

A Socio-environmental History of Commercial Tobacco Farming in Southern Rhodesia and Zimbabwe, c.1893-2000s

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Tobacco is without doubt one of the most destructive plants on the planet even before it hits the lungs.

Standard Schaeffer, 2007.

You will experience it with regret – like tobacco (snuff) on the nose.

Shona proverb (loosely translated)

DECLARATION

By submitting this thesis electronically, I declare that the entirety of the work contained therein is my own, original work, that I am the authorship owner thereof (unless to the extent explicitly otherwise stated) and that I have not previously in its entirety or in part submitted it for obtaining any qualification. Chapter Five of this dissertation is published in *International Review of Environmental History*, 5, 2 (2019).

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ABSTRACT

This thesis explores the relationship between tobacco farmers (both black and white) and the environment in Southern Rhodesia and Zimbabwe and how this relationship shaped physical landscapes, agricultural ecosystems and affected the human body across time. It examines the changing role of the state in regulating tobacco farming and discusses the shifting production dynamics and agronomic practices and how these transitions constructed new environments and social relations. The thesis demonstrates that extraneous global pressures such as the Great Depression, the Dust Bowl environmental catastrophe in the USA and the two World Wars also exerted a huge influence on tobacco farming in Southern Rhodesia. The thesis uses the broader historiographical theories on the rise of conservation ideologies within white settler agriculture in southern Africa and global discourses on modern environmentalism to interrogate how tobacco farming practices contributed to environmental degradation, contamination or improvement. The thesis further engages with colonial policy on African tobacco production and shows that Africans were systematically excluded from competitive commercial production of tobacco and relegated to the position of labourers in white farms and consumers of European tobacco. Finally, it evaluates the changing contemporary socio-environmental dynamics of tobacco production in Zimbabwe beyond 2000 and the prospects of using the lessons from history for curbing the global tobacco epidemic.

KEYWORDS: Tobacco, Environmental history, Southern Rhodesia, Zimbabwe, peasants, settler farmers, labour, mixed farming, conservation, Pesticides, Rachel Carson, deforestation, dust bowl, natural resources, contour ridges, Turkish tobacco, burley.

OPSOMMING

Hierdie proefskrif ondersoek die verhouding tussen tabakboere (beide swart en wit) en die omgewing in Suid-Rhodesië en Zimbabwe en hoe hierdie verhouding oor tyd die fisiese landskap en landbou ekosisteme gevorm het asook die menslike liggaam beïnvloed het. Dit ondersoek ook die veranderende regulatoriese rol van die staat in tabakboerdery en bespreek die veranderende produksie dinamika en agronomiese praktyke en hoe dié oorgange nuwe omgewings en sosiale verhoudings totstand gebring het. Die proefskrif toon aan dat eksterne globale faktore soos die Groot Depressie, die “Dust Bowl” omgewingskateastrofe in die VSA en die twee Wêreldoorloë tabakboerdery in Suid-Rhodesië grondig beïnvloed het. Die proefskrif gebruik die breër historiografiese teorieë oor die opkoms van bewarings ideologieë in wit setlaar/koloniale landbou in Suidelike Afrika asook globale diskoerse oor moderne omgewingsbewing/bewussyn om te bepaal hoe die praktyke van tabakboerdery tot omgewings agteruitgang, besmetting of verbetering bygedra het. Die proefskrif fokus verder op koloniale beleidsrigtings oor Swart (African) tabakproduksie en toon aan dat Swartmense (Africans) sistematies van mededingende kommersiële tabakproduksie uitgesluit is en tot arbeiders op wit plase en verbruikers van Europese tabak gerelegeer is. Ten slotte gee die proefskrif ’n oorsig oor die veranderende huidige sosio-omgewings dinamika van tabakproduksie in Zimbabwe na 2000 en die vooruitsigte vir die bekamping van die globale tabakepidemie.

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DEDICATION

To the memory of my late father, Keniard Doro, a tobacco farmer from rural Muzarabani who taught me how to dream and my mother, Dorothy Simbi, who gave me hope when it rained on me while working on the tobacco fields...

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LIST OF ABBREVIATIONS

AAA	Agricultural Adjustment Act
CFU	Commercial Farmers Union
Conex	Department of Conservation and Extension
DDT	Dichlorodiphenyltrichloroethane
EPA	Environmental Protection Agency
FCTC	Framework Convention for Tobacco Control
HRW	Human Rights Watch
ICAs	Intensive Conservation Areas
ILO	International Labour Organisation
NAZ	National Archives of Zimbabwe
NLHA	Native Land Husbandry Act
NPA	Native Purchase Areas
NRB	Natural Resources Board
RF	Rhodesian Front
RNFU	Rhodesia National Farmers Union
ROTA	Rhodesian Oriental Tobacco Association
RTA	Rhodesia Tobacco Association
TIMB	Tobacco Industries and Marketing Board
TMB	Tobacco Marketing Board
TRB	Tobacco Research Board
TTL	Tribal Trust Lands
TTLDCOR	Tribal Trust Lands Development Cooperation
UDI	Unilateral Declaration of Independence
WHO	World Health Organisation
ZTA	Zimbabwe Tobacco Association

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CHAPTER ONE

HISTORIOGRAPHY, LITERATURE REVIEW AND METHODOLOGY

INTRODUCTION

Zimbabwe is the largest producer of tobacco in Africa, and the fifth largest producer of flue-cured tobacco in the world after China, Brazil, India and the United States.¹ The crop is the country's single largest foreign currency earner, contributes 15% to national Gross Domestic Product (GDP) and accounts for 25% of total export earnings.² During the 2017/2018 season Zimbabwe produced a record tobacco crop of 252 million kilograms, breaking the 236 million kilogram mark realised in 2000 at the height of the invasion of white-owned commercial farms.³ The 2018 tobacco season's harvest was celebrated as a milestone achievement crowning the success of the Fast Track Land Reform Program. It created an ephemeral effervesce of euphoria over the prospects of the crop saving the country from an inevitably bleak economic future by becoming the driver of African small holder success. However, in the same year, the international humanitarian watchdog Human Rights Watch (HRW) cast a dark and ominous shadow on this fleeting evanescent glory by releasing a damning report that chronicled a litany of human rights abuses in the tobacco farms in Zimbabwe and showing the sinister side of this supposed "success story".⁴ These abuses included the prevalence of exploitative child labour practices in tobacco farming, the hazardous working environments, documented cases of nicotine poisoning, exposure of farm workers to toxic pesticides and labour rights abuses on large scale farms.⁵ Yet the report neither generated public reaction nor did it precipitate state action – indeed, the government spokesperson dismissed it as “not

¹ BDO Zimbabwe Chartered Accountants, 'Tobacco Industry and Marketing Board Study into Cost of Tobacco Production in Zimbabwe', 2015, 1. Also see 'Zimbabwe major producer of tobacco in Africa', *The Herald*, 10 November 2015.

² According to the Tobacco Industries and Marketing Board (TIMB) in 2017 tobacco exports raked in US\$ 904,4 million, and in 2018 exports rose to US\$ 914,3 million. See TIMB Annual Statistical Report, 2018, 11.

³ In 2000, a series of land invasions started by war veterans led to the occupation of white owned commercial farms and the Fast Track Land Resettlement Program. The land invasions transferred over 10 million hectares of land to 146,000 black small holder farmers. Its impact on tobacco production was profoundly felt as, up until then, about 2000 white commercial farms had dominated tobacco production. See Sam Moyo, 'Three Decades of Agrarian Reform in Zimbabwe', *The Journal of Peasant Studies*, 38, 3 (2011), 493–531; Ian Scoones et al, 'Tobacco, Contract Farming, and Agrarian Change in Zimbabwe', *Journal of Agrarian Change*, 28 (2018), 22-42.

⁴ See Human Rights Watch, 'A Bitter Harvest: Child Labour and Human Rights Abuses on Tobacco Farms in Zimbabwe', (April 2018).

⁵ Human Rights Watch, 'A Bitter Harvest', 28-73.

factual” and not “independently confirmed”.⁶ Nevertheless labour exploitation in the tobacco farms and widespread use of child labour has been documented as widespread by other independent global research organisations such as the International Labour Organisation (ILO).⁷

The negative impact of tobacco farming has also been felt outside the social and individual human body – on the natural environment. Tobacco farming has contributed to significant deforestation, land degradation, and both air and water pollution. In 1997, the United Nations Development Program (UNDP) reported that deforestation was a major problem facing Zimbabwe with between 70 000 and 100 000 ha of forest cover declining at a rate of 1.5% a year.⁸ Another report grimly noted that from 1990 to 2005, the country endured a decline of about 21% of its forest cover.⁹ The causes of this decline are all closely linked to tobacco production where small holder farmers rely exclusively on indigenous forestry resources to cure flue-cured tobacco and build tobacco barns. In 2013, for instance, an estimated 46 000 ha of forest (1.38 million cubic metres of wood) were cleared to cure a 127 million kilograms of tobacco output.¹⁰ The Forestry Commission of Zimbabwe estimates that between 1998 and 2013 the country lost approximately 15% of tree cover largely as a result of tobacco farming.¹¹

⁶ Sebastian Mhofu, ‘Zimbabwe government dismisses HRW report on child labour’, available on <https://www.voanews.com/africa/zimbabwes-government-dismisses-hrw-report-child-labor>, accessed on 24 July 2019.

⁷ The use of child labour on tobacco farms is a global phenomenon. The International Labour Organisation in its report on commercial agriculture and child labour notes that the existence of child labour in tobacco production is rampant particularly amongst children from poor and vulnerable backgrounds. These children work under poor conditions such as long working hours, extreme heat, and exposure to pesticides and risks from injuries. The prevalence of child labour in tobacco farming is largely because the crop is labour intensive, and children are a cheap source of labour. See ‘Child Labour, Commercial Agriculture and the Role of Tobacco’, International Labour Organisation, Geneva, (2009). In 2014 a Human Rights Watch report based on 141 interviews with children between the ages of 7 and 17 working on tobacco farms in the United States between 2012 and 2013 documented that there was extensive exploitation of children on the farms who excessively worked long hours, got paid poorly and were exposed to harmful tobacco pesticides. See Human Rights Watch, ‘Tobacco’s Hidden Children: Hazardous Child Labour in United States Tobacco Farming’, Washington, (2013). Another report by Human Rights Watch in 2010 documents similar labour exploitation practices in tobacco farms in Kazakhstan. See “‘Hellish Work’ Exploitation of Migrant Tobacco Workers in Kazakhstan”, <https://www.hrw.org/report/2010/07/14/hellish-work/exploitation-migrant-tobacco-workers-kazakhstan>, accessed 25 July 2019.

⁸ See Tariro Kamuti, ‘The Booming Zimbabwe Tobacco Sector and Massive Deforestation: Causes for Concern’, available on <https://www.polity.org.za/article/the-booming-zimbabwe-tobacco-sector-and-massive-deforestation-causes-for-concern-2013-07-02>, accessed on 25 July 2019. Also see Emmaculate Madimu, ‘The Impact of Environmental Change on Rural Livelihoods in Zimbabwe, The Case of Hurungwe District Ward 13, 2006-2014’, BA Hons Thesis, Midlands State University, 2014, 19.

⁹ ‘Global Resources Assessment: Country Report: Zimbabwe’, Food and Agricultural Organisation, Rome, 2014, 43.

¹⁰ Renias V. Chivheya, ‘Indigenous Forest Level of Deforestation, Forest Dependency and Factors Deserving Willingness to Participate in Indigenous Forestry Conservation: Evidence from Resettled Farmers in Shamva’, PhD Thesis, University of Fort Hare, 2016, 5.

¹¹ ‘The Impact of Tobacco Farming on Deforestation’, Forestry Commission of Zimbabwe, Harare, 2013, 6.

Consequently, it is projected that with the current rate of wood consumption in the tobacco sector the country will experience devastating desertification by 2048.¹² Chipso Chivuraise, in her study of small-holder tobacco production in Hurungwe District in Zimbabwe, also noted a trend of soil mining with negative impact to bio-diversity, and reduced prospects for sustainable development of agricultural and forest resources.¹³ She concludes that the biggest challenge faced by tobacco farmers in Zimbabwe has been the development of measures and strategies to “maximise use of natural resources while minimising the effect of resource degradation”.¹⁴

On a global scale, the socio-environmental panorama presented by tobacco production is no less apocalyptic. In 2004, the World Health Organisation (WHO) released a report that pointed out the causal link between tobacco farming and poverty in the low-income countries.¹⁵ The report noted that, while the profits of the big tobacco companies soar, the burden of tobacco farming to national economies in the form of the cost to public health facilities, the human toll due to pesticide exposure, the circle of debt by farmers owed to tobacco co-operations and the pernicious effects on the natural environment creates a vicious cycle of poverty.¹⁶ Approximate data from the mid-1980s confirmed that Virginia tobacco consumes between 82 and 175 million cubic metres of harvested wood annually.¹⁷ This translates in net value to between 1 million and 2.5 million hectares of woodlands and forest removal annually.¹⁸ The “Bellagio Statement on Tobacco and Sustainable Development” also concluded that in the developing

¹² Elias Mlambo, ‘Tobacco farmers fuel deforestation’, *The Zimbabwe Independent*, 28 March 2014, available at <https://www.theindependent.co.zw/2014/03/28/small-scale-tobacco-farmers-fuel-massive-deforestation/>, accessed on 25 July 2019.

¹³ Chipso Chivuraise, ‘Economics of Small Holder Tobacco Production and Implications of Tobacco on Deforestation in Hurungwe District of Zimbabwe’, MSc Thesis, University of Zimbabwe, 2011.

¹⁴ Chivuraise, ‘Economics of Small Holder Tobacco Production’, 4.

¹⁵ See ‘Tobacco and Poverty: A Vicious Cycle’, World Health Organisation, Geneva, 2004.

¹⁶ This report critiques the narrative often sold by tobacco companies to farmers in low income countries that tobacco farming brings prosperity. It points out that in 2002 the Chief Executive of the largest tobacco company Philip Morris earned US\$ 3.2 million in salaries and bonuses. The reports note that it would take six years for an average Brazilian farmer to earn what the Executive earns in a day and 2140 years to earn his annual salary. Also in 2002 the net revenue of the three top tobacco companies in the world Philip Morris, Japan Tobacco and British American Tobacco was US\$ 121 billion which was more than the combined GDP of Zimbabwe, Zambia, Cameroon, Botswana, Albania, Bahrain, Belize, Bolivia, Cambodia, Estonia, Georgia, Ghana, Honduras, Jamaica, Jordan, Macedonia, Malawi, Malta, Moldova, Mongolia, Namibia, Nepal, Paraguay, Senegal, Tajikistan, Togo and Uganda. The report also pointed out that in high income countries the cost of health care attributed to tobacco stood at between 6% and 15% of the total national health care bill. Also, according to the report in southern Africa, 1400 km² of indigenous woodland are destroyed annually because of tobacco farming which accounts for 12% of overall annual deforestation.

¹⁷ Helmut J. Geist, ‘Global Assessment of Deforestation Related to Tobacco Farming’, *Tobacco Control*, 8, 1 (Spring 1999), 18-28.

¹⁸ Geist, ‘Global Assessment of Deforestation’, 18-28.

world, “tobacco poses a major challenge not just to health, but environmental sustainability.”¹⁹ An authoritative study by Fraser in the mid-1980s drew similar results about the negative ecological effects of tobacco production.²⁰ Tobacco farming also contributes to siltation of rivers and water reservoirs, climate change and the extinction of species due to habitat overexploitation.²¹ Relative to other crops, tobacco facilitates accelerated soil erosion and imposes excessive demands on soil nutrients. Tobacco depletes more than ten times as much nitrogen, twenty-four times as much potassium and thirty times as much phosphorous as cassava.²² Farmers growing tobacco also use a lot of fertilisers, chemicals and insecticides. Run-off from these fertilisers and pesticides usually contaminate water bodies.²³ Thus, the exceptionality of tobacco farming relative to other crops is that it depletes soils, causes extensive deforestation, requires a lot of (frequently coerced) labour and uses a lot of agrochemicals and pesticides that contaminate both human and natural environments.

In 2005, WHO came up with a Framework Convention on Tobacco Control (FCTC) to restrict what it described as “the globalisation of the tobacco epidemic.”²⁴ The convention recommends the development of socio-environmentally sustainable models that ameliorate tobacco production’s social and environmental costs.²⁵ However, current intervention regimes have not been effective.²⁶ The Zimbabwean government has also been an outspoken critic of this

¹⁹ Representatives of 22 scientific organisations from across the world had a meeting in Bellagio, Italy in 1995 to examine the global impact of tobacco production and consumption. The meeting reached consensus that tobacco cultivation posed a major threat to sustainable development in low income countries. For the full report see ‘Bellagio Statement on Tobacco and Sustainable Development’, *Canadian Medical Association Journal*, 153, 8 (1995), 1109-110.

²⁰ Alastair Fraser in his 1986 study revealed that tobacco growing areas lie in parts of the developing world that are identified by FAO as being in wood deficit situations. He also argued that most forests in Asia and Africa are now below the levels of meeting the current and future wood fuel needs on a sustainable basis. See Alastair Fraser, *The Use of Wood by the Tobacco Industry and the Ecological Implications* (Edinburgh: International Forest Science Consultancy, 1986).

²¹ Natacha Lecours et al, ‘Environmental Health Impacts of Tobacco Farming: A Review of the Literature’, *Tobacco Control*, 21, 2 (March 2012), 191-196. A recent report published in 2018 confirmed that tobacco farming contributes to climate change through acidification, high fossil energy consumption and soil and water depletion. The report noted that the global production of 32,4 million megatons of green tobacco contributed 82 megatons of carbon emissions which was 0,2% of global emissions in 2014. See Maria Zafereidou, Nicholas S. Hopkinson and Nikolaos Voulvoulis, ‘Cigarette Smoking: An Assessment of Tobacco’s Global Environmental Footprint Across Its Entire Supply Chain’, *Environmental Science and Technology*, 52, 15 (2018), 8087-8094.

²² R.J.A. Goodland, C. Watson and G. Ledee, *Environmental Management in Tropical Africa* (Boulder: Westview Press, 1984), 78.

²³ R.J. Tobin and Walter I. Knausenberger, ‘Dilemmas of Development: Burley Tobacco, the Environment and Economic Growth in Malawi’, *Journal of Southern African Studies*, 24, 2 (1998), 405-24.

²⁴ Janet Chung-Hall et al, ‘Impact of the WHO FCTC Over the First Decade: A Global Evidence Review Prepared for the Impact Assessment Expert Group’, *Tobacco Control*, 28 (2018), 119-128.

²⁵ This is contained in Article 18 of the convention.

²⁶ Tobacco companies specifically BAT and Philip Morris created supply chains in the 1990s to improve production and access to markets. These supply chains were used in the 2000s to legitimate the portrayal of

convention and the various tobacco control measures. In 2000, during the WHO public hearings in Geneva, the Zimbabwe Tobacco Association (ZTA) criticised the work of the FCTC as thoroughly bad, “representing an attack on Zimbabwe’s national sovereignty.”²⁷ The country also refused to ratify the Tobacco Control Convention when it entered into force in 2005 citing that the convention would harm its tobacco industry.²⁸ Although Zimbabwe eventually ratified the treaty in December 2014, it has remained highly critical of global tobacco control initiatives and much aloof from the criticism of its tobacco industry’s non-compliance with global socio-environmental norms. Consequently, the implementation of the tobacco control regulations to mitigate the socio-environmental impacts of tobacco farming has remained uneven, symbolic and half-hearted. This raises critical questions about the long-term socio-environmental sustainability of tobacco farming in Zimbabwe and the economic prospects for small holder tobacco farmers.

These questions become especially pertinent in light of the exponential rise in the number of tobacco farmers from 8 500 in the year 2000 to 140 895 in 2018.²⁹ This growth, however, has been framed by most studies largely in terms of livelihood and measuring changes in rural incomes for small scale tobacco producers.³⁰ These discourses permeate much of the discussions on tobacco production in the post Land Reform era where tobacco has become

tobacco as socially and environmentally friendly instead of taking meaningful steps to eliminate child labour and deforestation with the result that the companies benefited to the tune of US\$ 64 million annually in money that would have been used to avoid tobacco related deforestation in the top 12 global tobacco-producing countries, including Zimbabwe. See Martin Ortez and Stanton A. Glantz, ‘Social Responsibility in Tobacco Production? Tobacco Companies Use of Green Supply Chains to Obscure the New Costs of Tobacco Farming’, *Tobacco Control*, 20, 6 (November 2011), 403-411.

²⁷ Anne Lown et al, ‘Tobacco is our Industry and We Will Support it: Exploring the Potential Implications of Zimbabwe’s Accession to the Framework Convention on Tobacco Control’, *Globalisation and Health*, 12, 2 (2016), 1-11.

²⁸ See Lown et al, ‘Tobacco is our Industry and We Will Support it’, 1-11.

²⁹ TIMB Annual Report, 2018, 26.

³⁰ Literature on contemporary tobacco farming in Zimbabwe after the year 2000 generally falls into two categories. The rural livelihoods and accumulation approach examine the changing patterns of production from dominance by white commercial farmers to the rise of black small holder producers (which intensified after the land invasions in 2000) within the context of increased incomes and new patterns of rural accumulation. See Scoones et al, ‘Tobacco, Contract Farming, and Agrarian Change in Zimbabwe’, 22-42; James Masvongo, Jackqueline Mutambara and Augustine Zvinavashe, ‘Viability in Tobacco Production Under the Small Holder Farming Sector in Mount Darwin District’, *Journal of Development and Agriculture Economics*, 5, 8 (June 2013), 295-301; Dumisani Magadlela, ‘A Smoky Affair: Challenges Facing Some Small Holder Burley Tobacco Producers in Zimbabwe’, *Zambezia*, XXIV.I, (1997), 13-30. The environmental scholarship emphasizes the ecological disruptions instigated by the surge on the number of tobacco producers on the limited land and natural resources. See Pius Nyambara and Mark Nyandoro, ‘Tobacco Thrives, but the Environment Cries’: The Sustainability of Livelihoods from Small-Scale Tobacco Growing in Zimbabwe, 2000–2017’, *Global Environment*, 12, 2 (September 2019), 304-320; Tatenda G, Nhapi, ‘Natural Resource Degradation through Tobacco Farming in Zimbabwe: CSR Implications and the Role of the Government’, *South African Journal for Communication Theory and Research*, (April 2019), 1-15.

more political than before and inextricably tied to the perceived successes of the political status quo. These dominant and hegemonic narratives have been deployed by the state to conceal the socio-environmental vices of tobacco farming while exaggerating the economic virtues of the crop which is portrayed as under siege from hostile western forces who want to reverse the gains of the Land Reform Program.³¹ Thus, the state has constructed narratives of tobacco farming that conceptualize tobacco farming within the script of national survival, economic indigenisation, black empowerment, national sovereignty and identity based on the rejection of neo-colonialism.³² In the end, socio-environmental policy interventions in tobacco farming have not been effectively nor robustly articulated.

Consequently, these localised but globally significant and conspicuous patterns of tobacco related socio-environmental damage ought to be integrated into environmental history research as a new way to understand the context and potential of tobacco control policy. In the current Anthropocene age, where issues of sustainability, climate change and ecological prudence have come to shape economic choices and policies it is also important to write stories that locate environmental change in historical time and show how contemporary environments and environmental systems have been shaped across history. This study connects with these contemporary socio-environmental narratives and historicises the environment and society in commercial tobacco farming in Zimbabwe (Southern Rhodesia).³³ It focuses on the interaction between tobacco farmers and the environment, and the role of the state in that process from 1893 onwards.

³¹ On 6 July 2014, *The Sunday Mail*, a state-owned newspaper carried a headline ‘Lurking dangers for the golden leaf’ in which the WHO FCTC was criticised for efforts to stifle small holder tobacco production and for besieging the economy through regulations such as stringent environmental controls that would affect tobacco growers who depend on wood for curing. The article draws focus to the impact of the WHO regulations on livelihoods, and the fact that tobacco farmers had earned for the country what is described metaphorically and hyperbolically as “purse bursting” returns amounting to US\$ 600 million, an amount more than the country’s earnings in Foreign Direct Investment that year.

³² On 27 October 2017, *The Patriot* newspaper which is a mouthpiece for the ruling party ZANU PF published an article in which it attacks WHO for its policies that are against tobacco farming. The article eulogises then President Robert Mugabe for his stance in defending the black-dominated tobacco farming industry and protecting the interests of his nation and people. The article points out that tobacco is key to the economy as it brings in billions in foreign currency and capital investments, supports 1,2 million people directly and another 4,8 million who are dependent on the crop. It adds that tobacco production “testifies to the success story of the Land Reform and Resettlement Programme which empowered 400,000 indigenous families from the previous 4,000 commercial white farmers.” See Chiratidzo Moyo, ‘WHO can’t change Mugabe standing’, *The Patriot*, 27 October to 2 November 2017.

³³ Present day Zimbabwe was known as Southern Rhodesia from 1890 to 1964. In 1964 when Northern Rhodesia (present day Zambia) got its independence the country changed its name to Rhodesia until 1980 when it got majority rule and independence. The term “colonial Zimbabwe” is used to refer to the colonial state (1890 to 1980). The name shall be used interchangeably with Southern Rhodesia and Rhodesia to reflect the period before and after 1964 respectively.

While scientific approaches to the tobacco control debate concentrate on contemporary practices in tobacco farming systems, there is a need to broaden this understanding by historicising it and observing environmental change over time. Tobacco production in Southern Rhodesia and Zimbabwe has always defined the political economy and constructed agricultural landscapes and social relations since the early colonial days. But while farmers grew the crop and made decisions on how to grow it that in turn affected the environment, the tobacco crop itself also exerted a significant amount of subtle agency. Richard Foltz argues that crops and nature also carry agency so much that historians who have focused exclusively on humans have missed the complexity that all human actions take place in an ecosystem that involve other non-human agents.³⁴ Thus, while humans develop the social, economic, political and cultural milieu that dictate how the tobacco crop is to be grown, the crop itself has biological features that determine its requirements for growth and lifespan that in turn influence human choices and the concomitant socio-economic institutions for its production. Also crops carry an unspoken symbolism of power through their cultivation and production, which sometimes reified certain racial ideologies, identities and stereotypes within the colonial state or “crop power hegemonies” as they are referred to in this thesis.

Thus, this study illuminates not only on the effects of tobacco farming on the environment, but how the tobacco environment affects the human body. This dimension is important because the interaction between humans and nature is not unidirectional, but a dialectical process, a dialogue in which human and natural systems interact by shaping and influencing each other.³⁵ In studying environmental change therefore, it is necessary to understand that human activities have environmental consequences, and change in natural ecosystems, whether induced by humans or not, inevitably affect humans, and the human body.³⁶ To this end, historians must also view farming landscapes not just as physical spaces of production but as socio-environmental sites of struggle on which humans and nature interact to produce not only new ecosystems and environmental change but also new relations of society. The dialectical nature

³⁴ Richard C. Foltz, ‘Does Nature Have Agency? World History, Environmental History, and How Historians Can Help Save the Planet’, *The History Teacher*, 37, 1 (2003), 9-28.

³⁵ In essence this can be distilled as the most basic definition of “socio-environmental history”, that is narratives that explain the human past using the lens of how humans and nature have interacted, influencing each other in the process and creating new social institutions, economic systems, physical landscapes, ecologies and ecosystems.

³⁶ William Cronon, ‘The Uses of Environmental History’, *Environmental History Review*, 17, 3 (Autumn 1993), 1-22.

of human and landscape interaction is central to historical change and natural landscapes are not neutral external backdrops to human activities.³⁷ Tim Ingold emphasises the temporality of landscapes as they are neither “built nor unbuilt but are perpetually under construction”.³⁸

This thesis explores how tobacco farming systems, shifts in politics and cultural practices by white settler farmers and African farmers changed landscapes, environments and social relations over time in Southern Rhodesia. This process was complex and shaped by factors outside the domain of the environment such as colonial economic and political conditions. While it has become historiographical orthodoxy to view colonial farming systems as homogeneously degrading to the environment, it is important to also understand that these production models were not static and stagnant but were fluid and dynamic. As Chapter Four demonstrates the environment of settler tobacco farms changed significantly from around 1949 as the pace of biological conservation quickened with investments in mixed farm models, afforestation, dam building and farm planning. Environmental change was further exhibited after the Unilateral Declaration of Independence (UDI) of 1965 as diversified systems in the tobacco farms brought in new agricultural landscapes. The political ecology of tobacco farming also involved power relations constructed along lines on race which meant that Africans suffered both as labourers in the white settler tobacco farms and then as tobacco farmers themselves. As labourers, Africans were exposed to exploitation and exposure to dangerous tobacco chemicals, and as farmers they were marginalised and deprived of access to land and natural resources, capital and markets as this thesis will argue. But indeed, Africans were not just passive victims under the colonial tobacco economy. Between 1900 and the early 1930s they seized the market opportunities offered by the establishment of mining settlements and towns to produce their indigenous tobacco and sell it to earn enough to pay their taxes and buy luxurious goods. During the 1950s, 60s and 70s – at the height of state promotion of Turkish and Burley production in African areas – a few African farmers were also able to benefit and invest some of their tobacco capital in soil and water conservation.

³⁷ See Tim Ingold, ‘The Temporality of Landscapes’, *World Archaeology*, 25, 2 (1993), 152-174.

³⁸ Ingold, ‘The Temporality of Landscapes’, 152-174. Ingold further explains that humans do not act upon the landscape to ‘do things to it’ but rather move along with it and are integral to the transformation of the landscape. Also see William Cronon, *Changes in the Land: Indians, Colonists, and the Ecology of New England* (New York: Hill and Wang, 2003). Cronon presents nature and landscapes as being more than stages for human activity but also actors on their own. For an engaged reading on the construction of landscapes in Zimbabwe see Joost Fontein, *Remaking the Mutirikwi: Landscape, Water and Belonging in Southern Zimbabwe* (James Currey: Suffolk, 2015). Fontein examines the construction of landscapes around Lake Mutirikwi in Zimbabwe during both the colonial and post-colonial periods and shows that this process is both “imaginative and material”. Also see David McDermott Hughes, ‘Hydrology of Hope: Farm Dams, Conservation, and Whiteness in Zimbabwe’, *American Ethnologist*, 33, 2 (May 2006), 269-287.

LITERATURE REVIEW

The importance of tobacco to the colonial economy of Southern Rhodesia is appreciated in most historical works that have described the crop, usually with the most profoundly flattering epithets that range from “golden leaf”³⁹, “most promising weed”⁴⁰ or “more than a crop” but the very “crucible” in which the colony of Southern Rhodesia was created.⁴¹ Despite this widely acknowledged importance in Southern Rhodesian agrarian historiography, there is a limited corpus of writings on tobacco history specifically. The first-generation literature on the Southern Rhodesian tobacco industry was essentially propaganda celebrating the establishment and growth of the white settler colonial tobacco farmer and his resilience and buoyancy amid adverse economic and environmental conditions. This triumphalist, boosterist literature was a product of the Rhodesian Tobacco Association (RTA) public relations machinery and is best represented by Frank Clements and Edward Harben’s 1962 work, which became the industry’s official narrative.⁴² Much of tobacco literature produced in the 1950s and 60s share the inherent biases evident in Clements and Harben of constructing hyped-up settler-centric tobacco histories.⁴³ In these histories, society and the environment are rendered invisible and white settler tobacco capitalism glorified. Trish Mbanga’s tobacco history of the 1990s (although a post-colonial work chronologically) also gets trapped in the pitfalls of cheerleading for the colonial tobacco establishment.⁴⁴ Later tobacco accounts have, however, transcended these narrow histories and critically engaged with how the white settler tobacco farmer was a beneficiary and driver of the colonial state’s racially biased economic policies and labour

³⁹ This is sometimes captured in the titles of these historical works, as in the period of tobacco farming in Southern Rhodesia between 1890 and 1990 as a “century of gold”. See Trish Mbanga, *Tobacco: A Century of Gold* (Harare: ZIL Publications, 1991). Also see Tobacco Export Promotional Council of Rhodesia and Nyasaland, ‘Rhodesia’s Golden Harvest: A Special Review of the Tobacco Industry of Rhodesia and Nyasaland’, (Salisbury: TEPCORN, 1963).

⁴⁰ Steven Rubert, *A Most Promising Weed: A History of Tobacco Farming and Labour in Colonial Zimbabwe, 1890-1945* (Athens: Ohio Centre for International Studies, 1998).

⁴¹ Frank Clements and Edward Harben, *Leaf of Gold: The Story of Rhodesian Tobacco* (London: Methuen and Co., 1962), 70.

⁴² See Clements and Harben, *Leaf of Gold*. Both Frank Clements and Edward Harben were themselves tobacco farmers which make their accounts even much more liable to subjective ‘insider’ views.

⁴³ See Peter Scott, ‘The Tobacco Industry of Southern Rhodesia’, *Economic Geography*, 28, 3 (July 1952), 189-206; H.R. Roberts, ‘The Development of the Southern Rhodesian Tobacco Industry’, *South African Journal of Economics*, 19, 2 (1951), 177-188; W.E. Haviland, ‘Tobacco Farm Organisation, Cost and Land Use in Southern Rhodesia’, *The South African Journal of Economics*, (December 1953), 367-380; W.E. Haviland, ‘The Use and Efficiency of African Labour in Tobacco Farming in Southern Rhodesia’, *The Canadian Journal of Economics and Political Science*, 20, 1 (February 1954), 100-106.

⁴⁴ See Mbanga, *Tobacco: A Century of Gold*.

exploitation. These histories, however, had several limitations in answering the questions that interest us in the current moment, which this thesis wishes to address.

Victor Machingaidze trail-blazed the critical historicization of tobacco with his PhD thesis in 1980.⁴⁵ The thesis looked at the development of white settler capitalist agriculture in Southern Rhodesia. His work showed that the settler tobacco industry had, in fact, benefitted from state support and the infrastructure set up for production and marketing between 1908 and 1939. Machingaidze's work was a key break from the glorified tobacco histories' tradition because it exposed the link between the colonial state and the tobacco farmer. However, he concentrated on the economic and political infrastructure (in particular, the marketing and production crisis that dogged the tobacco industry) and did not engage with the social and environmental crisis that accompanied production.⁴⁶ Machingaidze's work was complemented by Steven Rubert's 1998 social history of labour in the tobacco farms, which documented the various practices of African labour exploitation in the white settler tobacco farms between 1890 and 1945.⁴⁷ Rubert's monograph is a rich text on colonial labour historiography that weaves the odyssey of the Rhodesian tobacco industry through lives of Africans whose bodies became raw materials to produce the "promising weed". His tale exposes the grisly world of child labour in dingy tobacco barns, gangs of labourers toiling incessantly in the settler tobacco fields and the festering farm compounds. Nevertheless, as this thesis will show, Rubert's social history is disengaged from the global constructions of labour in tobacco farming systems, and how these labour regimes have been shaped across history.⁴⁸

Ian Phimister made what was probably the first attempt at an environmental history of tobacco in Southern Rhodesia in his 1986 article on conservation.⁴⁹ Phimister pointed to the

⁴⁵ V.E.M. Machingaidze, 'The Development of Settler Capitalist Agriculture in Southern Rhodesia with particular Reference to the Role of the State, 1908-1939', PhD Thesis, University of London, 1980.

⁴⁶ Chapter three of Machingaidze's thesis is devoted to the tobacco industry's production and marketing crisis and the intervention of the state between 1918-1939.

⁴⁷ Rubert, *A Most Promising Weed*, 89-192.

⁴⁸ This thesis draws on global histories of labour and contemporary labour narratives in tobacco farms to situate Rubert's local history in a much broader conceptual perspective in chapter two.

⁴⁹ Ian Phimister, 'Discourse and the Discipline of Historical Context: Conservatism and Ideas about Development in Southern Rhodesia, 1930-1950', *Journal of Southern African Studies*, 12, 2 (April 1986), 263-275. This article was also later reproduced in Phimister's seminal 1988 book publication. See Phimister, *An Economic and Social History of Zimbabwe*, 228-234. Phimister was responding to William Beinart's 1984 article that argued colonial governments in southern Africa were preoccupied with the conservation of natural resources and soil erosion from the 1930s to the 1950s. See William Beinart, 'Soil Erosion, Conservationism and Ideas about Development: A Southern African Exploration, 1900-1960', *Journal of Southern African Studies*, 15, 1 (October 1984), 52-83. The debate is more comprehensively covered in Chapter four.

deteriorating soil conditions in tobacco farms that were conspicuous during the war years as a result of speculative farming and limited state conservation intervention. He argued that this pattern continued in the post-war boom years as tobacco farms took much-needed capital and resources from other crops, resulting in unbalanced agricultural development and a concomitantly delayed impeded pace of conservationism. This thesis draws on this seminal research but nevertheless diverges from Phimister in two key respects. Firstly, the corpus of tobacco environmental history contained in his article is too thin to constitute a comprehensive environmental history of tobacco as it covers a short period, 1938 to 1950. Secondly, even in that narrow coverage of time, his article neglects the fundamental transitions in the tobacco farm environment and landscapes that were generated by the post-war tobacco boom and indeed private capital. Thus, an unintentionally uniform reading of environmental change between 1938 and 1950 was constructed, while this thesis argues that the tobacco farms were not static but a fluid set of landscapes being structured and restructured by a plethora of factors.

Sibanengi Ncube's 2018 PhD thesis fills a void in Southern Rhodesia's tobacco history from where much of present scholarship ends analyses in 1945, while he extends it up to independence in 1980.⁵⁰ His work focusses on the nexus between local and international politics in the development of the Rhodesian tobacco industry from the landmark 1947 London agreement, which gave the industry an unprecedented market and propelled a transitional boom. Ncube shows how production dynamics were shaped by international factors such as relations with the European Common Market, the tobacco economy in the United States of America (which was a major competitor to Southern Rhodesia), federal politics, relations with Britain and the politics of decolonisation. While doing so, Ncube engages with David Rowe's 2001 history of tobacco farmers and state relations after the UDI.⁵¹ The engagement results in a revisionist analyses of Southern Rhodesian tobacco history during the UDI, which dismantles the long-held belief that tobacco farmers during the UDI had lost all power to the state. In fact, as Ncube does show, tobacco farmers operating through the RTA still had significant political leverage in the Rhodesian state, even after the UDI. However, while Ncube praises the later critical tobacco histories in Southern Rhodesia for transcending the parochial and glorified narratives of settler tobacco farming contained in the works of Clements and Harben, his thesis

⁵⁰ Sibanengi Ncube, 'Colonial Zimbabwe Tobacco Industry: Global, Regional and Local Relations, 1949-1979', PhD Thesis, University of the Free State, 2018.

⁵¹ See David M. Rowe, *Manipulating the Market; Understanding Economic Sanctions, Institutional Change and the Political Unity of White Rhodesia* (Ann Arbor: The University of Michigan Press, 2001).

and the histories he praises also inadvertently fall into a similar historiographical predicament of being impressed and preoccupied with settler histories. This preoccupation precipitates the neglect of the analysis of African participation in tobacco production in Southern Rhodesia. Upon reading these accounts one gains the erroneous impression that tobacco production was the exclusive domain of white settler farmers and Africans only played the role of labourers in the tobacco fields. In fact, the only historian who goes beyond this settler-centric script is Barry Kosmin, who tells the story of a vibrant precolonial indigenous tobacco economy that survived into the colonial period and challenged settler tobacco production before it was stymied and collapsed from around 1938. Kosmin ends his story in 1938, and there is a silence on the participation of Africans in the tobacco economy beyond that. This thesis helps to fill this lacuna by examining African tobacco production, the changing nature of colonial state intervention and its impact from 1900 to 1980.

While there is also scant focus on the environment from the tobacco history literature, other agrarian history works have looked at conservation within the white settler agrarian sector in the region and in Southern Rhodesia. Regional studies have focussed on the development of conservationism in Southern Africa from the 17th century and the proliferation of these ideas into colonial doctrines and their application in white and African agriculture. Richard Grove locates conservation ideas as beginning in the Island colonies of Mauritius and St Helena as a result of declining forestry resources before they became entrenched at the Cape where a series of droughts between 1821 and 1863 stimulated colonial scientist to interpret environmental change as linked to the activities of settler farmers.⁵² In particular, Grove notes that out of this nascent conservation consciousness emerged the “desiccation theory” after 1820 that linked vegetation removal by white settler farmers to rainfall decline and climate change.⁵³ William Beinart concurs with Grove that conservation arose from the difficulties facing settler agriculture in fragile and delicate African ecologies and its dissemination followed the 1921 South African Drought Investigation Committee report.⁵⁴ Kate Showers shows how these ideas

⁵² Richard Grove, *Green Imperialism: Colonial Expansion, Tropical Island Edens and the Origins of Environmentalism, 1600-1860* (Cambridge: Cambridge University Press, 1996) and also Richard Grove, ‘Scottish Missionaries, Evangelical Discourses and the Origins of Conservation Thinking in Southern Africa, 1820-1900’, *Journal of Southern African Studies*, 15, 2 (1989), 163-184.

⁵³ Grove, ‘Scottish Missionaries, Evangelical Discourses and the Origins of Conservation’, 163-184.

⁵⁴ The South African Drought Investigation Committee was set up in 1920 following a high loss of stock during the 1919/20 drought. It published its findings in 1922 and pointed out that settler activities such as overstocking and burning of veld fires had contributed much to the drought. The report pointed out that those, “who start farming with the set purpose of wringing out the lifeblood of the farm to make a quick profit must shoulder much of the blame.” The report emphasized the need for the state to intervene and protect resources for future settler

were implemented by the colonial officials in the Kingdom of Lesotho to control soil erosion and land degradation.⁵⁵ JoAn McGregor points out that this incipient conservationism prompted authorities in Southern Rhodesia to promulgate a forestry conservation policy beginning from 1920. She, however, argues that early forestry policy in the country was motivated by commercial interests for production of export timber rather than conservation concerns.⁵⁶

Other literature has demonstrated how colonial conservation extended beyond the white settler agrarian environment to be more coercively used as a tool for reorganising and controlling Africans. Jacob Tropp notes that colonial officials in South Africa responded to soil erosion and environmental problems in African areas in the 1930s through land rehabilitation programs and schemes that were ostensibly designed as ecological conservationist but were part of a systematic colonial project to extract cheap African labour.⁵⁷ Tropp's observation does indeed confirm earlier conclusions by Giovanni Arrighi and Colin Bundy on the colonial restructuring of peasant economies as reservoirs of cheap labour for the white capitalist economy.⁵⁸ Most studies in Southern Rhodesia also reveals the same pattern of the construction of colonial authority on land and resources and the marginalisation of African peasantries from effective agrarian participation through state sponsored environmental control based on land centralisation models.⁵⁹ This pseudo-conservation script marginalised and disempowered African tobacco producers and curtailed their participation in the colonial tobacco economy as this thesis will show.

agrarian accumulation. See William Beinart, *The Rise of Conservation in South Africa: Settlers, Livestock, and the Environment, 1770-1950* (Oxford: Oxford University Press, 2003); William Beinart, 'The Politics of Colonial Conservation', *Journal of Southern African Studies*, 15, 2 (January 1989), 143-162.

⁵⁵ Kate Showers, 'Soil Erosion in the Kingdom of Lesotho: Origins and Colonial Responses, 1830s-1950s', *Journal of Southern African Studies*, 15, 2 (January 1989), 143-162. Also see Kate Showers, *Imperial Gullies: Soil Erosion and Conservation in Lesotho* (Athens: Ohio University Press, 2005).

⁵⁶ JoAn McGregor, 'Woodland Resources: Ecology, Policy and Ideology: An Historical Case Study of Woodlands Use in Shurugwi Communal Area, Zimbabwe', PhD Thesis, Loughborough University of Technology, 1991.

⁵⁷ Jacob A. Tropp, *Natures of Colonial Change: Environmental Relations in the Making of the Transkei* (Athens: Ohio University Press, 2006), 6.

⁵⁸ See G. Arrighi, 'Labour Supplies in Historical Perspective: A Study of the Proletarianization of the African Peasantry in Rhodesia', *Journal of Development Studies*, 6 (1970), 197-234. Also see C. Bundy, *The Rise and Fall of The South African Peasantry* (London: James Currey, 1979).

⁵⁹ See JoAn McGregor, 'Conservation Control and Ecological Change: The Politics and Ecology of Colonial Conservation in Shurugwi, Zimbabwe', *Environment and History*, 1, 3 (October 1995), 257-279; J.A. Elliot, 'Soil Erosion and Conservation in Zimbabwe: Political Economy and Environment', DPhil Thesis, Loughborough University of Technology, 1989; Eira Kramer, 'The Early Years: Extension Services in Peasant Agriculture in Colonial Zimbabwe, 1925-1929', *Zambezia*, XXIV, ii (1997), 159-179; Robin Palmer, *Land and Racial Domination in Southern Rhodesia* (London: Heinemann Educational Books, 1977); V.E.M. Machingaidze, 'Agrarian Change From Above: The Southern Rhodesia Native Land Husbandry Act and African Response', *The International Journal of African Historical Studies*, 24, 3 (1991), 557- 588.

Simeon Maravanyika's pioneering 2013 work on soil conservation in the settler agrarian sector in colonial Zimbabwe offers a rich analysis and an entry point into the debates framed around conservationism in the colonial state and the history of soil conservation in the settler white farms.⁶⁰ His focus, however, is broad and general extending to a myriad of sectors in agriculture.⁶¹ A weakness in Maravanyika's otherwise comprehensive conservation history is his framing of settler agrarian communities in Southern Rhodesia as a homogenous block. Indeed, Paul Mosley in his study of the Rhodesian and Kenyan settler economies stressed the importance of zooming in on "the settler economics of fault lines" between economic sectors.⁶² He emphasized that the category of white capital must not be seen as one sector, but several if policy is to be understood. This thesis extends Mosley's contention to include not only differences between economic sectors but the fault lines within an economic sector- the intra sectoral dynamics within the agrarian economy. To this end therefore, merely homogenising state policy on settler agriculture without unpacking the internal heterogeneities that differed from one sector to the other, one crop to the other leads to unfortunate historical generalisations about conservation in white farms. Angus Selby criticises such historical constructions that perceive white farmers as a homogenous rural bourgeoisie since it shrouds their differences when viewed through lenses of land and race.⁶³ White farmers as an interest group and an economic sector were enduringly divided by their backgrounds, geography, land uses and crop types as Selby Angus and Rory Pilosof have shown.⁶⁴ Also, the cultural practices and the production systems of tobacco differed very much from other crops, as this thesis will show. To this end a general conservation history of the white agrarian environment does not suffice to explore the nuanced socio-environmental attributes of the tobacco crop and its production context, which differed markedly from that of maize and other crops.

⁶⁰ Simeon Maravanyika, 'Soil Conservation and the White Agrarian Environment in Colonial Zimbabwe, 1908-1980', PhD Thesis, University of Pretoria, 2013.

⁶¹ See Maravanyika, 'Soil Conservation and the White Agrarian Environment', 136-40.

⁶² Paul Mosley, *The Settler Economies: Studies in the Economic History of Kenya and Southern Rhodesia, 1900-1963* (Cambridge: Cambridge University Press, 1983), 45.

⁶³ Angus Selby, 'Commercial Farmers and the State: Internal Group Politics and Land Reform in Zimbabwe', PhD Thesis, University of Oxford, 2006, 10.

⁶⁴ Selby, 'Commercial Farmers and the State', 10. Rory Pilosof argues that "a singular and cohesive white rural identity does not exist." See Rory Pilosof, 'The Unbearable Whiteness of Being: White Farming Voices in Zimbabwe and their Narration of the Recent Past, c.1970-2004', PhD Thesis, Sheffield University, 2010, 4.

Other general agrarian conservation histories of note include Muchaparara Musemwa's farmer-miner conflicts over the control of timber, grazing lands and water.⁶⁵ In addition, there is also Kwashirai's study on conservationism between 1890 and 1930 that looks at colonial settler activities in Mazowe, which observes that the activities of farmers and miners resulted in soil erosion and deforestation at a time when the state lacked a comprehensive policy thrust on the conservation of natural resources.⁶⁶ Besides being general agrarian conservation historical narratives, Maravanyika, Musemwa and Kwashirai focus on conservation-based discourses that were fashionable before the rise of modern environmentalism in the 1960s. These discourses looked at the environment through the prism of preservation of the wilderness and conservation of resources such as timber and soil enforced through legislations and regulations on the consumption of nature. Frank Uekotter designates this conservation dispensation as having been born in traditions of nature protection, the establishment of national parks and western conservation efforts that became more discernible from 1900.⁶⁷ The rationale for these conservation efforts was to protect space, govern access to ownership of natural resources and limit conflict in a way that conferred power and legitimacy to the state. Charles Maier further adds that these "space based" conservation efforts were a result of the age of "territoriality" when nation states had to enforce rules in peripheral regions.⁶⁸ Thus, in this regard conservation regulations in colonial systems can be seen as one of the ways used to control peripheral spaces. Indeed, as this thesis does argue in chapter six conservation laws such as the Land Apportionment Act (1930) and the Native Land Husbandry Act of 1951 became subtle strategies used by colonial officials in Southern Rhodesia to control Africans and contain them in geographic spaces amenable for effective coercive administration.

From the end of the Second World War with the expansion on the use of agrochemicals, the discourse of environmentalism began to change in fundamental ways to become global, and to emphasize more on environmental degradation and its relationship to human health as problems of pollution and industrial waste became endemic. Post-war environmental activism emphasized global ecological interconnectedness and was given great impetus by the

⁶⁵ Muchaparara Musemwa, 'Contestation Over Resources: The Farmer- Miner Dispute in Colonial Zimbabwe, 1903-1939', *Environment and History*, 15, 1 (February 2009), 79-109. Also, see Tapiwa Madimu, 'Farmers, Miners and the State in Colonial Zimbabwe, c.1895-1961', PhD Thesis, University of Stellenbosch, 2017.

⁶⁶ Vimbai Kwashirai, 'Dilemmas in Conservationism in Colonial Zimbabwe, 1890-1930', *Conservation and Society*, 4, 4 (2006), 541-561.

⁶⁷ Frank Uekotter, 'Consigning Environmentalism to History? Remarks on the Place of the Environmental Movement in Modern History', *Rachel Carson Center [RCC] Perspectives*, 7 (2011), 1-36

⁶⁸ Charles Maier, 'Consigning the Twentieth Century to History? Alternative Narratives for the Modern Era', *American Historical Review*, 105 (2000), 807-831.

publication of Rachel Carson's epoch defining book *Silent Spring* in 1962.⁶⁹ The book birthed modern environmentalism and made the environment a subject for government policy and global governance.⁷⁰ My thesis draws on, but also challenges and extends, the important work of Maravanyika, Musemwa and Kwashirai in that it goes beyond conservation discourses to engage with these new insights on the environment generated in the 1960s and show how the global environmental seismic wave generated by Carson on pesticides use played out in Southern Rhodesia.

THE INTERNATIONAL TOBACCO CONTEXT

This thesis similarly engages with a huge body of literature on global tobacco history to understand the overarching political, economic, social and environmental forces that shape the production dynamics within the history of the crop as well as in contemporary society. These global narratives are important because they contextualise the study in broader historiographies to show interconnectedness, historical continuities and change and the construction of farming traditions and socio-environmental change on a global scale. While there is much global literature on the medical properties of tobacco concentrating on smoking and the public health debates this thesis is more interested in the interaction of people with the tobacco plant and how this relationship has changed over time, and also shifting social relations and the physical environment. Jordan Goodman correctly if cursorily describes this relationship as “full of conflict, compromise, coercion and co-operation.”⁷¹ He examines the history of the crop as integral to the establishment of colonial settlements in America and playing a big historical role in creating new landscapes, economic centres and social relations that transformed the American frontier.

⁶⁹ Paul Warde, Libby Robin and Sverker Sörlin, *The Environment: A History of the Idea* (Baltimore: John Hopkins University, 2018), 6-18. Also see Adam Rome, ‘Give Earth a Chance: The Environmental Movement and the Sixties’, *The Journal of American History*, 90, 2 (September 2003), 525-554. Prior to the publication of Carson's work that ignited a global environmental avalanche other writer had begun advocating for planetary environmental histories showing how ecological disruptions in local settings had global ramifications and consequences. See William Vogt, *Road to Survival* (New York: William Sloane and Associates, 1948), 283-288.

⁷⁰ See Rachel Carson, *Silent Spring* (London: Hamish Hamilton, 1963). For discussions on how the book changed discourses on environmentalism see Mark Hamilton Lytle, *The Gentle Subversive: Rachel Carson, The Silent Spring and the Rise of the Environmental Movement* (New York: Oxford University Press, 2007); Linda J. Lear, ‘Rachel Carson's Silent Spring’, *Environmental History Review* 17, 2 (1993), 23-48; Ralph H. Lutt, ‘Chemical Fallout: Rachel Carson's Silent Spring, Radioactive Fallout and the Environmental Movement’, *Environmental History Review* 9, 3 (1985), 210-25; Lawrence Culver, ‘Reading *Silent Spring* as a Challenge for Contemporary Environmentalism’, *RCC Perspectives*, 7 (2012), 31-34.

⁷¹ Jordan Goodman, *Tobacco in History: The Cultures of Dependence* (London: Routledge, 1993), 14.

During much of the 18th century, tobacco cultivation was attached to colonialism and the establishment of European settlements. Its expansion in the 20th century as a commercial agricultural commodity to most parts of the world including Asia and Africa was principally a result of the association between European settlement and tobacco culture. Thus, the crop went through various transitions in production systems from the planter slave economy into the globalised cultures of production in the 19th century which saw the rise of dependent producers and huge powerful global tobacco co-operations. Goodman makes the important observation that tobacco is best understood in historical terms, as there is a complex process of cultural accretion associated with changes in its cultivation, production and marketing, and only by such a historical understanding can its eradication as a harmful socio-environmental product be successful.⁷²

Goodman's work is complemented by Peter Benson's anthropological and ethnographic study that looks at tobacco farming through the lens of the globalisation of tobacco capitalism and the changing models of production in tobacco farms, the tobacco economy and the accompanying social changes.⁷³ His work reflects on the evolution of labour regimes from the jungle tobacco farms to modern mechanised tobacco farm systems that still thrive on conditions of structural violence that include deplorable working conditions, endemic poverty, racism, stigma, poor health and low wages. He delves into the huge debate about the role of big cigarette manufacturers like Philip Morris in obfuscating the debates on public health and smoking as well as the global tobacco control initiative in the new millennium and the prospects. Benson makes the intrinsically poignant observation that although many people feel they have no relationship with tobacco, or its harms – the crop has shaped society in so many determinate ways.⁷⁴ Big tobacco companies have long affected society by stimulating tobacco production by offering attractive economic incentives to farmers. This has resulted in intensive cropping systems accompanied by a breakdown of ecologies and social relations. William Loker showed how BAT stimulated contract flue-cured tobacco production in the Copan valley in Honduras between 1952 and 1995.⁷⁵ This resulted in intensive cultivation that led to a huge demand for labour that in turn reinforced social inequality and quickened the pace of

⁷² Goodman, *Tobacco in History*, 245.

⁷³ See Peter Benson, *Tobacco Capitalism: Growers, Migrant Workers, and the Changing Face of a Global Industry* (Princeton: Princeton University Press, 2012).

⁷⁴ Benson, *Tobacco Capitalism*, 269.

⁷⁵ William Loker, 'The Rise and Fall of Flue-Cured Tobacco in the Copan Valley and Its Environmental and Social Consequences', *Human Ecology*, 33, 3 (June 2005), 299-327.

exploitation. In 1995, when BAT withdrew its interest, this tobacco industry collapsed leaving behind “a mess of rocks, mud, fallen trees” and a crisis in the agricultural economy.⁷⁶ In Kenya BAT also introduced contract tobacco farming in Kuria district in the 1970s, disrupting the existing pastoral economies and bringing intensification of land use patterns that resulted in ecological disruption, deforestation and a disruptive reordering of social relations.⁷⁷

Allan Brandt examines the process which led to the globalisation of the tobacco epidemic and the historical change of the tobacco industry from national into multinational.⁷⁸ He locates this dynamic in the changes in tobacco consumerism from snuff taking, pipe smoking and chewing to the cigarette whose revolutionary power transformed tobacco culture, the market and the whole smoking tradition. The cigarette century revealed “the drama of historical change”, it transformed smoking in ways that impacted agrarian change in tobacco farms.⁷⁹ Brandt argues that “before the cigarette, there was tobacco”, but the rise of the cigarette technology in the 20th century led to many changes including the popularisation of Virginia tobacco and flue-curing technology.⁸⁰ Before the 19th century tobacco was cured by air and sun.⁸¹ Fire curing using wooden fires and smoke became popular around the 1820s as a result of the rise of the cigarette.⁸² However, in 1839 fire-curing technology was overtaken by flue-curing using smokeless heating systems that required charcoal fires and turned the leaf into a desirable bright colour.⁸³ The cigarette also led to changes in the harvesting techniques from those used before the twentieth century that involved cutting the whole plant to “priming” – that is removing each ripe leaf separately.⁸⁴ This change in harvesting techniques was a result of preferences by cigarette manufacturers for a uniformly ripened and cured leaf. This new harvesting technique that involved priming constructed newer labour regimes and made tobacco farming more

⁷⁶ Loker, ‘The Rise and Fall of Flue Cured Tobacco in the Copan Valley’, 299-327.

⁷⁷ See Babere Kerata Chacha, ‘From Pastoralist to Tobacco Peasants: The BAT and Socio-ecological Change in Kuria District Kenya, 1969-1999’, (Unpublished paper), available on https://www.academia.edu/4153302/From_Pastoralists_to_Tobacco_Peasants_The_British_American_Tobacco_B.A.T_and_Socio-ecological_Change_in_Kuria_District_Kenya_1969-1999, accessed on 26 July 2019; Suzette Heald, ‘Tobacco, Time and the Household Economy in Two Kenyan Societies: The Teso and the Kuria’, *Comparative Studies in Society and History*, 33, 1 (January 1991), 130-157; Suzette Heald, ‘Agricultural Intensification and the Decline of Pastoralism: A Case Study from Kenya’, *Journal of the International African Institute*, 69, 2 (1999), 213-237.

⁷⁸ Allan M. Brandt, *The Cigarette Century: The Rise, Fall, and Deadly Persistence of the Product that Defined America* (New York: Basic Books, 2007).

⁷⁹ Brandt, *The Cigarette Century*, 12.

⁸⁰ Brandt, *The Cigarette Century*, 30.

⁸¹ F.F. Siegel, *The Roots of Southern Distinctness: Tobacco and Society in Danville, Virginia, 1780-1865* (Chapel Hill: University of North Carolina Press, 1987), 101.

⁸² Nannie M. Tilley, *The Bright Tobacco Industry* (Chapel Hill: University of North Carolina Press, 1948), 24.

⁸³ Tilley, *The Bright Tobacco Industry*, 24.

⁸⁴ Tilley, *The Bright Tobacco Industry*, 57-58.

labour intensive.⁸⁵ Thus, the growth of cigarette technology in the twentieth century resulted in a lot of significant changes in tobacco cultivation and culture – that in turn affected society relations and the environment.

The cigarette revolution made Virginia flue-cured tobacco to become more popular and replaced other tobacco varieties such as air-cured and fire-cured. Flue-cured is acidic, while air-cured and fire-cured are alkaline, and it is the acidic component of flue-cured which makes its smoke easy to inhale that made it convenient for the manufacture of cigarettes.⁸⁶ The cigarette century made tobacco the single largest cause of preventable death in the world killing one hundred million people in the 20th century, and projected to kill one billion in this century.⁸⁷ WHO estimates that the majority of tobacco deaths will occur in the developing world where the tobacco industry has popularised smoking and is recruiting youths.⁸⁸ The popularisation of flue-cured Virginia and the cigarette has globalised tobacco consumption and its production into the third world where multinational tobacco companies have moved in and secured powerful government support.⁸⁹ The globalisation of tobacco comes with challenges to developing economies which are unlike western governments that have come up with stringent policing on tobacco control and are relatively better able to regulate tobacco companies. In the developing world's illicit cigarettes trade, the smuggling of tobacco products and tobacco tax evasion has created a criminal underworld involving government officials and state institutions in corrupt scams benefitting tobacco multi-nationals. Johan van Loggerenberg's recent publication reveals how tobacco companies corrupted law enforcement officials in South Africa, capturing state institutions such as the South African Revenue Services (SARS), corrupting politicians, businessmen and ordinary South Africans.⁹⁰ Independent estimates suggest that South Africa loses five billion Rand annually to this illicit tobacco trade.⁹¹

⁸⁵ Goodman, *Tobacco in History*, 208.

⁸⁶ Goodman, *Tobacco in History*, 98-99.

⁸⁷ Benson, *Tobacco Capitalism*, 37.

⁸⁸ 'Report on the Global Tobacco Epidemic', WHO, Geneva, 2008, 4

⁸⁹ The shrinking market space in the developed world as a result of tobacco control regulations has been a cause for concern for most cigarette companies. Between 1975 and 1994 cigarette sales in the USA declined by 20%, while production rose by 11% prompting cigarette manufacturers like Philip Morris to look for other markets. The globalisation of free trade and world commerce has helped this initiative so much that new frontier markets have been found in the developing world where demographic and population explosion create conducive conditions. In addition to opening of frontier markets another feature of the globalisation of the tobacco industry has been the proliferation of international companies such as BAT in the developing world where tobacco contract farming is now prevalent. See Brandt, *The Cigarette Century*, 449- 458.

⁹⁰ Johan van Loggerenberg, *Tobacco Wars* (Cape Town: Tafelberg Publishers, 2019).

⁹¹ Graeme Hosken, 'Smoking out the conspirators', *Sunday Times*, 28 July 2019.

The tobacco industry's response to its withering criticism on the negative public health, socio-environmental and economic impact of their product has been flexible and creative. These responses range from sponsoring and funding parallel scientific studies disseminating favourable reports to advancing protectionist arguments that argue that rural farming communities would suffer economic dislocation if tobacco control is enforced, and to promoting deceitful social responsibility using its public relation machinery to whitewash the industry's complicity in social violence and environmental degradation.⁹² Furthermore, the tobacco companies have used political donations to lobby favourable legislative and policy decisions from governments to eschew regulative scrutiny.⁹³ Chapter seven of this thesis engages with how the tobacco industry in Southern Rhodesia responded to the global public health debates that arose in the 1950s linking smoking and cancer. It shows how the tobacco interest groups worked in defence of the industry's reputation through disseminating propaganda research absolving Rhodesian leaf from having carcinogenic properties. Even, in present day Zimbabwe the power of "big tobacco" is visible as these co-operations make big political donations to whitewash their noncompliance to social responsibility obligations and socio-environmentally sustainable production models.⁹⁴

THEORETICAL POINTS OF DEPARTURE AND RESEARCH QUESTIONS

The literature on Southern Rhodesian tobacco history reveals that there is a huge gap on the interaction between tobacco farmers and the environment and how this interaction changed

⁹² See Benson, *Tobacco Capitalism*, 43-62. For a wider discussion on how the tobacco industry has sponsored parallel researches to scuttle evidence linking its product to cancer and other diseases see Naomi Oreskes and Erik M. Conway, *Merchants of Doubt: How a Handful of Scientist Obscured the Truth on Issues From Tobacco Smoke to Global Warming* (New York: Bloomsbury Press, 2010), 136-165.

⁹³ WHO estimates that between 1995 and 2000 tobacco companies in the USA alone spent over US\$ 32 million in donations to political candidates and federal officials, See <https://www.who.int/tobacco/en/atlas24.pdf?ua=1>, accessed 6 August 2019. Also, *The Guardian* reporter Jessica Glenza reported in 2017 that the tobacco industry had a strangle hold on top White house officials and the industry had a "pervasive" influence upon Capitol Hill. She added that tobacco industry representatives held frequent meetings with administration officials on regulation of e-cigarettes, tobacco packaging and advertisement. American biggest tobacco companies Reynolds and Altria are rumoured to have donated US\$ 1,5 million for the inauguration of President Donald Trump. During the first quarter of 2017, tobacco companies spent \$US 4,7 million on political lobbies resulting in politicians with deep ties to the industry heading the health department, the attorney offices and the Senate. In 2001, current USA Vice-President, but then member of the House of Representatives Mike Pence argued that "smoking doesn't kill". See Jessica Glenza, 'Tobacco companies tighten hold on Washington under Trump', available on <https://www.theguardian.com/world/2017/jul/13/tobacco-industry-trump-administration-ties>, accessed on 6 August 2019.

⁹⁴ In 2015, BAT signed a Memorandum of Understanding with the government of Zimbabwe towards the creation of the Zimbabwe Tobacco Empowerment Trust- a funding facility for youths to have access to credit for tobacco farming. The funding was worth US\$ 527, 000. See 'Government, BAT sign MoU', available at <https://www.herald.co.zw/govt-bat-sign-mou/>, accessed on 6 August 2019. This funding violates article 5.3 of the FCTC that emphasises states to protect public health from the vested commercial interests of the tobacco industry and not have conflict of interests.

physical landscapes, the human body and social relations over time. To remedy this gap the thesis draws conceptual grounding from the debates around conservation and ecology which arose after the “Dust Bowl disaster” in the United States in the 1930s. This new approach towards environmental concern has been captured more intensely in the American environmental historiographical school which has located the origins of environmental degradation within wasteful and predatory capitalist agricultural systems. This school rejects romanticised narratives of colonial agricultural settlements based on the agrarian myth of progressive frontier farming. American environmental historians such as Donald Worster,⁹⁵ Henry Nash Smith⁹⁶, Richard Hofstadter⁹⁷, Leslie Hewes⁹⁸ and Douglas Hurt⁹⁹ have all pointed out the severe impacts of colonial farming systems on labour exploitation, class conflict and the environment. Historians of colonial Africa have also shown that the influence of the Dust Bowl was key in the formulation of conservation ideologies in the continent during the 1930s as it made soil erosion “the first global environmental problem”.¹⁰⁰

This study further connects this theoretical approach to contemporary debates on the Anthropocene.¹⁰¹ This emphasizes that human activity has altered the earth significantly and instigated environmental change in the form of global warming, loss of habitats and biodiversity, changes in the chemical composition of the atmosphere, oceans, soil as well as extinction of the species.¹⁰² The Anthropocene approach connects with the concept of

⁹⁵ Donald Worster’s works on the subject include, *Dust Bowl: The Southern Plains in the 1930s* (Oxford: Oxford University Press, 1979); *Rivers of Empire; Water Aridity and the Growth of the American West* (New York: Pantheon Books, 1985); *Nature’s Economy: The Roots of Ecology* (San Francisco: Sierra Club Books, 1972); ‘The Dirty Thirties: A Study in Agricultural Capitalism’, *Great Plains Quarterly*, 6, 2 (Spring 1986), 107-116.

⁹⁶ Henry Nash Smith, *Virgin Land: The American West as Symbol and Myth* (Cambridge: Harvard University Press, 1970).

⁹⁷ Richard Hofstadter, *The Progressive Historians: Turner, Beard and Parrington* (New York: Alfred A. Knopf, 1968).

⁹⁸ Leslie Hewes, *The Suitcase Farming Frontier: A Study in the Historical Geography of the Central Great Plains* (Lincoln: University of Nebraska Press, 1973).

⁹⁹ Douglas Hurt, *Dust Bowl* (Chicago: Nelson Hall, 1981).

¹⁰⁰ See David Anderson, ‘Depression, Dust Bowl, Demography, and Drought: The Colonial State and Soil Conservation in East Africa during the 1930s’, *African Affairs*, 83, 332 (1984), 321-343.

¹⁰¹ The term Anthropocene was introduced by J.P. Cruitzten and E.F. Stoermer in 2000 to designate a new geological age distinct from the Holocene era. They argue that the Anthropocene is the age of humans and is defined by rapid climate change, expansion of human and livestock populations, rapid urbanisation, increased consumption of fresh water, extinction of animal species, landscape and waterway modification, and the decline of natural resources. They designate this era as beginning between 1750 and 1800. The debate has been taken up and although there are disagreements on when exactly the age began there is unanimity that human activity has altered the planet more significantly during this era. See J. P. Cruitzten and E.F. Stoermer, ‘The Anthropocene’, *Global Change Newsletter*, 41 (2000), 17-18.

¹⁰² For debates on the age of the Anthropocene see Nina Möllers, ‘Cur(at)ing the Planet—How to Exhibit the Anthropocene and Why?’, *RCC Perspectives*, 3 (2013), 57-66; Todd J. Braje, ‘Earth Systems, Human Agency, and the Anthropocene: Planet Earth in the Human Age’, *Journal of Archaeological Research*, 23, 4 (December

“sustainable development” that has come to dominate the global development agenda in the new millennium. This new paradigm has come to inform choices and options of economic development rationalising them within the capacities of environmental systems to optimally contain and sustain them. Emerging from the Bruntland report of 1987, or the World Environmental Commission on Environmental Development, “sustainable development” rejects the orthodox and conventional views of the environment as a sphere separate from human action and categorises development in relation to the environment. Sustainability is seen as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”¹⁰³ Within this theoretical context, this study wishes to answer the research question: In what ways did tobacco production affect the environment, or contribute to environmental degradation or improvement – and how did this change over time?

The study is also theoretically located within the debates on the evolution of colonial conservation in southern Africa and the roots of conservation thinking in Southern Rhodesia captured in the formative Ian Phimister-William Beinart debate.¹⁰⁴ The debates will be situated within the study as a theoretical fulcrum to trace the genesis and development of colonial environmental policy, particularly how the state’s role metamorphosed over time, the distinctive characteristics of state-led conservation initiatives, and the changing attitudes of settler farmers over time. The study will contend that ideas about conservation amongst tobacco farmers in Southern Rhodesia did not manifest in a vacuum but were closely attached to local economic needs and production necessities. To this end, the thesis will seek to answer the research question: What role did the state play in regulating the interaction between settler tobacco farmers and the environment and how did this change over time?

2015), 369-396; Maria Paula Diogo, Ivo Louro and Davide Scarso, ‘Uncanny Nature: Why the Concept of Anthropocene is Relevant for Historians of Technology’, *Icon*, 23 (2017), 25-35.

¹⁰³ Report of the World Commission on Environmental Development: Our Common Future, available at <http://www.un-documents.net/our-common-future.pdf>, retrieved on 28 March 2017.

¹⁰⁴ The debate is linked to the beginning of conservation thinking in Southern Rhodesia. William Beinart views the colonial state as a significant agent in conservationist intervention before the 20th century. Beinart, further argues that these ideas had become established at the Cape around the 1860s where future capitalist agrarian development came to be viewed as dependent on rational planning, the application of technology and the unbridled freedom to exploit natural resources for private gain was condemned. Ian Phimister vehemently rejected the importance attached to conservationism in shaping the pattern of state intervention in Southern Rhodesia. He maintains that the roots of the conservation movement were shallow in Southern Rhodesia, and these were applied only assiduously in relation to African peasants, and not settler farmers. See Beinart, ‘Soil Erosion, Conservationism and Ideas about Development’, 52-83; Phimister, ‘Discourse and the Discipline of Historical Context’, 263-275.

The thesis also uses Rob Nixon's twin concepts of "slow violence" and "the environmentalism of the poor", which reflect on how disempowered social groups disproportionately suffer the effects of environmental violence, and how this violence happens slowly and invisibly over time.¹⁰⁵ The concept is used to reflect on the impact of tobacco farming on the human body by pointing to the socio-environmental violence tobacco farming wrought on African labour through rigid labour control, mechanisms, exposure to tobacco chemicals and other unsafe working conditions within which they became victims of "slow death". On the same theoretical note Rachel Carson's *Silent Spring* is used to interrogate the use of pesticides in tobacco production in Southern Rhodesia between 1945 and 1980. This theoretical point is more thoroughly used to answer the research question in Chapter Five: What was the impact of tobacco production in Southern Rhodesia on the human body?

Historiographical models of colonial peasantries are used in the study as prisms through which to scrutinise African tobacco farmers' interaction with the colonial state and their responses over time. Giovanni Arrighi¹⁰⁶, Robin Palmer¹⁰⁷, Ian Phimister¹⁰⁸ as well as Colin Bundy¹⁰⁹ point to how colonial peasant economies experienced transient booms during early colonial encounters before being disrupted by systematic state-sponsored economic ostracism. The responses of peasantries to these forms of colonial dislocation differed from one context to the other and have been subject to much debate and contestation.¹¹⁰ The thesis uses these theories to examine the nature of state policy on African tobacco farmers and the impact on the rural landscape and social economy. Africanist environmental history also adds an intriguing theoretical entry point: these histories have portrayed colonial encounters as constituting the rape and plunder of "native" natural resources through unbridled settler economic expansion. Africanist writers have shared what John MacKenzie has referred to as "the apocalyptic vision of global environmental history based on the profoundly disruptive colonial encounters in the

¹⁰⁵ Rob Nixon, *Slow Violence and the Environmentalism of the Poor* (Cambridge: Harvard University Press, 2011), 2.

¹⁰⁶ Arrighi, 'Labour Supplies in Historical Perspective', 97-234.

¹⁰⁷ Robin Palmer, 'The Agricultural History of Rhodesia', in R. Palmer and N. Parsons (eds), *The Roots of Rural Poverty in Central and Southern Africa* (London: Heinemann, 1977).

¹⁰⁸ Ian Phimister, 'Peasant Production and Underdevelopment in Southern Rhodesia, 1890-1914', *African Affairs*, 73, 291 (April 1974), 217-228.

¹⁰⁹ Bundy, *The Rise and Fall of The South African Peasantry*.

¹¹⁰ Terence Ranger argued that peasant dislocation narratives fail to understand that peasant economies were complex, and, in some cases, peasants were not dislocated and disrupted by the colonial state's discriminative policies. Ranger promoted the model of peasants with agency, many options and the rise of reserve entrepreneurs who navigated around the crude writ of colonial oppression in African areas. The thesis engages with Ranger's theory in Chapter Six. See Terence Ranger, *Peasant Consciousness and Guerrilla War in Zimbabwe* (London: James Currey, 1985), 54-98.

Americas and Australia”.¹¹¹ Notable amongst the Africanist scholars are Helge Kjekshus who argued that colonialism spread diseases and epidemics such as tsetse fly and trypanosomiasis in Tanzania¹¹², and Leroy Vail who – as early as the 1970s – presented colonial experiences in Zambia as resulting in concentrated village settlements by expanding areas dominated by bush, wildlife and tsetse fly.¹¹³ Africanist scholars have also been sceptical of the motives around conservation, largely seeing it as a tool to curtail African access to land and a means for social and political control.¹¹⁴

RESEARCH DESIGN AND METHODOLOGY

This study relies on primary sources, mostly archival material from the National Archives of Zimbabwe, newspapers, agricultural magazines, journals and oral interviews. The use of these primary sources was informed by the gaps in secondary literature as highlighted in the literature review. The National Archives of Zimbabwe houses a huge collection of files on tobacco in colonial Zimbabwe and much of the research material in the thesis was based on this collection of official documents that range from correspondences, reports, statistical data and minutes of meetings of key stakeholders of the Southern Rhodesian tobacco industry. These were important in understanding the attitudes of all the major players in the industry towards the environment, the factors that shaped those attitudes and how these changed over time. Also, the archive offers a convenient official vantage point from which to glean the nature of state

¹¹¹ John MacKenzie, ‘Empire and the Ecological Apocalypse: The Historiography of the Imperial Environment’, in Tom Griffith and Libby Robin (eds), *Ecology and Empire: Environmental History of Settler Societies* (Edinburgh: Keele University Press, 1997), 215-28.

¹¹² Helge Kjekshus, *Ecology Control and Economic Development in East African History* (London: Heinemann, 1987).

¹¹³ Leroy Vail, ‘Ecology and History: The Example of Eastern Zambia’, *Journal of Southern African Studies*, 3 (1977), 129-55.

¹¹⁴ See Anderson, ‘Depression, Dust Bowl, Demography, and Drought’, 321-343; David Anderson and David Throup, ‘Africans and Agricultural Production in Colonial Kenya: The Myth of the War as a Watershed’, *The Journal of African History*, 26, 4, World War II and Africa (1985), 327-345; Eira Kramer, ‘The Early Years: Extension Services in Peasant Agriculture in Colonial Zimbabwe, 1925-1929’, *Zambezia*, XXIV, ii (1997), 159-179; Ian Phimister, ‘Rethinking the Reserves: Southern Rhodesia’s Land Husbandry Act Reviewed’, *Journal of Southern African Studies*, 19, 2 (June 1993), 225-239; JoAn McGregor, ‘Conservation Control and Ecological Change: The Politics and Ecology of Colonial Conservation in Shurugwi, Zimbabwe’, *Environment and History*, 1, 3 (October 1995), 257-279.

intervention in tobacco production and how socio-environmental policy and legislation was crafted and enforced on tobacco farmers.

The archive, however, had the major weakness of not revealing the more nuanced relationship between farmers and the environment, which was happening outside the gaze of official state institutions and remained invisible in official narratives. Such encounters are recoded in newspapers, magazines, and other informal publications and newsletters of the time which contain opinion pieces from readers, letters to the editor complaints about tobacco farmers and farming. The research used a collection of newspapers cuttings found at the repositories of the Tobacco Research Board (TRB) of Zimbabwe. These newspapers included *The Rhodesian Herald* and *The Financial Gazette*, *The Star* and *The Sunday Mail*. Other Farmers magazines such as *Vuka* and *The Countryside* were also helpful in that regard. The newspapers and magazines had a lot of details not contained in official files collections at the National Archives particularly from the 1970s as most of those files are not yet processed and accessible to the public.

The Tobacco Research Board also houses collections of tobacco journals such as the *Rhodesian Tobacco Journal* (which was a publication of the Rhodesian Tobacco Association and launched in 1949), *Tobacco Today*, *The Rhodesian Tobacco Grower and Food Producer*, *The Tobacco Forum of Rhodesia* and *Nyasaland*, which later changed its name to *The Tobacco Forum of Rhodesia* when the Federation ended in 1963. The journals of tobacco farmers contained a huge collection of material on the industry and were very useful in understanding the general outline of the development of the industry from 1949 to 1980. Another useful source used in that regard is the *Rhodesian Agricultural Journal* which contains technical and policy publications on tobacco cultural practices from as early as 1903 until 1980. The journal provides a convenient reading on production changes and policy shifts across time and the impact on the land and environment. The technical articles contained in the journals shed light on how the tobacco farmers shaped the environment through tobacco cultural practices such as the control of eel worm in tobacco, rotation practices, tobacco curing systems, the evolution of mechanisation models on tobacco farms, farm planning and chemical control of pests, diseases and weeds. These journals offer nuggets of historical information, however, in some instances they contain some inherent biases because they are mouthpieces of the tobacco farmers and the established tobacco interest groups in Southern Rhodesia – such as the Rhodesian Tobacco Association and the Tobacco Export Promotion Council of Rhodesia and Nyasaland.

Although the archive is a useful source of colonial tobacco history, it does not tell a very objective story of African tobacco producers and their experiences. The archive constructs the colonial state as a benevolent patron dispensing a lot of technical and financial assistance towards African tobacco farmers to develop their areas through promoting cash crop production. These sources ignore the challenges African farmers had to face to compete with white farmers who had the benefit of access to the colonial socio-environmental infrastructure conducive for production such as land, water resources, labour and capital. To fill in this gap the research had to rely on oral interviews with African farmers who grew tobacco in the Native Purchase Areas of Karuyana in Mount Darwin and Tribal Trust Lands of Chiweshe in Mazowe district during the colonial period to understand their experiences and challenges. Unfortunately, but understandably, given the huge lapse of time and geographic displacement of people that has happened across the years within these areas, the researcher could only get a limited number of participants (four), but their oral testimonies were valuable in understanding the plight of African tobacco producers and the levels of socio-environmental challenges they faced. Also, these colonial sources are not critical on how the use of chemical pesticides by white tobacco farmers was affecting African labourers. Oral interviews with former colonial tobacco farm workers thus had to be done to understand the conditions and circumstances of chemical exposure. The researcher also intended to interview white commercial farmers to get their perspectives, but unfortunately the attempt to approach them through the Commercial Farmers Union (CFU) was a failure as its chairperson Mr. Charles Taffs refused to grant the researcher an interview or recommend white farmers for interview because he felt there could have been political motives. However, this was not a huge methodological inconvenience as the voices of the white tobacco farmers are contained in the sources at the archives and the various tobacco journals previously mentioned. The oral interviews were simply meant to add another layer to the existing corpus of white farmers' voices by distilling retrospective perspectives on tobacco farming and the environment in colonial Southern Rhodesia.

Embedded ethnography and personal experiences were also used to reflect on the socio-environmental experiences of tobacco farming landscapes. The researcher has had personal lived experiences in a tobacco farming area from the late 1980s. He grew up on a commercial white tobacco farm, lived in a black resettlement where his father grew tobacco on a small-scale basis, and has himself grown tobacco on several occasions. Although, these experiences

are not directly recorded in this thesis they form a large latent body of knowledge, which informed several outlooks and perspectives.¹¹⁵

The major methodological challenge in the study, however, was in quantifying the impact, and levels of socio-environmental degradation caused by tobacco farming during the colonial period in quantitative environmental science and epidemiological categories. This study observes the difficulties in coming up with objective scientific data to measure the extent over time. This is due to the penchant of the colonial state to conceal certain information for the purposes of constructing flattering narratives and due to the lack of more technically sound means during the period of measuring environmental impact. This problem is more aptly captured by Kate Showers who, in her study of colonial Lesotho's soil erosion, noted that the colonial state lacked technical expertise in erosion evaluation and surveys so much that the records on early development of soil erosion and soil conservation is primarily a collection of incomplete anecdotal observations and perceptions by missionaries and colonial administrators who were untrained in landscape evaluations.¹¹⁶ To remedy this shortfall, the study relied on qualitative testimonies, reports and evaluations on socio-environmental impacts that portrays the historical magnitude of the problem. Moreover, statistical figures on land conservation, contour farming and land use patterns in the tobacco farms are given in the thesis to demonstrate environmental and landscape change over time.

STRUCTURE AND LAYOUT

This study is divided into eight chapters. This chapter has provided the introduction, the palimpsestic historiographical traditions and the research methods that were employed. Chapter two begins from 1893, which is when white settler tobacco production in Southern Rhodesia is believed to have started. It focusses on the early history of the white pioneer tobacco farmers in Southern Rhodesia and how they used land and natural resources in their production systems. It integrates these cultural practices of the early farmers within the global history of tobacco within American pioneer settlements to give a dense context and broader perspectives on how tobacco farming constructs new landscapes and ecologies. The chapter argues that tobacco opened new farming frontiers in Southern Rhodesia which led to much

¹¹⁵ From 2011-2016, I grew 2-3 hectares of flue-cured Virginia tobacco each season in Centenary District northern Zimbabwe, Mashonaland central province. The farm a 12-acre is part of land the government parcelled out to African peasant farmers at Jutland farm under Land Resettlement Program during 1990-91.

¹¹⁶ Showers, 'Soil Erosion in the Kingdom of Lesotho', 143-162.

clearing of forest, virgin bushes, cutting down of trees and the degradation of soils in the sand veld. The chapter also looks at how tobacco production spurred the exploitation of labour in the white settler farms, and how a crude system based on child labour, cruel recruitment methods and diabolical labour management entrenched itself. The chapter argues that the construction of labour regimes in tobacco farming that accentuates social violence and rigidifies racial and class hierarchies are part of the historical heritage of the crop which is still conspicuous in contemporary systems of labour in tobacco production.

Chapter Three examines the period from the Great Depression in 1930 to the end of World War II in 1945. It focuses on the influence of the Dust Bowl disaster in the USA and the Great Depression on the development of the conservation movement in Southern Rhodesia, and how these conservation ideas were articulated by the state to white tobacco farmers. It argues that, just as the Dust Bowl in the USA was a result of speculative farming that resulted in the wasteful tilling of brittle soils in the plains, the tobacco slump from 1928 also resulted from overproduction accompanied by a plunder of resources in the tobacco farms. It looks at how these environmental problems caused by tobacco farming were espoused in various state reports from the Danziger report of 1934 to the Natural Resources Board Commission Enquiry of 1942. It argues that while in the USA state intervention models on tobacco farming as articulated under the Agricultural Adjustment Act (AAA) of 1933 under the Federal Tobacco Program had been successful in limiting acreages and encouraging conservation; in Southern Rhodesia the various attempts by the state to regulate tobacco farming such as production controls failed to stem the tide of speculation and environmental degradation.

Chapter Four looks at the changing trajectory of tobacco farming from 1947 to 1960 brought about by the post-war boom and the London Agreement, which witnessed tobacco overtake gold as the colony's chief export commodity. It examines how the boom and flow of capital changed the landscape of tobacco farms in Southern Rhodesia. It engages with the historiographical debates in colonial conservation in southern Africa and contends against environmental declensionist narratives. The chapter concludes that the impact of the tobacco boom to farming landscapes was more nuanced and transcend degradation narratives. The dynamic of tobacco capital and high production costs was changing farming systems and bringing in biological conservation that integrated cropping systems with dairying and beef production.

Chapter Five offers an insight into the use of pesticides in tobacco production beginning in 1945 when there was a huge global pesticide revolution that extended pest control technology as organochlorine pesticides became more readily available and used. It examines the evolution of pest and disease control in tobacco from 1945 and the attendant socio-environmental challenges. This chapter engages with the global debates on environmentalism that emerged in the global north in the 1960s with the publication of Rachel Carson's book *Silent Spring*¹¹⁷ in 1962. It critiques the application of these ideas in the global south by reflecting on how the Rhodesian tobacco industry appropriated the banning of certain pesticides and their controlled use. In the end, the chapter argues that the use of pesticides in tobacco farming claimed several casualties in the human and natural environment.

Chapter Six discusses the African tobacco producers and the nature of state policy and its impact on rural incomes and physical landscape from 1900 to 1980. It discusses the various tools that were used by the colonial authorities to kill native competition in tobacco production and how these resulted in the extinction of the African tobacco economy in the late 1930s. The chapter also discusses the change in state policy from 1952 when under the modernisation thrust the colonial state began encouraging African production of Turkish and Burley tobacco in the Native Purchase Areas and Tribal Trust Lands. It argues that despite the cosmetic changes in state policy from curtailment to encouragement of African producers, the nature of colonial state policy remained fundamentally premised on the need to limit the participation of Africans in the colonial tobacco economy where their role was supposed to be that of labourers in European tobacco farms and consumers of European produced tobacco. The chapter also critiques the universal applicability to tobacco production in Southern Rhodesia of theories of colonial peasant responses and initiatives as espoused by Ranger, Paul Mosley and Gary Blank. It proposes an alternative conceptual paradigm of looking at colonial responses to African peasant production called the "crop power hegemonies".

Chapter Seven engages with the global public health debates that arose from the 1950s linking smoking and cancer and how they were articulated in Southern Rhodesia. The chapter, however, concentrates on the UDI and the tobacco embargo and its impact on tobacco farming. Unlike previous histories that looked at the UDI's impact in economic terms this chapter extends the perspective to the impact on conservation farming, the environment and changes

¹¹⁷ Carson, *Silent Spring*.

in agricultural ecologies. It examines how agricultural diversification into other crops such as cotton prompted by the embargo destroyed the sand veld agricultural ecosystems that could not withstand the new cropping systems resulting in land degradation. Also, the financial constraints resulted in tobacco farmers abandoning the progressive conservation practices such as “contour farming”. The chapter also examines the environmental impact of the war on tobacco farms as most of them were abandoned.

Chapter Eight is the conclusion that highlights the core arguments, connects the arguments developed in the chapters together and links the colonial period to contemporary developments in the 2000s, daring to not only understand the past but use it to try understand the present and even (tentatively) predict the future. It discusses the present socio-environmental systems in tobacco as part of the heritage of tobacco history. It uses the past to make a bold call for the need for more proactive socio-environmental interventions and tobacco control measures if the future of tobacco farming livelihoods is to be secured in an era of rapid environmental and climate change. The chapter concludes by proposing socio-environmental policy interventions based on a long-term understanding of both the ideographic and global history of tobacco farming – and the connections between them.

CHAPTER TWO

GLOBAL PERSPECTIVES AND LOCAL NARRATIVES: A SOCIO-ENVIRONMENTAL HISTORY OF PIONEER TOBACCO FARMING IN SOUTHERN RHODESIA, 1893-1928

Virginia growers are heirs—not always literally, of course—to an unbroken history of tobacco cultivation that links them to the origins of the plantation and chattel slavery in North America and, by extension, to the larger consequences of both for world history.

Evan P. Bennett, 2012

An Amerindian crop-transplanted to Europe, transplanted back to America, grown by an English-Algonquian couple, and transplanted to Africa—miraculously justifies whites' position in Zimbabwe. With such aptitude for meanings and materials, surely whites could make their home in both Virginias¹ or anywhere in Africa.

David McDermott Hughes, 2006

INTRODUCTION

The colony of Southern Rhodesia was founded in 1890 by a private commercial concern, the British South African Company (BSAC). The basis for colonial occupation was the hope of finding the second Rand and the belief in the existence of an African *Eldorado*. In 1892, after visiting Mashonaland (see map below), Lord Randolph Churchill judged the environment hostile to farming and concluded that agriculture on a large scale, except for the feeding of a large mining population, would be a “ruinous enterprise”.² However, many of the mineral prospectors who sought the elusive mother lode were frustrated – searching in vain for the vein of bright metal. When gold disappointed them, several turned their hands to cultivating the soils surrounding the reefs. Here they found a different kind of gold: the potential to grow the rich golden leaf of tobacco. These new pioneer farmers carved out new farms in the sand veld so readily found in most northern and north-eastern parts of the colony – an area that was later to assume the appellation the “tobacco belt”.³ Between 1894 and 1928, tobacco growing expanded exponentially to become a key pillar of the colonial economy contributing 42.7% to agricultural export revenue by 1928.⁴ However, the development and expansion of the colonial

¹ “Virginia” is used with reference to two geographic places. The Virginia state in the USA famous in history as the place where Virginia flue-cured tobacco culture originated. The second is the name of a farming area in the district of Marondera in Zimbabwe so- named because the area had a lot of white-owned commercial farms on which Virginia flue-cured tobacco was grown before the advent of the Fast Track Land Resettlement Program in 2000.

² M.G.B. Rooney, ‘European Agriculture in the History of Rhodesia, 1890-1907’, MA Thesis, UNISA, 1968, 35.

³ Peter Scott, ‘The Tobacco Industry of Southern Rhodesia’, *Economic Geography*, 28, 3 (July 1952), 189-206.

⁴ V.E.M. Machingaidze, ‘The Development of Settler Capitalist Agriculture in Southern Rhodesia with particular Reference to the Role of the State, 1908-1939’, PhD Thesis, University of London, 1980, 183.

tobacco economy by pioneer farmers in Southern Rhodesia was not a simple, triumphalist, whiggish story of success – it was accompanied by a host of socio-environmental challenges whose narratives have not been told, neither has it been contextualised into the broader global account. The tobacco crop itself cultivated new social relations, produced and reproduced new environments, fresh social and ecological landscapes as mentioned in the introductory chapter. To explore a more nuanced and multi-directional interaction amongst the tobacco crop, the pioneer farmer and the environment this chapter draws on a global historiography and explores comparative trajectories of tobacco's early colonial history in the New world where the crop first became a global commercial commodity. Consequently, the chapter engages predominately with scholarship from the United States of America⁵ on early agricultural settlements, pioneer tobacco planters and the socio-environmental historiography with regards to labour regimes and land use, to locate Southern Rhodesia in a broader global history of tobacco farming ecosystems. Its central ambition is to critique the agrarian myth of progressive pioneer farmers taming the sand veld wilderness and creating paradise gardens of tobacco and harnessing nature productively to forge a new economy upon which the subsequent prosperity of Southern Rhodesia was founded. In doing so this chapter hopes to contribute towards the construction of new histories that locate colonial agrarian encounters within global histories of society and the environment.

⁵ The focus on American scholarship is based on several historical similar reference points between America and Southern Rhodesia. The first being the parallel significance of pioneer tobacco settlements to colonial economic development and the expansion of the agrarian frontier. Secondly, American settlers achieved demographic, economic and political dominance establishing what Alfred Crosby calls a “neo-Europe”. See Alfred Crosby, *Ecological Imperialism: The Biological Expansion of Europe, 900-1900* (Cambridge: Cambridge University Press, 1986), 2. Southern Rhodesia was also established based on the same model but the whites failed to achieve demographic superiority – becoming what David McDermott Hughes called a “failed neo-Europe”. See David McDermott Hughes, ‘Hydrology of Hope: Farm Dams, Conservation, and Whiteness in Zimbabwe’, *American Ethnologist*, 33, 2 (May 2006), 269-287. Thirdly, both countries have been dominant global tobacco producers throughout history.



FIGURE 1 MAP OF SOUTHERN RHODESIA C. 1968.⁶

THE “AGRARIAN MYTH” AND TOBACCO CULTURE IN COLONIAL HISTORY.

In explaining the rise of tobacco cultivation in Southern Rhodesia and the tobacco economy, most local historians have looked at it as an almost neutral and often benign interaction of “man” and “nature” out of which white settler communities pioneered new productive patterns that promoted expansion, development and growth.⁷ Indeed, as Sibanengi Ncube succinctly suggests, the historiographic traditions of the earlier works on Rhodesian tobacco centred more on a glorified tradition of the role of private capital and the enterprise and ingenuity of individual (white, male) farmers captured in the glow of public relations and promotional literature.⁸ This was a much-romanticised version belonging to the pioneering frontier and “virgin lands” school of historiography. Ncube exculpates only three local tobacco historians,

⁶ <http://www.jackenuul.nl/rhodesia-map-africa/> accessed 30 August 2019.

⁷ For historical works on the early of tobacco farming in Southern Rhodesia that offer lionizing accounts of the enterprising spirit of the pioneer farmers who, with private capital, hewed out the Rhodesian bushes, planted the seeds of tobacco growth as a commercial crop and established the industry with their own sweat and savvy. See Clements and Harben, *Leaf of Gold: The Story of Rhodesian Tobacco* (London, Methuen and Co., 1962); Trish Mbanga, *Tobacco: A Century of Gold* (Harare: ZIL Publications, 1991); Peter Scott, ‘The Tobacco Industry of Southern Rhodesia’, 189-206.

⁸ Sibanengi Ncube, ‘Colonial Zimbabwe Tobacco Industry: Global, Regional and Local Relations, 1949-1979’, PhD Thesis, University of the Free State, 2018, 6.

V.E.M. Machingaidze (1980)⁹, Ian Phimister (1988)¹⁰, and Steven Rubert (1998¹¹) (whom he grudgingly includes as only partially innocent) for not having been guilty of this celebratory complacency as they were more critical in examining the experiences of indigenous populations and the role of the state. While concurring that indeed this more critical triumvirate produced more objective appraisals, they, however, did not extend their gaze to the environment and confined themselves to writing of tobacco in political and economic histories. Thus, this chapter adds the critical environmental narrative to these histories. Secondly, it also engages with Rubert's social history of tobacco by re-examining it from a macro perspective and juxtaposing it with global tobacco history's labour regime framework.

This chapter consequently looks at the socio-environmental disruptions that accompanied pioneer tobacco farming settlements. These include the expropriation and exploitation of huge pieces of "virgin lands" on a larger scale than before, the despoliation of fragile ecologies in the sand veld areas of the country, the extraction of forestry resources of the colony, and the linked ecological and social violence meted on African labour in the tobacco farms. While these practices were endemic to settler agriculture in general as other studies have shown, the nature and extent of tobacco farming during this period witnessed a much larger and disproportionate scale of such socio-economic dislocations as this chapter will argue.

The study of pioneer settler colonial agricultural communities has a rich historiography that is, while extensive, conceptually challenging and controversial.¹² Much of this literature is from

⁹ Machingaidze, 'The Development of Settler Capitalist Agriculture in Southern Rhodesia'.

¹⁰ Ian Phimister, *An Economic and Social History of Zimbabwe, 1890-1948: Capital Accumulation and Class Struggle* (London: Longman, 1988). The inclusion of Phimister's book as one of the three critical historical sources on tobacco history of Southern Rhodesia is a trifle arbitrary as, although his work remains a comprehensive and seminal work on the social and economic developments in Southern Rhodesia, it contains very limited references to tobacco.

¹¹ However, while agreeing with Ncube that Rubert's social history of tobacco lacks global outlook, this writer considers Rubert's work on labour in the tobacco farms and the role of the state the most authoritative text on critical tobacco history in Southern Rhodesia. Steven Rubert, *A Most Promising Weed: A History of Tobacco Farming and Labour in Colonial Zimbabwe, 1890-1945* (Athens: Ohio Centre for International Studies, 1998).

¹² Much scholarship on settler colonial societies concur in conflating settlers and colonial forms of settler colonisation by pointing out to the collective spirit to build and plant new communities far away from home and extending the frontiers of those communities through private capital and initiative, exploiting indigenous resources and populations. See Louis Hartz (ed), *The Founding of New Societies: Studies in the History of the United States, Latin America, South Africa, Canada, and Australia* (San Diego, CA: Harvest/HBJ, 1964); K. Good, 'Colonialism and Settler Colonialism: A Comparison', *Australian Outlook*, 33, 3 (1979), 339-51; Ralph Horwitz, 'Whites Settlement in Africa', *African Studies*, 5,1 (1946), 63-66; A. Grenfell Price, *White Settlers and Native Peoples* (Melbourne: Cambridge University Press, 1950); A. Grenfell Price, *White Settlers, in the Tropics* (New York: AMS Press, 1978). However, Lorenzo Veracini accuses much earlier historiography of conflating settler and colonial forms of settler colonisation and makes a critical distinction that settler colonialism only emerged as a

the establishment of colonial settlements in the Americas. The early literature from the 1920s followed an upbeat, cheerful model that posited that pioneer farmers occupied new lands, established homes and engaged in the production of agricultural commodities that provided the foundations for future economic prosperity.¹³ This body of scholarship entrenched the “mythical” vision of pioneer settler farmers as new communities devoted to ploughing virgin land, putting in crops and transforming vast untamed colonial lands into Edenic gardens.¹⁴ Consequently, the motif of growing agricultural communities in the interior became the most dominant symbolism of 18th century American society and was celebrated as the embodiment of the virtues of hard work and individual entrepreneurship. This iconic tradition idolising frontier agrarianism found a trail blazer in Frederick Jackson Turner in 1921.¹⁵ In explaining the westward expansion of American settlement by agriculturalists, Turner saw on the American frontier a kind of rebirth of man and society as nature was tamed into a free land.¹⁶ He glorified the exploits of pioneer settlers with metaphors of fecundity and blissful labour of the earth all centred upon the heroic figure of the idolised frontier male, white farmer.¹⁷ In essence, the pioneer farmer mastered these farming environments, built new ecosystems and a prosperous agricultural landscape, from the forested Appalachia to the grassy prairies of Indiana and Illinois, and to the semi-arid southern plains of America.¹⁸

This historiography was challenged by revisionist historians beginning with Henry Nash Smith in 1950, who exposed the frontier hypothesis as an “agrarian myth”.¹⁹ In the 1970s, this critical

category of analytical enquiry within the 1960s and 70s within the context of the protracted anti-colonial struggles involving settler minorities particularly in Africa. Prior to that, Veracini argues, settlers and colonialism are entirely unrelated as the two do not occupy the same analytical field. See Lorenzo Veracini ‘Settler Colonialism’: Career of a Concept’, *The Journal of Imperial and Commonwealth History*, 41, 2 (2013), 313-333. Southern Rhodesia was, however, a settler colony because of the nature of its occupation, settlement and administration in which its relationship to the central government was looser than in most African colonies. It was administered for the first three decades by a commercial company the BSAC. In 1923, when company administration ended, the settlers were granted self-government.

¹³ See Gilbert C. Fite, ‘The Pioneer Farmer: A View Over Three Centuries’, *Agricultural History*, 50, 1 (1976), 275-289.

¹⁴ See Henry Nash Smith, *Virgin Land: The American West as Symbol and Myth* (Cambridge: Harvard University Press, 1970), 123.

¹⁵ See Frederick Jackson Turner, *The Frontier in American History* (New York: Henry and Holt Co., 1921). Other works after Turner that glorified the frontier and pioneers include Isaiah Bowman, ‘The Pioneer Fringe’, *Foreign Affairs*, (27 October 1927) and Walter Prescott Webb, *The Great Frontier* (Cambridge: The Riverside Press, 1951). Bowman anthropomorphised the pioneer as a youthful spirit intent upon winning from taming the wilderness with his strong hands and build homes for posterity. Prescott Webb argued that the American frontier had not only shaped American institutions but was indeed a universal frontier.

¹⁶ Ray Allen Billington, *Frontier and Section: Selected Essays of Frederick Jackson Turner* (New Jersey: Prentice Hall, 1961), 50.

¹⁷ Turner, *The Frontier in American History*, 1-38. Also see Smith, *Virgin Land*, 123-132.

¹⁸ Fite, ‘The Pioneer Farmer: A View Over Three Centuries’, 275-289.

¹⁹ Smith, *Virgin Land*, 251.

scholarly tradition gained momentum and Turner was criticised by new environmental histories for not acknowledging the sinister side of the westward expansion.²⁰ Richard Hofstadter and others criticised Turner's romantic western history for ignoring the shameful side of westward expansion, particularly the land speculations, the despoiling of natural resources, the arrogance of American expansionism, and the stories of the conquered indigenous populations.²¹ These new histories of the west challenged the old orthodoxy. Donald Worster highlighted that historians chose to downplay the ecological disasters and nightmares that had occurred in the west such as the pillaging of public lands, the pollution of waters, the impact of big farming operations on the quality and quantity of water, and the destruction of wildlife.²²

Within these debates, the expansion of tobacco farming in the Americas from the end of the 17th century has also drawn a lot of socio-environmental scrutiny as its cultivation as a global commercial crop coincided with the opening of the American frontier for settlement. Tobacco had been cultivated by the "native" Americans long before the so called discovery of the Americas by European explorers.²³ Indeed, the genus *Nicotiana*²⁴ is believed to have its roots in South America where it grew naturally and was cultivated by "native" Indian peoples who used it for religious, spiritual and pharmaceutical purposes.²⁵ The European settlers displaced indigenous groups in growing of the crop, commercialised it and transformed it from an Amerindian into a new "European commodity".²⁶ From the Americas, the crop spread to and proliferated in other parts of the world – finding its way to Africa, India, the Mediterranean and becoming grafted into supposedly "indigenous agrarian ecologies".²⁷ From the 1600s, tobacco had become an important crop for European merchants and political elites following

²⁰ These revisionist historians include Robert G. Athearn, *The Mythic West in 20th Century America* (Kansas: Lawrence University Press, 1986) and Richard Hofstadter, *The Progressive Historians: Turner, Beard and Parrington* (New York: Alfred A. Knopf, 1968). Also see Donald Worster, *Under the Western Skies: Nature, History and the American West* (Oxford: Oxford University Press, 1982), 3-18.

²¹ Hofstadter, *The Progressive Historians*, 103-104.

²² Worster, *Under the Western Skies*, 4.

²³ Allan M. Brandt, *The Cigarette Century: The Rise, Fall, and Deadly Persistence of the Product that Defined America* (New York: Basic Book, 2007), 19.

²⁴ There are dozens of species of *Nicotiana* but the two most important are *Nicotiana Tabacum L.* which is largely grown for commercial industrial purposes and *Nicotiana Rustica L.* which is produced for household consumption and small-scale industrial purposes. Both species contain nicotine which has pharmacological properties that increase mental focus and reduce anxiety. *Nicotiana Rustica* though has a higher nicotine content than *tabacum*.

²⁵ For the history of the tobacco plant see Bill Laws, *Fifty Plants That Changed the Course of History* (New York: Firefly Books, 2010), 136-39; Sander L. Gilman and Zhou Xun, *Smoke: A Global History of Smoking* (London: Reaktion Books, 2004); Brandt, *The Cigarette Century*, 19-25; Jordan Goodman, *Tobacco in History: The Cultures of Dependence* (New York: Routledge, 1993), 19-36.

²⁶ Goodman, *Tobacco in History*, 167.

²⁷ Goodman, *Tobacco in History*, 51-55.

the establishment of tobacco settlements in the American colonies.²⁸ The increasing consumer demand made the production of the leaf profitable and drove colonial settlement, such that by 1640 tobacco had become the chief cash crop within British colonies.²⁹

Tobacco became more than a crop, becoming an integral part of the colonial culture defining a range of values, labour systems and cultural practices including the calendar itself.³⁰ In the tobacco states life was organised around idiosyncratic rituals of making the crop from the nursery, to the lands, harvesting and curing.³¹ Tobacco dominated and regulated colonial life more than any other agricultural activity and became a basis of currency.³² Historical accounts note that the clergy were most enthusiastic to serve in those parishes that produced the best tobacco crops and church sermons often reiterated the moral necessity of raising and curing a good tobacco crop.³³ To emphasize the agency of the tobacco crop, Jordan Goodman argues that the plant not only affected perceptions of time, but also other dimensions of the colonial culture, as both human and material geography were affected by the crop as its labour and land demands determined settlements and social relations.³⁴

The growing of tobacco in the Americas also controlled the frontier environment as farmers moved into new virgin forests as soon as their soils showed exhaustion clearing forest and extending the boundaries of the colony.³⁵ However, much of the American literature on conservation from geographers, agronomist, sociologist, economist and historians has been critical of the agricultural practices of the tobacco farmers and blamed it on the plantation economy, slavery and row crop cultivation.³⁶ In Chesapeake, where colonial land was opened

²⁸ The standard type of tobacco that was grown in the earliest settlements was dark-fired tobacco which was cultivated within the fertile lands of Virginia and Maryland. By 1800, there was a quest for a tobacco of a lighter and milder quality that witnessed the migration of tobacco culture from the traditional areas of Virginia and North Carolina into the Piedmont region. After 1812, traders began to demand a milder, light coloured and more aromatic tobacco resulting in the rise of flue-cured bright tobacco and flue-curing technology. Bright tobacco popularity witnessed the extension of cultivation into the lighter thin sterile soils of Ohio and Kentucky by 1850. For an early history of bright tobacco culture see Nannie M. Tilley, *The Bright Tobacco Industry, 1860-1929* (Chapel Hill: The University of North Carolina Press, 1948), 3-36.

²⁹ Goodman, *Tobacco in History*, 134-137.

³⁰ Brandt, *The Cigarette Century*, 22.

³¹ Rhys Isaac, *The Transformation of Virginia, 1740-1790* (Chapel Hill: University of North Carolina Press, 1982), 41.

³² Jeremy E. Brooks, *The Mighty Leaf: Tobacco Throughout the Centuries* (Boston: Little and Brown Company, 1952), 92.

³³ Brooks, *The Mighty Leaf*, 93-94.

³⁴ Goodman, *Tobacco in History*, 174.

³⁵ Brooks, *The Mighty Leaf*, 97.

³⁶ See Hugh Bennett, *Soil Conservation* (New York: McGraw-Hill, 1939); Lewis C. Gray, *History of Agriculture in the Southern States to 1860* (Gloucester: Peter Smith, 1958); Samuel P. Hays, *Conservation and the Gospel of*

by tobacco farmers between 1780 and 1840, erosion of tobacco fields as a result of soil exhaustion led to the sedimentation and clogging of streams.³⁷ The expansion of the tobacco plantation economy and its labour intensive demands also institutionalised new social relations that accentuated slavery from around 1700.³⁸

Although it is not clear at what point tobacco was introduced to Africa, it is generally accepted that by the end of the 17th century the crop had penetrated much of the continent as a result of Portuguese, French, English and Arabic trade networks.³⁹ Other sources indicate that the crop was introduced before 1650 in Morocco, Gambia, Egypt, Sierra Leone and Congo.⁴⁰ The Dutch settlers at the Cape in what later became South Africa planted tobacco in 1652 and the crop became popular amongst the Khoisan who traded it in exchange with their labour, cattle and land.⁴¹ Precolonial African societies also developed diverse cultural methods of tobacco production and consumption. By 1800, with the establishment of colonial settlements in Africa tobacco became a key crop for colonial agricultural development. American seeds and varieties were imported in the 1900s and tobacco became an important cash crop for the development of white settler agriculture in eastern and southern Africa.⁴²

This chapter integrates the story of early Southern Rhodesian tobacco farming into these global socio-environmental narratives and historiographies that seek to show how the tobacco crop shaped history, physical geographies, social relations and farming landscapes. This chapter heeds the call by Richard Foltz for environmental historians to tell their stories while emphasising global connections and interactions.⁴³ In this regard, Evan Bennett points out that tobacco growers are heirs to a continuous unbroken history of the crop's cultivation that links them to the plantations and slavery in the American colonies, and by extension to all the

Efficiency: The Progressive Conservation Movement 1890-1920 (Cambridge: Harvard University Press, 1959); Avery Craven, *Soil Exhaustion as a Factor in the Agricultural History of Virginia and Maryland, 1606-1860* (Urbana: University of Illinois Press, 1925).

³⁷ Louis C. Gottschalk, 'Effects of Erosion and Navigation in Upper Chesapeake Bay', *Geographic Review*, 35 (1945), 219-238.

³⁸ Benson, *Tobacco Capitalism*, 66-69.

³⁹ See J.E. Philips, 'African Smoking and Pipes', *Journal of African History*, 24 (1983), 303-19.

⁴⁰ Chris S. Duvall, 'Cannabis and Tobacco in Precolonial Africa', *Oxford Research Encyclopaedia of African History*, (March 2017), 1-32.

⁴¹ Duvall, 'Cannabis and Tobacco in Precolonial Africa', 1-32.

⁴² Duvall, 'Cannabis and Tobacco in Precolonial Africa', 1-32.

⁴³ Richard C. Foltz, 'Does Nature Have Agency? World History, Environmental History, and How Historians Can Help Save the Planet', *The History Teacher*, 37, 1 (2003), 9-28.

consequences of tobacco culture to world history.⁴⁴ In essence, therefore, the history of tobacco production is a global narrative that cuts across different cultures and epochs. The heritage of tobacco across history has etched itself on the environment, human relations and the human physical body in ways that evoke the need to write stories that reflect the trans-nationality of the crop in history. Indeed, Foltz challenged histories focussing on specific regions and locations to expand their gaze and write transcontinental environmental histories.⁴⁵ To this extent, what this chapter offers that is new is not only in telling a socio-environmental story of pioneer tobacco settlers in early Southern Rhodesia, but in linking it with a global history of tobacco production in the construction of new labour regimes, social relations and environmental landscapes.

EARLY SETTLER TOBACCO FARMERS, LAND SETTLEMENT AND THE ENVIRONMENT IN SOUTHERN RHODESIA, 1893-1928.

Tobacco production in Southern Rhodesia began long before the settlement of Europeans in the country where it is believed to have been brought by the Portuguese traders in the 15th century.⁴⁶ Early accounts point out that in most parts of Mashonaland and Matabeleland Africans cultivated patches of tobacco in their gardens for their own consumption, trade and the payment of tribute.⁴⁷ The most popular of these pre-colonial producers were the Shangwe people who had a thriving tobacco industry that the colonialists found and later undermined.⁴⁸ The exact date for the beginning of white cultivation is unclear, but what is evident is that by 1893, a few settler farmers had begun experimenting with commercial production on very small plots.⁴⁹ The BSAC Reports from 1889 to 1892 note that tobacco cultivation had promising prospects in the colony and one farmer a Mr. Henry Atkins had come to Salisbury with the

⁴⁴ Evan P. Bennett, 'Dubious Heritage: Tobacco, History, and the Perils of Remembering the Rural Past', *Agricultural History*, 86, 2 (Spring 2012), 23-40.

⁴⁵ Foltz, 'Does Nature Have Agency', 9-28.

⁴⁶ H. Weinmann, *Agricultural Research and Development in Southern Rhodesia, 1890-1923* (Harare: University of Rhodesia, 1972), 12.

⁴⁷ See Joseph Garbett Wood, *Through Matabeleland: The Record of a Ten Months Trip in an Ox Waggon Through Mashonaland and Matabeleland*, Reprint of 1893 edition (Bulawayo: Books of Rhodesia, 1974), 42; T.M. Thomas, *Eleven Years in Central South Africa* (Cardiff: John Snow and Co., 1873), 180-181; G.H.W. Knight-Bruce, *Memories of Mashonaland* (London: Edward Arnold, 1895), 100.

⁴⁸ The Shangwe people had a thriving tobacco industry prior to the coming of Europeans which is well documented by Barry Kosmin's book chapter, 'The Inyoka Tobacco Industry of the Shangwe People: The Displacement of a pre-colonial economy in Southern Rhodesia', in Robin Palmer and Neil Parsons (eds), *The Roots of Rural Poverty in Central and Southern Africa* (London: Heinemann 1977). This will be more comprehensively covered in chapter six, which solely focusses on African tobacco production from 1900-1980.

⁴⁹ BSAC reports from 1892-94 refer to these few tobacco farmers during the pioneer days. They mention a certain Father Boos, Jesuit priest who grew an experimental crop at Chishawasha mission in 1893.

specific objective of setting up a tobacco factory.⁵⁰ The *Rhodesian Herald* of 1892 quotes a colonial official C.A. Lewis testifying at the Colonial Industry Conference that the country had the potential to produce tobacco as good as that produced in America.⁵¹ From 1893, onwards European farmers had started growing tobacco, and on several isolated farms a few acres were scattered here and there.⁵² Most sources, however, concur that Rhodesia's first commercial leaf was grown in 1895 by Colonel Lionel Cripps a member of the Pioneer Column who later became the first speaker of the Legislative Assembly.⁵³ He grew an experimental crop of 57 ½ lbs on his farm near Umtali in Manicaland province in eastern Southern Rhodesia (See map fig 1).⁵⁴

These earliest farmers were experimenting with the “indigenous” and local tobacco varieties largely of the genus *Nicotiana Rustica*.⁵⁵ One observer described his encounter with this type of tobacco on a farm owned by a Mr. Fischer within the vicinities of Umtali.⁵⁶ He recounts that the tobacco grew luxuriantly, had a pleasant aroma but was “far too strong” and he hoped that with continuous cultivation the taste would become milder.⁵⁷ However, in 1898 the government distributed to farmers, fifteen varieties of *Nicotiana Tabacum* seed bought from America; the following year the Secretary Department of Agriculture reported that the excellent samples of tobacco harvested proved the suitability of the climate and soils for tobacco farming.⁵⁸ A tobacco expert from the neighbouring Cape Colony Professor Daniel Hahn was most enthusiastic about the prospects of the country as a tobacco producing area and was positive that Mashonaland Virginia leaf would be consumed in England and assume a global reputation in future.⁵⁹

By 1902, the crop was being cultivated in most parts of the colony by Europeans, with the newly established Department of Agriculture reporting that 11 000 lbs were exported to the

⁵⁰ Weinmann, *Agricultural Research and Development in Southern Rhodesia*, 12.

⁵¹ *The Rhodesian Herald*, 19 November 1892.

⁵² Rooney, ‘European Agriculture in the History of Rhodesia’, 128.

⁵³ See Clements and Harben, *Leaf of Gold*, 48 and Rubert, *Most Promising Weed*, 2

⁵⁴ RTA Golden Jubilee Supplement to *The Rhodesian Herald*, 5 July 1978. Also, Clements and Harben, *Leaf of Gold*, 48.

⁵⁵ For the botanical, chemical and industrial differences between species of *nicotiana* see footnote 24.

⁵⁶ H.C. Thomson, *Rhodesia and Its Government* (London: Smith, Elder and Co., 1898), 67.

⁵⁷ Thomson, *Rhodesia and its Government*, 67.

⁵⁸ Weinmann, *Agricultural Research and Development in Southern Rhodesia*, 13.

⁵⁹ NAZ, S482/114/39/1, Tobacco May 1934- January 1935, Ralph Leaver, ‘Rhodesian tobacco; What of its Future’, 10 October 1934.

diamond mining capital Kimberley in South Africa.⁶⁰ The 1903 Customs Agreement between the Union of South Africa and Southern Rhodesia under which animal products and crops were guaranteed duty free exchange provided a ready market for Rhodesian tobacco.⁶¹ However, during much of these early days not much farming was done, and land was rather held for speculative purposes as the hunger for gold drew much of the farmers away from their farms as they sought quick fortunes in gold mining. Machingaidze notes that this trend was largely because from the 1890s capital had penetrated the colony as speculative investments in the form of huge land grants.⁶² For this reason, bona fide farmers were scarce, and the few who were willing to take up the rigours of farm life preferred grabbing land near towns and subsist through cutting down timber on their farms and selling it as firewood to the towns.⁶³ By 1901, the agricultural industry was marked by no great progress and little attention was paid to it as the colony's commercial effort was still centred on mining.⁶⁴ Consequently, so many immense tracts of land were being held solely for the purpose of speculation instead of being opened for small holder farming.⁶⁵

In 1903, the tobacco growing industry was slowly getting established with about 100 farmers cultivating the crop.⁶⁶ Earl Gray, the Director of the BSAC, was so enthusiastic about this development that he hired George Odlum, an agriculturalist from Canada as the government tobacco expert and sent him to the United States of America (USA) for a year to study tobacco culture.⁶⁷ Upon his return, the BSAC endeavoured to stimulate production and company shareholders actively began to support export tobacco growing to build and sustain a stable white agricultural community.⁶⁸ In 1904, 147 355 lbs of tobacco were harvested.⁶⁹ In 1905, the figure increased to 500 000 lbs.⁷⁰ As a result of this positive production trend, in 1906, William H. Morton, the Company's Administrator for Southern Rhodesia, ecstatically declared that he

⁶⁰ Report of the Department of Agriculture, 1903.

⁶¹ Machingaidze, 'The Development of Settler Capitalist Agriculture in Southern Rhodesia', 23.

⁶² Machingaidze, 'The Development of Settler Capitalist Agriculture in Southern Rhodesia', 5.

⁶³ Percy F. Hone, *Southern Rhodesia* (London: George Bell and Sons, 1909), 195. Also see Phimister, *An Economic and Social History of Zimbabwe*, 58.

⁶⁴ Hone, *Southern Rhodesia*, 197.

⁶⁵ William Harvey, *On the South African Frontier: The Adventures and Observations of an American in Mashonaland and Matabeleland* (New York: Charles Scribner's Sons, 1899), 307.

⁶⁶ Clements and Harben, *Leaf of Gold*, 68.

⁶⁷ Rubert, *A Most Promising Weed*, 28

⁶⁸ Vimbai Kwashirai, 'Dilemmas in Conservationism in Colonial Zimbabwe, 1890-1930', *Conservation and Society*, 4, 4 (2006), 541-561.

⁶⁹ Weinmann, *Agricultural Research and Development in Southern Rhodesia*, 46.

⁷⁰ Clements and Harben, *Leaf of Gold*, 57.

was “very pleased with the advance made during the past year in the prospects of the tobacco industry.”⁷¹

The growth of tobacco as an export crop had significant ramifications for the land settlement plans of the BSAC. The sand veld that consisted of some of the poorest soils in the colony suddenly found a unique appeal and the company took advantage of this opportunity, pointing out to its shareholders in very hyperbolic language that the entire colony of Southern Rhodesia was favourable to the cultivation of tobacco.⁷² The BSAC report of 1903 stated that every portion of the country was favourable and, there was no limit to the quantity of tobacco that could be produced.⁷³ In 1904, Odlum emphasised this by saying that tobacco was a crop that was peculiarly adapted for a new country such as Southern Rhodesia as a result of cheap virgin soils and a plentiful supply of labour.⁷⁴ By 1905, the BSAC tobacco expert was encouraging the appropriation of huge land resources when he pointed out that “land is cheap in Rhodesia; if you want more tobacco, plant a bigger acreage”.⁷⁵ During the same year, the Department of Agriculture issued out a *Handbook of Tobacco Culture for Planters in Southern Rhodesia* which spoke highly of the convenient socio-environmental conditions for tobacco growing, pointing out that, “the facilities available in Rhodesia for tobacco growing are quite exceptional, and as such as probably do not exist elsewhere in the world. The climate and the soils are peculiarly adapted to the culture of the leaf, suitable land is cheap and practically limitless”.⁷⁶ As a result of this propaganda, flue cured barns sprang up all over the countryside and good crops were grown and prices of 1.s to 1.s.6d per lb were obtainable.⁷⁷

The cultivation of tobacco on a more extensive scale as an export crop was yoked in tandem with the colony’s general agricultural outlook that began to change from around 1907 following the visit of the Company’s Directors in Southern Rhodesia. That year, the Directors declared that the outlook for agriculture in the colony was auspicious.⁷⁸ In 1908, the so-called “White

⁷¹ Rubert, *A Most Promising Weed*, 4.

⁷² BSAC Company Reports, 1903.

⁷³ BSAC Company Reports, 1903.

⁷⁴ G.M. Odlum, ‘Tobacco Notes’, *Rhodesia Agricultural Journal*, 2, 1 (September 1904), 19-22.

⁷⁵ G.M. Odlum, ‘The Culture of Tobacco’, BSAC, Department of Agriculture, 1905, 15.

⁷⁶ *A Handbook on Tobacco Culture for Planters in Southern Rhodesia* (Department of Agriculture, Southern Rhodesia, 1905), 2.

⁷⁷ E. Plewman de Kock, *Various Outspans* (Bloemfontein: A. C. White P. & P. Co., 1948), 83.

⁷⁸ BSAC Co. Directors Reports, 1907.

Agricultural Policy” was launched.⁷⁹ For much of these early years from the launch of the White Agricultural Policy the BSAC pursued a policy of encouraging the introduction of large capital to open up the farms as these were envisaged as possessing the capacity to more rapidly develop the resources of the colony than the smaller individual enterprises.⁸⁰ In 1912, for instance the 15 principal land owning companies in Southern Rhodesia held above 8 million acres of land amongst them.⁸¹ In its land settlement policy the Company was less interested about issues of conservation and most settlers were new and still settling down to the new ecological environment.⁸² Conservation was thus less a priority as the company was more interested in parcelling huge chunks of land and make profits for its investors. Consequently, the nature of most land transactions for tobacco farming reveals this avaricious appetite for aggrandisement, exploitation and speculation by the tobacco cooperates.

On 31 July 1908, a Company Holt and Holt Limited that had already been granted 30 000 acres of land in 1905, wrote to the Assistant Secretary requesting a further 20 000 acres of land for tobacco production!⁸³ The letter specified:

As my scheme embraces the growing of many grades of tobacco on a large scale, it was necessary to apply for a larger amount of land so that I might obtain the various soils necessary for producing each separate species of leaf...in short, my idea is to get beyond the present untrained culture of tobacco and make Rhodesia a tobacco producing centre.⁸⁴

The Assistant Secretary observed that it would be many years before half or a quarter of that acreage could be put under tobacco.⁸⁵ He further cautiously added that the land grant was needed not for bona fide agricultural concerns but for the purposes of floating a large company.⁸⁶ In 1906, when one of the BSAC’s directors, Mr. Paleothorpe visited he severely criticised one of the companies formed for the purposes of growing tobacco in Rhodesia the Hunyani Estates, that with a capital of £100 000 and 30 000 acres of land only managed to

⁷⁹ Agrarian historians of Southern Rhodesia have generally agreed that the year 1908 marks a key shift in the company administration’s perception of settler agriculture as the Company became more amenable to the economic prospects of agriculture and began supporting settler farmers. See Robin Palmer, *Land and Racial Domination in Southern Rhodesia* (London: Heinemann, 1977), 80.

⁸⁰ Hone, *Southern Rhodesia*, 197.

⁸¹ Machingaidze, ‘The Development of Settler Capitalist Agriculture in Southern Rhodesia’, 6.

⁸² Simeon Maravanyika, ‘Soil Conservation and the White Agrarian Environment in Colonial Zimbabwe, 1908-1980’, PhD Thesis, University of Pretoria, 2013, 94.

⁸³ NAZ, L2/1/108, Tobacco Culture, Application for a grant of land by F.E. Mann to the Assistant Secretary BSAC, 31 July 1905.

⁸⁴ NAZ, L2/1/108, Tobacco Culture, Application for a grant of land by F.E. Mann to the Assistant Secretary BSAC, 31 July 1905.

⁸⁵ NAZ, L2/1/108, Tobacco Culture, Administrator to F.E. Mann, 8 September 1905.

⁸⁶ NAZ, L2/1/108, Tobacco Culture, Administrator to F.E. Mann, 8 September 1905.

produce 4 000 lbs in 1905.⁸⁷ On 11 November, 1908 yet another company, the Inyoka Rhodesia Tobacco Co. wrote to the Secretary of Agriculture requesting for the purchase of 30 000 acres adjacent to the 20 000 acres already allocated to them arguing that the existence of large tracts of fresh and broken rocky ground reduced to a very small figure the %age of land available for tobacco growing.⁸⁸ Surprisingly, when Odlum (the government tobacco expert) toured the estate to assess land utilisation and evaluate the application for land, he discovered that the application for more land was not justified. The land applied for was barely arable, preponderantly rocky, and could not be utilised for any purposes of tobacco culture.⁸⁹ He added that the only explanation that could be given for the request of such land was the desire to secure control of the neighbouring “native kraals” and create compelling grounds for labour coercion.⁹⁰ Indeed, securing native labour was important for tobacco farmers during these early days and most were more inclined to use coercive recruiting techniques that involved compulsion and kidnappings as the next section will show.

The dominance of big companies in tobacco production, however, was dismantled in a brief two-year period between 1912 and 1914.⁹¹ This was a result of the new company policy to encourage small planter settlers and the disastrous tobacco crash of 1914. The company encouraged settlement by small capital settlers through disposal of land at lower rates from 1907.⁹² The company also created farms run on a commercial basis called “central farms” on which new settlers were trained in tobacco culture before being given their own farms.⁹³ The first such central farm was the Marandellas premier estate that produced tobacco worth £ 2000 in 1911.⁹⁴ The abundant optimism in tobacco culture witnessed the major buying company the United Tobacco Company (UTC) telling Rhodesian tobacco farmers that the only problem with

⁸⁷ NAZ, A11/2/2/13 Tobacco 1904-November 1909, J.A. Stevens to Administrator BSAC, 27 October 1906. (American settlers for tobacco growing).

⁸⁸ NAZ, L2/1/114, The Inyoka Rhodesia Tobacco Company, S.A. Bartman (Secretary Inyoka Rhodesia Tobacco Company to the Secretary BSAC, 11 November 1907.

⁸⁹ NAZ, L2/1/114, The Inyoka Rhodesia Tobacco Company, G.M. Odlum Report on the Inyoka Tobacco Company, 4 August 1908.

⁹⁰ NAZ, L2/1/114, The Inyoka Rhodesia Tobacco Company, G.M. Odlum Report on the Inyoka Tobacco Company, 4 August 1908.

⁹¹ Hodder-Williams, *White Farmers in Rhodesia*, 56.

⁹² Machingaidze argues that between 1906 and 1912 six factors boosted settler capitalist agriculture. One of these was the Wise Report of 1906. One of the recommendations of the report was for the company to dispose of the land to settlers at a lower rate as the success of land development and the country rested on these individual settler farmers. The company had to resort to reducing the price of land to 1/6 a morgen. See Machingaidze, ‘The Development of Settler Capitalist Agriculture in Southern Rhodesia’, 7-11.

⁹³ The setting up of central farms to encourage white settlement was also another recommendation of the Wise Report. See Machingaidze, ‘The Development of Settler Capitalist Agriculture in Southern Rhodesia’, 7-11.

⁹⁴ Machingaidze, ‘The Development of Settler Capitalist Agriculture in Southern Rhodesia’, 21

their tobacco was quantity as “Rhodesia was producing samples, the market wanted quantity, not samples”.⁹⁵ The publication of the statement by the UTC created a “gold rush” frenzy as everyone rushed to buy farms and plant the golden leaf.⁹⁶ The BSAC, also seeing the prospects of selling off vast areas of the less fertile sand veld sent out its Land Settlement Director Percy Inskipp with a cheque book persuading growers to double their output.⁹⁷ Banks also advanced thousands of pounds to farmers at zero interest.⁹⁸ The result of this was the production of more tobacco than the South African market could absorb and a tobacco crush that ruined many farmers in 1914. The crash of 1914 undid much of the progress as most farmers on the land were bankrupted and abandoned their farms.⁹⁹ One advert in the newspaper more poignantly captured the magnitude of the 1914 tobacco disaster: “Farm for sale in Marandellas, or would exchange with a bicycle capable of taking owner to Cape Town”.¹⁰⁰

So, after the 1914 crash most tobacco companies were bankrupted and the BSAC came to view the small farmer as the pillar upon which the future foundation of the tobacco industry depended.¹⁰¹ Clements and Harben argue that it was these small farmers after the 1914 crash who permanently settled on the land and changed the face of the landscape as the frontier of tobacco settlements spread further and advanced into new areas.¹⁰² They glorify these settler tobacco farmers as they “tamed the land so today, unlike the bulk of Rhodesia, it reflects in its landscape more often the work of man than the savage exuberance or dull monotony which characterise Central Africa”.¹⁰³ Commenting on the early development of tobacco farming in Southern Rhodesia the Tobacco Industry Council also exhorted the passion shown by the early pioneers:

The distinguishing feature of the early tobacco pioneers was his boundless enthusiasm and energy; with no experience to draw on, little by the way of capital, new growers and their labourers hacked lands out of the Rhodesian bush, and with a simple faith put all they had into tobacco crops.¹⁰⁴

⁹⁵ Plewman de Kock, *Various Outspans*, 84.

⁹⁶ Plewman de Kock, *Various Outspans*, 84.

⁹⁷ Hodder-Williams, *White Farmers in Rhodesia*, 56.

⁹⁸ Plewman de Kock, *Various Outspans*, 84.

⁹⁹ Machingaidze, ‘The Development of Settler Capitalist Agriculture in Southern Rhodesia’, 23.

¹⁰⁰ Clements and Harben, *Leaf of Gold*, 77.

¹⁰¹ Hodder-Williams, *White Farmers in Rhodesia*, 56.

¹⁰² Clements and Harben, *Leaf of Gold*, 78-80.

¹⁰³ Clements and Harben, *Leaf of Gold*, 68.

¹⁰⁴ The Tobacco Industry Council, ‘The History of Tobacco in Rhodesia’, 1975, 2.

Clements and Harben described white tobacco farmers and their farms as gazing down on a primitive and savage landscape “interspersed with patches of cultivation” and the civilised music from their radios mingling with the drumbeats, ululations and primitive dances.¹⁰⁵ They further glorify white tobacco farmers for their independence, endurance and courage.

These pioneering whiggish ‘virgin land’ narratives were constructed around what J.M. Coetzee called “dream topographies”-fantasies of viewing colonised land as empty spaces that were unoccupied.¹⁰⁶ This reinforced the notion of the conquered territory as a pristine wilderness in which native subjects and environmental resources are raw materials for the expansion of settler agricultural communities. These “dream topologies” and “virgin” land fantasies constituted a Jeffersonian ideology of progressive white yeomanry turning a “howling wilderness” into a garden of settler nationhood in which white settlers and the land become unified and the “native” is rendered invisible.¹⁰⁷ Clements and Harben portray this “virgin land” stereotype by describing Mashonaland during the trek of the pioneers as “the home of vast herds of game” with rare, scattered and sparse native population.¹⁰⁸ They further add that the country was “as empty of men as the American west.”¹⁰⁹ Thus, attracted by cheap land and the lure of the golden tobacco crop, immigrants from Britain, Europe and South Africa had flocked to the colony and bought huge chunks of land. But in order to cultivate the most fertile soils, this new wave of pioneers had to do heavy stumping and clearing of indigenous trees.¹¹⁰ In time, the countryside began to change as the new immigrants altered the very landscape. Native woodlands and grass veld suffered. Veld fires to burn new areas of the sand veld became common, and at the meeting of the Directors in 1907 the issue was brought up.¹¹¹ An editorial of the *Rhodesian Agricultural Journal* in 1908 complained that maize and tobacco farmers were burning grass to clear their land and in the process much forests were lost. It pointed out that “what farmer would think of planting mealies or tobacco in soils devoid of humus, yet every year we take away by fire the only means our grasslands have of gaining any”.¹¹²

¹⁰⁵ Clements and Harben, *Leaf of Gold*, 188.

¹⁰⁶ J.M. Coetzee, *White Writing: On the Culture of Letters in South Africa* (New Haven, Cape Town: Yale University Press, 1988), 7.

¹⁰⁷ Hughes, ‘Hydrology of Hope’, 269-287

¹⁰⁸ Clements and Harben, *Leaf of Gold*, 22.

¹⁰⁹ Clements and Harben, *Leaf of Gold*, 22.

¹¹⁰ L.H. Gann, *A History of Southern Rhodesia: Early days to 1934* (London: Chatto and Windus, 1965), 71.

¹¹¹ Gann, *A History of Southern Rhodesia*, 71.

¹¹² ‘Editorial’, *Rhodesia Agricultural Journal*, 3 (February 1908), 153-159.

In the American colonies the expansion of tobacco farming during pioneer days had created similar problems. Tobacco being a draining crop had rapidly lowered the yielding capacity of the soil, and with scarce capital for fertilisers all the burden was thrown on the soils immediately available.¹¹³ As a result tobacco farming as practised during the early colonial American days was an itinerant business. Newcomers to the colony would always petition to move from public lands to which they had been assigned on the plea that their farms were depleted for further tobacco crops.¹¹⁴ This practice could be sustained then since land was cheap and 5 shillings could purchase 100 acres by the later part of the 17th century.¹¹⁵ The Governor of Maryland observed of this peripatetic practice in tobacco farms during the seventeenth century and noted that “tobacco requires us to abhor communities or townships, since a planter cannot carry on his affairs without considerable elbow room within his plantation”.¹¹⁶ In the Madison County of North Carolina the boom in flue-cured tobacco during the 1870s and 1880s as a result of increased market access witnessed huge waves of tobacco cultivation such that “mountain tops and ridges that seemed forever destined to wear their verdure and the crown of forests were brought into cultivation.”¹¹⁷ The timbered sandy land was stumped and cropped with tobacco for a few years until the virgin fertility was exhausted by crop removal, cultivation and erosion.¹¹⁸ In the state of Virginia a large part of the country was desert land with old fields and abandoned lands that were unfit for profitable cultivation.¹¹⁹ Whole districts which used to have green forests were left derelict as planters moved on or stayed to eke out a marginal existence on the impoverished slopes.¹²⁰ Farmers cleared new lands on the precipitous steep slopes, and the cutting of fuelwood caused deforestation. The countryside was heavily gullied as a result.¹²¹ The practice of burning the ground for seed bed preparation to kill insects and their larvae was also so common that during late winter the tobacco belt presented “a hazy appearance from the great number of glowing fires” that consumed so much wood and was so wasteful that there was a scarcity of fuel.¹²²

¹¹³ Brooks, *The Mighty Leaf*, 97.

¹¹⁴ Brooks, *The Mighty Leaf*, 97.

¹¹⁵ Brooks, *The Mighty Leaf*, 98.

¹¹⁶ Brooks, *The Mighty Leaf*, 98.

¹¹⁷ Katie Algeo, ‘The Rise of Tobacco as a Southern Appalachian Staple: Madison County, North Carolina’, *South-eastern Geographer*, 37, 1 (May 1997), 46-60.

¹¹⁸ F.A Stinson, ‘Research and Sound Farming’, *The Rhodesian Tobacco Quarterly*, 1 (June 1953), 4.

¹¹⁹ Tilley, *The Bright Tobacco Industry*, 16

¹²⁰ Stinson, ‘Research and Sound Farming’, 4.

¹²¹ F.A Sondley. *A History of Buncombe County North Carolina* (Spartanburg, SC: The Reprint Company, 1977), 733.

¹²² Tilley, *The Bright Tobacco Industry*, 43.

Similar problems abounded in Southern Rhodesia as a result of the activities of these pioneer farmers. In 1910, the Company government of Southern Rhodesia had hired the services of Mr. J. Simms, a forest officer of experience from South Africa to visit Rhodesia and assess the condition of its natural forests. His report pointed out the haphazard and wasteful ways in which forestry resources were being exploited by farmers and miners.¹²³ He noted that most of Rhodesia's forests were poorly stocked and many of the trees damaged by fires caused by farmers burning early grass and not controlling the fire, with disastrous effects on the soil and the deterioration of forests.¹²⁴ He added:

The legitimate cutting of timber for fuel, and the clearing of lands suitable for agriculture is necessary and desirable, but the felling of trees as practised in this country is so wasteful and indiscriminate that it can only be classified as destructive.¹²⁵



FIGURE 2 CLEARING FOR LAND AT A TOBACCO FARM IN MARANDELLAS, 1912.¹²⁶

Indeed, Muchaparara Musemwa and Tapiwa Madimu argue that there was bitter contestation over control of land and natural resources between farmers and miners in the gold belt, resulting

¹²³ 'Extract from J. Simms Report on Forestry in Southern Rhodesia', *Rhodesia Agricultural Journal*, 1, 3 (February 1911), 197-222.

¹²⁴ 'Extract from J. Simms Report on Forestry in Southern Rhodesia', 197-222.

¹²⁵ 'Extract from J. Simms Report on Forestry in Southern Rhodesia', 197-222.

¹²⁶ *A Handbook of Tobacco Culture in Southern Rhodesia*, 16.

in the wanton destruction of forests and land degradation.¹²⁷ Producers of flue-cured tobacco in particular required wood for curing tobacco, and constructing tobacco barns, as well as large tracts of virgin bushes to clear every year to put up new crops.¹²⁸ Seed bed preparation also required a lot of firewood to burn the ground for the control of insect pests and weeds.¹²⁹ The handbook of tobacco culture in Southern Rhodesia in 1913 recommended farmers to give the seed bed sites “a thorough burning”.¹³⁰ Vimbai Kwashirai notes that when European settlers established farms in the so-called virgin bush, deforestation and soil erosion became the major challenges and environmental hazards.¹³¹ This was more accentuated in the tobacco farms as the crop typically depletes the soil more than any other crop since it has a voracious appetite for nutrients such as potassium, calcium and nitrogen.¹³² In the American colonies during the early days the only form of fertilisation available to restore soil fertility was farm manure but due to the absence of cattle pens in those days the supply was limited and soil fertility could only be guaranteed through planting in new lands.¹³³ However, between 1680 and 1780 as a result of a deep depression in tobacco prices tobacco farmers in Chesapeake had adopted new agronomic practices abandoning the vicious cycle of “cultivation, exhaustion and abandonment, and out-migration”, choosing to put their lands in fallow for twenty years to encourage natural renovation.¹³⁴ The new system was described by Carville Earle:

A typical worker beginning on fertile virgin land haphazardly cleared three acres. Trees were girded and left to die in the fields, which was also littered with stumps and roots. In the first year, raw or strong land was planted in corn or beans or both. Tobacco followed during the next two or three years...in the fourth through to seventh years corn was intercropped with peas...Thereafter the worn parcel was abandoned to “old field

¹²⁷ Muchaparara Musemwa, ‘Contestation Over Resources: The Farmer- Miner Dispute in Colonial Zimbabwe, 1903-1939’, *Environment and History*, 15, 1 (February 2009), 79-109 and Tapiwa Madimu, ‘Farmers, Miners and the State in Colonial Zimbabwe, c.1895-1961’, PhD Thesis, University of Stellenbosch, 2017.

¹²⁸ Hodder-Williams, *White Farmers in Rhodesia*, 53.

¹²⁹ This was the common practice before the advent of herbicides and nematicides in the 1940s. Also, insect pests and diseases of tobacco were not prevalent until the 1920s and 30s when tobacco acreages expanded exponentially causing over production. The main pest problems during the early days were grasshoppers, cutworms and caterpillars. Chemical control was very limited during the days but in 1906 Odlum recommended Paris Green (Sodium Arsenate) for the control of grasshoppers and other leaf eaters. See Odlum, G.M, “Tobacco Notes”, *Rhodesia Agricultural Journal*, 4, 1 (October 1906), 268-270. However, the most common means of pest control were cultural including clean cultivation and hand-picking. In 1913 farmers were recommended to use flocks of turkeys and fowl to follow behind ploughing implements and pick up caterpillars and grasshoppers. See *A Handbook on Tobacco Culture for Planters in Southern Rhodesia* (Department of Agriculture, Southern Rhodesia, 1913), 17. Also see Elijah Doro, ‘An Environmental History of Tobacco Pests and Diseases in Southern Rhodesia, 1893–1940’, *Environment & Society Portal, Arcadia*, 31 (Summer 2019), Rachel Carson Center for Environment and Society. <http://www.environmentandsociety.org/node/8766>

¹³⁰ *A Handbook on Tobacco Culture for Planters in Southern Rhodesia*, 14.

¹³¹ Kwashirai, ‘Dilemmas in Conservationism in Colonial Zimbabwe, 1890- 1930’, 541-61.

¹³² B.C. Akehurst, *Tobacco* (London: Longman, 1981), 138.

¹³³ Goodman, *Tobacco in History*, 172.

¹³⁴ Carville Earle, ‘The Myth of the Southern Soil Miner: Macrohistory, Agricultural Innovation and Environmental Change’, in Donald Worster (ed), *The Ends of the Earth: Perspectives on Modern Environmental History* (Cambridge: Cambridge University Press, 1988), 194.

colonisation”. During the next two decades, a succession of grasses, shrubs, pines and hard woods restored fertility.¹³⁵

This new system was, however, attacked by agrarian reformers as primitive agricultural methods since it left “unkempt fields littered with dying trees” and decaying ramshackle tobacco houses. These agricultural reformers advocated modern intensified farming systems. From 1780 new agricultural mechanical devices such as ploughs replaced hoes and a more continuous farming system using fertilisers was adopted to replace the primitive land rotation system. Despite advice to diversify into other crops, tobacco received greater emphasis within the Carolina-Virginia tobacco belt and, because of methods of clean cultivation and the physical structure of the tobacco soils, erosion constituted a major problem.¹³⁶ The tide of erosion continued in the tobacco lands as the clean tilled lands accelerated erosion which stripped away plant nutrients depleting most plantations and clogging streams.¹³⁷ The wasting away of tobacco lands was estimated to be as high as 15 % per annum by 1879.¹³⁸

This impact on the environment was replicated to an extent in in Southern Rhodesia. The depletion of the soil was particularly deleterious in the sand veld where soils were lighter and of poor fertility, such that fertilisers were first used for tobacco ahead of any other crop.¹³⁹ A writer in 1898 noted of the poor nature of the sand veld soils in Southern Rhodesia that “they do not remain fertile unless manured” adding that “at present manuring is not possible as there are no cattle”.¹⁴⁰ He also pointed out that another trouble caused by the sandy nature of the soil was that it was so loose a heavy shower of rain always washed it away.¹⁴¹ However, in the later days of tobacco cultivation farm manure and green manure was recommended as well as wood ash supplemented with commercial fertilisers.¹⁴² In 1906, the net worth of fertilisers used was only £ 114, but jumped to £ 15, 222 in 1913, an increase of 113 fold as a result of the expansion of tobacco acreages.¹⁴³ *The Handbook for tobacco planters in Southern Rhodesia* (1913) emphasised that in order to produce a profitable leaf per acre in the granitic soils large quantities

¹³⁵ Earle, ‘The Myth of the Southern Soil Miner’, 195.

¹³⁶ Tilley, *The Bright Tobacco Industry*, 89.

¹³⁷ Earle, ‘The Myth of the Southern Soil Miner’, 194, 195, 199.

¹³⁸ Tilley, *The Bright Tobacco Industry*, 110.

¹³⁹ ‘The Fertilisers Farm Foods, Seeds and Pest Remedies Ordinance’, *Rhodesia Agricultural Journal*, 11, 5 (June 1914), 746.

¹⁴⁰ Thomson, *Rhodesia and its Government*, 68.

¹⁴¹ Thomson, *Rhodesia and its Government*, 69.

¹⁴² G.M. Odium, ‘Tobacco Notes’, *Rhodesia Agricultural Journal*, 1 (1903-4), 185-187.

¹⁴³ ‘The Fertilisers Farm Foods, Seeds and Pest Remedies Ordinance’, 746.

of fertilisers had to be used.¹⁴⁴ In the absence of other practices of restoring soil fertility farmers had to rely on inorganic fertilisation. In Nyasaland, where production of flue-cured had begun in the southern provinces in 1904, soil exhaustion was also becoming a serious problem because of the increasing pressure on the land from around 1910.¹⁴⁵ As migrants pushed into the southern province “less and less acreage was available”, and when planters could not find virgin land, they had to import chemical fertilisers to revive their fields.¹⁴⁶

In 1912, the Southern Rhodesia Chief tobacco officer Mr Rice warned growers that tobacco simply could not be grown in the same lands for more than two years, and it would be advantageous in the third year to put in a leguminous crop such as cow peas and so-called “kaffir beans” to restore the fertility of the soil to a considerable extent.¹⁴⁷ This practice, however, was received with little enthusiasm by tobacco growers who preferred to use new lands each year thus extending opened up lands and making them in succession much susceptible to degradation.¹⁴⁸ Cognisant of these emerging environmental challenges, in 1913 the Irrigation Officer had written an article ‘The Dangers and Prevention of Soil Erosion’ in the *Rhodesian Agricultural Journal*.¹⁴⁹ In the article he insisted that erosion was beginning to show its effects in the territory of Southern Rhodesia, and several farms in Mashonaland had suffered significantly with siltation of rivers along most of the occupied farms.¹⁵⁰ In October 1914, Mr. Lionel Cripps, one of the pioneer tobacco farmers moved a motion in the Southern Rhodesia Legislative Assembly exhorting the government to take steps to combat soil erosion in Southern Rhodesia, since in his words “a stich in time saves nine”.¹⁵¹ He correctly observed that the erosion problem was being most felt in the sand veld tobacco farms that composed of light soils liable to be washed away.¹⁵² This view was supported by another legislator Mr Cleveland who observed in 1919 of tobacco farmers that they had been growing an article which they could export or sell very profitably resulting in large areas cultivated year after year with the fertility of the soil significantly extracted with nothing being put back.¹⁵³

¹⁴⁴ *Handbook of Tobacco Culture for Planters in Southern Rhodesia*, 92.

¹⁴⁵ Tony Woods, ‘Why Not Persuade Them to Grow Tobacco: Planters, Tenants and the Political Economy of Central Malawi, 1920-1940’, *African Economic History*, 21 (1993), 131-150.

¹⁴⁶ Woods, ‘Why Not Persuade Them to Grow Tobacco’, 131-150.

¹⁴⁷ ‘Editorial’, *Rhodesia Agricultural Journal*, 9, 4 (April 1912), 510.

¹⁴⁸ ‘Editorial’, *Rhodesia Agricultural Journal*, 9, 4 (April 1912), 508.

¹⁴⁹ W.M. Watt, ‘The Dangers and Preservation of Soil Erosion’, *Rhodesia Agricultural Journal*, 10, 5 (June 1913), 667-673.

¹⁵⁰ Watt, ‘The Dangers and Preservation of Soil Erosion’, 667-673.

¹⁵¹ Southern Rhodesia Legislative Council Debates, 9 October 1914.

¹⁵² Southern Rhodesia Legislative Council Debates, 9 October 1914.

¹⁵³ Southern Rhodesia Legislative Assembly Debates, 2 May 1919.

In 1913, the state put in place the Herbages Preservation Act to mitigate the trouble of farmers in connection with the burning of the veld and destruction of organic matter so vital to the soil.¹⁵⁴ However, during the debate over the new bill, Colonel Raleigh Grey was highly critical of it remarking that it was utopian as there was no probability and intention on the part of the state to carry out the law.¹⁵⁵ He definitely was right as most colonial conservation historians have observed that the ordinance was rarely ever enforced in the white settler agrarian environment.¹⁵⁶ On the contrary, in South Africa these issues began to populate official discourse earlier – particularly at the Cape. William Beinart and Richard Grove have shown how knowledge about conservation was well developed at the Cape from the 1860s as a result of settler farmers encountering fragile African ecologies, exacerbated by a series of droughts in the 1820s and 30s.¹⁵⁷ In 1918, a memorandum submitted to the Minister of Lands by a deputation representing Divisional Councils of the Cape Province and the Cape Agricultural Union advanced a number of measures for dealing with soil erosion and land degradation that included periodic inspection of farms, and legislation against indiscriminate burning of the veld.¹⁵⁸ In 1920, The South African Drought Investigation Committee was set up following a high loss of stock during the 1919 to 1920 drought. It published its findings in 1922. The report of the committee faulted settler activities such as over-stocking and indiscriminate burning of the veld for accentuating the severity of the drought.¹⁵⁹ The report emphasized the need for state intervention to protect resources for future settler agrarian accumulation.¹⁶⁰ This report although marking a significant turning point in conservation ideology in southern Africa had very limited reach during this time in Southern Rhodesia (and its effect on the development of conservation ideology will be discussed in the next chapter).

These environmental problems nascently manifesting themselves in the tobacco farms were compounded by the tobacco boom occasioned by the war. The First World War accelerated the

¹⁵⁴ Southern Rhodesia Legislative Assembly Debates, 8 April 1913.

¹⁵⁵ Southern Rhodesia Legislative Assembly Debates, 8 April 1913.

¹⁵⁶ See Maravanyika, 'Soil Conservation and the White Agrarian Environment', 68 and Kwashirai, 'Dilemmas in Conservationism in Colonial Zimbabwe', 541-561.

¹⁵⁷ See William Beinart, *The Rise of Conservation in South Africa: Settlers, Livestock, and the Environment, 1770-1950* (Oxford: Oxford University Press, 2003); Richard Grove, 'Scottish Missionaries, Evangelical Discourses and the Origins of Conservation Thinking in Southern Africa, 1820-1900', *Journal of Southern African Studies*, 15, 2 (1989), 163-184.

¹⁵⁸ 'Government Attention Urged, Cape Recommendations: Erosion Problems', *The Star*, 20 March 1918.

¹⁵⁹ William Beinart, 'Soil Erosion, Conservationism and Ideas about Development: A Southern African Exploration, 1900-1960', *Journal of Southern African Studies*, 15, 1 (October 1984), 52-83.

¹⁶⁰ Beinart, 'Soil Erosion, Conservationism and Ideas about Development', 52-83.

rise of the cigarette consumer culture as patterns of use amongst servicemen increased its consumption.¹⁶¹ The net effect of this was an increase in prices which leapt from an average of under 6 pence a pound in 1915 to over 22 pence in 1919.¹⁶² This positive upward trend was given another jolt in 1919 by the granting of an imperial preference of 1/6 duty free on tobacco grown anywhere in the empire and marketed in the UK which secured a bigger market for Rhodesian leaf.¹⁶³ The result was an expansion in tobacco acreages such that in 1920, the report of the Director of Agriculture pointed out that tobacco that had hitherto taken up less land than beans became the second most important crop after maize.¹⁶⁴ In 1925, Rhodesian tobacco was showcased at the British Empire Exhibition held at Wembley in London. The exhibition was important as it highlighted to British citizens the suitability of Southern Rhodesia's climate and soils to the prospects of tobacco production.¹⁶⁵ In the same year, the British government increased the existing imperial preference from 1/6 to 1/4, which had the effect of further increasing the demand for and price of Rhodesian tobacco on the British market.¹⁶⁶ The Wembley Exhibition and the increase in the imperial preference saw the influx of many new settlers from Britain willing to cash in on the tobacco rush between 1925 and 1928.¹⁶⁷ The policy of the Responsible government was to encourage many white settlers immigrating to Southern Rhodesia.

From 1925, tobacco barns sprang up all over the colony, and tobacco farming spread further into the bush in areas such as Banket and Umvukwesi.¹⁶⁸ The Minister of Agriculture and Lands Mr. J.W. Downie exhorted the pursuit of a more vigorous land settlement policy to take advantage of the influx of immigrants into the Rhodesian countryside to grow tobacco.¹⁶⁹ Consequently, the number of growers increased from 189 in 1925 to 336 in 1926, once again increasing to 763 in 1927.¹⁷⁰ The influx of new settlers caused by the tobacco rush created a host of conditions for land settlement particularly visible in the planting of large acreages,

¹⁶¹ Brandt, *The Cigarette Century*, 54.

¹⁶² Clements and Harben, *Leaf of Gold*, 86.

¹⁶³ Report of the Proceedings at the 24th Annual Congress of the Rhodesian Agricultural Union held on 14-18 September 1926.

¹⁶⁴ Report of the Department of Agriculture, 1920.

¹⁶⁵ Clements and Harben, *Leaf of Gold*, 82.

¹⁶⁶ Report of the Proceedings at the 24th Annual Congress of the Rhodesian Agricultural Union held on 14-18 September 1926.

¹⁶⁷ Clements and Harben, *Leaf of Gold*, 91.

¹⁶⁸ Clements and Harben, *Leaf of Gold*, 91.

¹⁶⁹ Machingaidze, 'The Development of Settler Capitalist Agriculture in Southern Rhodesia', 193.

¹⁷⁰ Clements and Harben, *Leaf of Gold*, 98.

agricultural speculation and the growing of low-quality tobacco.¹⁷¹ Because of high prices paid for tobacco, a lot of farmers left cotton and maize to grow tobacco between 1925 and 1927 leading to what Ian Phimister called a “startling” expansion of the tobacco industry.¹⁷²

Perturbed by this development, in 1925 an official from the Department of Agriculture presented a paper to the Department warning that it was not prudent to encourage new settlers to all grow tobacco because “estimable as this crop is, I do not think it offers a complete solution to our settlement problems.”¹⁷³ He added that tobacco was a somewhat speculative crop requiring considerable experience and capital, and the basis for farming in Southern Rhodesia was supposed to be mixed farming.¹⁷⁴ He noted:

Let the new settler start off with good dairy stock being satisfied with a small return the first few years, and then gradually expand into tobacco...Let us encourage the home idea in Rhodesia rather than a place where one makes a rapid fortune out of cotton or tobacco...the dairy cow, I consider is absolutely an essential in the settlement of the granitic sand veld, or I fail to see how soil fertility is to be maintained.¹⁷⁵

He proposed land settlement for tobacco on small, subdivided and compact irrigation farms suitable for other ventures such as dairying, pigs and poultry with farms of this type to contain not less than 20 acres of irrigable land, 50 acres of dry land arable and 60 acres of sand veld to grow tobacco.¹⁷⁶ This was based on the logic that the small farm settler stood a good chance of making good on a compact small farm that he could adequately supervise than on a big scattered place. This proposed settlement pattern although ideal was not what happened as Southern Rhodesia’s method of settlement was based on “South African methods”. This method was described as deriving a living from the natural but undeveloped resources of the land.¹⁷⁷ In such circumstances, large areas of land are needed to secure a living for one farmer.¹⁷⁸ Thus, large acreages of tobacco were more common prompting the British American

¹⁷¹ Report of the Director of Agriculture, 1927.

¹⁷² Clements and Harben, *Leaf of Gold*, 97. Also see Phimister, *An Economic and Social History of Zimbabwe*, 136.

¹⁷³ NAZ, S2371/1/1, Land Settlement, ‘Closer Settlement’, Department of Agriculture; Paper read at the laboratory on 5 January 1925.

¹⁷⁴ NAZ, S2371/1/1, Land Settlement, ‘Closer Settlement’, Department of Agriculture; Paper read at the laboratory on 5 January 1925.

¹⁷⁵ NAZ, S2371/1/1, Land Settlement, ‘Closer Settlement’, Department of Agriculture; Paper read at the laboratory on 5 January 1925.

¹⁷⁶ NAZ, S2371/1/1, Land Settlement, ‘Closer Settlement’, Department of Agriculture; Paper read at the laboratory on 5 January 1925.

¹⁷⁷ NAZ, S1189/9, Rhodesia Cooperation Limited: Settlement of the Land, Memoranda on scheme for intensive settlement on land by Colonel Frank Johnson, 9 January 1925.

¹⁷⁸ NAZ, S1189/9, Rhodesia Cooperation Limited: Settlement of the Land, Memoranda on scheme for intensive settlement on land by Colonel Frank Johnson, 9 January 1925.

Tobacco expert to remark that the industry in Southern Rhodesia had prospects of attaining a great magnitude, but the costs were too high and the acreages too large, and what was needed was more growers and not large acreages.¹⁷⁹

In addition to planting large acreages the pioneer tobacco farmers also rarely practiced crop rotations. During the 1926/27 season 30 164 acres were devoted to tobacco, a total increase of 16 249, from the 1925/26 season acreage.¹⁸⁰ The report for summer crop returns for 1926/27 revealed that the expansion in acreages had resulted in single crop systems and the neglect of crop rotations. The report noted:

It will be observed that 448 farms only grow a single crop (tobacco) and are therefore not practising crop rotation at all. The land planted to tobacco is not regularly used in rotation. It is evident therefore that this important side of agricultural practice is not given the attention it deserves.¹⁸¹

During the 1927/28 season acreage planted to tobacco also went up from 30 164 to 46 622 acres.¹⁸² Production multiplied more than fourfold from 5 660 000 lbs in 1926/27 season to 24 889 000 lbs during the 1927/28 season.¹⁸³ There was a crisis of over-production as there was no ready market to absorb the surplus leaf resulting in the disaster of 1928.¹⁸⁴ It was the worst disaster that ruined many farmers who went bankrupt. The crisis of 1928 continued to depress production such that by 1930, only 272 growers remained out of 987.¹⁸⁵ The implications of the 1928 to 1930 tobacco crush on tobacco farming systems will be fully discussed in the next chapter that looks at the Great Depression. Thus by 1928, when the tobacco crush happened, pioneer tobacco farmers in Southern Rhodesia just like the early tobacco farmers in the American tobacco colonies were soil miners and yet to come up with agronomic models to conserve soil fertility and preserve natural forests and timber. The next section examines the construction of labour regimes in tobacco farming.

¹⁷⁹ NAZ, S1189/9, Rhodesia Cooperation Limited: Settlement of the Land, Memoranda on scheme for intensive settlement on land by Colonel Frank Johnson, 9 January 1925.

¹⁸⁰ NAZ, S7878, Reports on the summer crop returns, 1926-27.

¹⁸¹ NAZ, S7878, Reports on the summer crop returns, 1926-27.

¹⁸² NAZ, S7878, Reports on the summer crop returns, 1927-28.

¹⁸³ Scott, 'The Tobacco Industry of Southern Rhodesia', 189-206.

¹⁸⁴ Clements and Harben, *Leaf of Gold*, 103.

¹⁸⁵ Clements and Harben, *Leaf of Gold*, 112.

CULTIVATING CLASS, RACE AND SOCIAL VIOLENCE: LABOUR EXPLOITATION IN THE TOBACCO FARMS IN SOUTHERN RHODESIA, 1900-1930.

The history of African labour in Southern Rhodesia's economic growth has received a great deal of scholarly attention.¹⁸⁶ The history of labour in tobacco, however, has received no other detailed attention outside the seminal work of Rubert who pioneered a whole new outlook that documented various levels of exploitative practices including the use of child labour, and a rigorous system that he described as “benevolent paternal autocracy”.¹⁸⁷ Prior to Rubert's history of tobacco labour, W.E Haviland¹⁸⁸ and Clements and Harben had written about labour patterns and problems in tobacco farming in Southern Rhodesia. Their narratives were, however, racist and framed to defend the interests of white settler tobacco farmers. African labourers are depicted as “childish, unambitious and lazy” with very small material needs and living happily in the Rhodesian tobacco farms at the benevolence of their “masters”.¹⁸⁹ Haviland emphasised the necessity of enforcing discipline on African labourers as one of the ways to improve labour efficiency. He noted that successful tobacco farmers were those who understood that Africans responded favourably to discipline.¹⁹⁰ Rubert's seminal work followed Beverly Grier's 1994 publication, which – though ground breaking on child labour and the colonial state in Southern Rhodesia – was a more general take on the issue across sectors of the economy with one very terse reference to tobacco farming and labour.¹⁹¹ While Rubert's tobacco labour history is an authoritative account, it did not integrate itself in a broader global frame linking labour practices in tobacco production within world-wide theories of the

¹⁸⁶ See Charles van Onselen, *Chibharo, African Mine Labour in Southern Rhodesia, 1900-1933* (London: Pluto Press, 1976); David Johnson, ‘Settler Farmers and Coerced African Labour in Southern Rhodesia’, *Journal of African History*, 33, 1 (1992), 111-128; G. Arrighi, ‘Labour Supplies in Historical Perspective: A Study of the Proletarianization of the African Peasantry in Rhodesia’, *Journal of Development Studies*, vi (1970), 198-233.

¹⁸⁷ Rubert, *A Most Promising Weed*, 89.

¹⁸⁸ W.E Haviland, ‘The Use and Efficiency of African Labour in Tobacco Farming in Southern Rhodesia’, *The Canadian Journal of Economics and Political Science*, 20, 1 (February 1954), 100-106.

¹⁸⁹ See Clements and Harben, *Leaf of Gold*, 186-197. Clements and Harben narrative of African tobacco labourers is distinctly upsetting. They describe African tobacco labourers as “primitive” having a preference for mud and dagga compound hovels over brick-built cottages. Furthermore, they add that African labourers needs included the veld for picking wild delicacies and relishes, a river, for the women to do laundry and gossip, an open space of “beaten mud” for dances and beer drinking! Haviland juxtaposes and compares European (in Europe) and African labourers in tobacco farms in Southern Rhodesia and concludes that the difference was that the wage incentive was weaker with Africans as they had ‘primitive’ wants. These views of the African as raw, primitive and childish was part of how Europeans imagined Africans and it became entrenched within the native policy of Southern Rhodesia in the 1920s. See Diana Jeater, ‘Imagining Africans: Scholarship, Fantasy, and Science in Colonial Administration, 1920s Southern Rhodesia’, *The International Journal of African Historical Studies*, 38, 1 (2005), 1-26.

¹⁹⁰ Haviland, ‘The Use and Efficiency of African Labour in Tobacco Farming’, 100-106.

¹⁹¹ Beverly Grier, ‘Invisible Hands: The Political Economy of Child Labour in Colonial Zimbabwe, 1890-1930’, *Journal of Southern African Studies*, 20, 1 (March 1994), 27-52.

history of labour and tobacco production, and thus locating itself in a more nuanced global history. The problems associated with tobacco production and labour exploitation have all come to be viewed in global terms through the appropriation of a global language and a global framework.¹⁹² Thus, Rubert did not connect to the broader global studies on tobacco production and labour regimes but wrote a localised history. Again, while Rubert concentrated much on the exploitation of labour in the farms, he did not examine the methods used in the recruitment of such labour. This section will thus extend Rubert's work on those two key aspects. It contributes to the historiography of labour in tobacco farming in Southern Rhodesia by integrating the local histories within global narratives of labour regimes in tobacco farming. This approach adds a conceptual layer towards understanding Rubert's social history of labour in a more theoretically engaged manner. This locates labour practices and regimes in Southern Rhodesia tobacco farms as not existing in a vacuum but constituting part of the globalization of tobacco's disruptive social and environmental heritage.

Historian Jeremy Brooks reflects on the labour dynamic in tobacco culture. He argues that the production of tobacco is an "intensive, tedious, year-round occupation" involving a series of operations carried out manually.¹⁹³ He muses "so laborious is this vocation that the literature dealing with the subject of tobacco culture, from the seventeenth century to our own day is replete with complaints and resentment".¹⁹⁴ Brooks asks the distressing question as to why despite its lack of comfort most people have continued to be stubbornly involved in labour that is so detestable. He finds the answer in the chance for profits for a few although for most people involved in tobacco culture "the monetary yield of their labours is always insufficient to maintain them".¹⁹⁵ Peter Benson, in his ethnographic study of tobacco labour in the USA, sought to understand the meaning of tobacco work within the context of a highly contentious tobacco market and production system and sees tobacco labour in a dense global and conceptual context.¹⁹⁶ He argues that, while the tobacco leaf is being made, along this process is the construction of other sources of identity baggage such as race and class structure.¹⁹⁷ New cultural meanings of belonging, identity and modernity that are based on the longstanding

¹⁹² Issues of tobacco production and labour have come to command global attention where various international labour organisations, human rights organisations and inter-governmental organisations have developed transnational frameworks and partnerships. In that regard when historicising labour in tobacco production, there is need to adopt a holistic global historical narrative.

¹⁹³ Brooks, *The Mighty Leaf*, 284.

¹⁹⁴ Brooks, *The Mighty Leaf*, 284.

¹⁹⁵ Brooks, *The Mighty Leaf*, 285.

¹⁹⁶ See Benson, *Tobacco Capitalism*, 63-95.

¹⁹⁷ Benson, *Tobacco Capitalism*, 66.

prejudices about race, class and gender are also cultivated and rigidified within the social landscape.¹⁹⁸ Evan Bennett adds that the labour intensive nature of tobacco operations has seen its cultivation privileging “cultural insiders” and this characteristic explains the dominance of particular forms of production and reifies its cultural distinctiveness.¹⁹⁹ Nevertheless, Bennett adds the caveat that labour relations in tobacco culture are mutable and much a result of history and not nature.²⁰⁰

Initially colonial tobacco planters in the Americas had relied on white indentured servants for much of their manual labour.²⁰¹ However, by late 1600s the indentured labour system was in decline as a result of the rise of independent yeoman farmers and most tobacco planters had to turn to black slave labour.²⁰² The result was a ten-fold growth of African slaves from 100 000 to a million in the plantations, accompanied by the growth in size of tobacco estates, new forms of labour control and field management.²⁰³ Although the cultivation of tobacco did not cause slavery, it changed the social landscape. In Virginia for instance in 1625 there had only been 23 “negroes”, the number rose to 2000 slaves in 1671, but still that was three times less than the number of white indentured servants in a population of 40 000.²⁰⁴ By 1700, indentured white labour had become scarce and the plantation gangs were now completely composed of “negroes”²⁰⁵ It was now increasingly difficult to encounter farms where there was no slave labour; in Maryland the number of farms without slave labour decreased from 62 % to 32 % between 1658 and 1777.²⁰⁶ Tobacco cultivation absorbed about half a year of working time, and cultivation was often merciless with labour.²⁰⁷ Labour peak tasks²⁰⁸ included transplanting which absorbed the entire work schedule in April and May, then weeding, suckering, topping,

¹⁹⁸ Benson, *Tobacco Capitalism*, 66.

¹⁹⁹ Bennett, ‘Dubious Heritage’, 23-40.

²⁰⁰ Bennett, ‘Dubious Heritage’, 23-40.

²⁰¹ Goodman, *Tobacco in History*, 176.

²⁰² Brandt, *The Cigarette Century*, 23.

²⁰³ See Kulikoff, *Tobacco and Slaves*, 40.

²⁰⁴ Brooks, *The Mighty Leaf*, 98-99.

²⁰⁵ Brooks, *The Mighty Leaf*, 99.

²⁰⁶ Goodman, *Tobacco in History*, 176.

²⁰⁷ Goodman, *Tobacco in History*, 173.

²⁰⁸ Tobacco tasks include suckering, topping, harvesting, curing and grading. Topping is the removal of the flower head or the terminal bud to concentrate nutrients on the leaves. It is a tedious process as it must be administered to every plant. After topping, the shoots that develop must be removed periodically to maintain the supply of nutrients to the leaves in a process called suckering. The harvesting process is done in various stages by “priming” which is the picking of ripe leaves from the tobacco stalk individually. Harvesting usually takes two months. The harvested leaves are hung in the barns for curing. After curing each leaf is meticulously graded according to colour and texture and subdivided according to quality and colour. The graded leaves are then tied into small bundles called “hands” consisting of fifteen to twenty leaves. The hands are then packaged for marketing in bales. For a description of the tobacco labour process see Brooks, *The Mighty Leaf*, 279-293; *A Handbook of Tobacco Culture for Planters in Southern Rhodesia*, 20-25.

harvesting, curing and grading.²⁰⁹ Tobacco cultivation was closely tied to the use of gangs of enslaved labour who worked in small units while engaged in weeding, pest control, cultivation of the soil between tobacco rows, the pruning of suckers.²¹⁰ These labour tasks relied on rigorous labour control mechanisms, use of gangs of slaves, and aggressive managerial strategies to maximise leaf quality.²¹¹ The system of labour management had become so rigorous and routine that it could be taught to untrained slaves.²¹² Thus, while the public face of the tobacco boom was a shared culture of prosperity, in reality this boom relied on regimented social divisions and labour control mechanism that helped maintain an oppressive social order.

The emergence of slave labour made tobacco cultivation socially complex and witnessed the transitioning from conditions where planters cultivated under similar labour regimes to a complex production system with distinct social relations.²¹³ When slavery ended, with the emancipation there was a renegotiation of labour relations on tobacco farms. Share cropping and the use of ganged paid labour became prominent.²¹⁴ But even then, share cropping and tenancy was still another exploitative practice and the use of ganged labour “still looked like slavery”.²¹⁵ In the 20th century, as other forms of tenancy, arose the locus of production shifted to the household where from the 1920s male farmers exploited the unpaid labour of women and children.²¹⁶ From 1907, the labour of women and children had become common place in most tobacco fields in America as neither the tenant farmers nor small landowners could afford to hire labour.²¹⁷ Production became centred on smaller areas of about three acres on which two thirds of women and children’s labour was devoted.²¹⁸ The conditions for family labour were so grim that one writer observed that women and children slept in bedrooms crowded with tobacco and the children were “gummy and dirty from contact with the tobacco stalks, their youthful faces tired.”²¹⁹ Studies of contemporary tobacco production systems have also been

²⁰⁹ Goodman, *Tobacco in History*, 173.

²¹⁰ Benson, *Tobacco Capitalism*, 67.

²¹¹ Benson, *Tobacco Capitalism*, 65.

²¹² Brooks, *The Mighty Leaf*, 99.

²¹³ Goodman, *Tobacco in History*, 177.

²¹⁴ Bennett, ‘Dubious Heritage’, 23-40.

²¹⁵ Bennett, ‘Dubious Heritage’, 23-40.

²¹⁶ Pete Daniel, *Breaking the Land: The Transformation of Cotton, Tobacco, and Rice Cultures since 1880* (Urbana: University of Illinois Press, 1985), 23–31.

²¹⁷ Tilley, *The Bright Tobacco Industry*, 102.

²¹⁸ Tilley, *The Bright Tobacco Industry*, 102.

²¹⁹ Tilley quotes a writer in *Progressive Farmer* F.H. Jeter writing on 23 October 1928. See Tilley, *The Bright Tobacco Industry*, 102.

able to confirm the continuation of social violence as part of the historical heritage of tobacco cultivation labour regimes.²²⁰ The globalised nature of tobacco labour systems and the transnationality of labour exploitation in tobacco production thus begs for a historicization of tobacco labour regimes in a way that links them into universal patterns and practices.

The labour dynamic is very important to tobacco because the crop requires much more labour than any other crop. Tobacco requires more scrupulous management per acre than cotton, rice, or sugar.²²¹ Tobacco work is both skilled and hard as almost every task has to be carried out by hand.²²² Throughout the 19th and 20th centuries, while other agricultural products were becoming more mechanised, tobacco continued to demand an even greater degree of meticulous hand labour. A cost of production survey in Granville county South Carolina in 1868 revealed that the cost of labour amounted to more than 50% of the total cost of production, 61% in 1879 and 55% in 1922.²²³ In Southern Rhodesia, between 1910 and 1914, the average labour required for cotton was 60-100-man hours per acre, for maize 37-100-man hours per acre and for tobacco of all kinds 356-man hours per acre.²²⁴ Before the advent of extensive mechanisation in the Post-World War II era, 70 acres of tobacco needed a labour requirement of about 150 “native” boys (meaning African adult men in the demeaning nomenclature of the time).²²⁵ In 1952, the average man hours per acre for tobacco production in Southern Rhodesia was estimated to be as high as 1600.²²⁶

From the early days the major problem that confronted tobacco farming in Southern Rhodesia was shortage of labour, and this was because many African labourers preferred working in

²²⁰ See ‘A State of Fear: Human Rights Abuses in North Carolina’s Tobacco Industry’, Oxfam Report (2011); B. Gamlin, ‘My Eyes are Red from Looking and Looking: Mexican Working Children: Perspectives on How Tobacco Affects their Bodies’, *Vulnerable Children and Youth Studies*, 6.4 (December 2011), 339-345; M. G. Otañez, M.E. Muggli, R.D. Hurt and S.A. Glantz, ‘Eliminating Child Labour in Malawi: a British American Tobacco Corporate Responsibility Project to Sidestep Tobacco Labour Exploitation’, *Tobacco Control*, 15, 3 (June 2006), 224-230; Athena K. Ramos, ‘Child Labour in Global Tobacco Production: A Human Rights Approach to an Enduring Dilemma’, *Health and Human Rights Journal*, 20, 2 (December 2018), 235–248. Also, in May 2019, *The Guardian* reported that there was rampant exploitation of African immigrants in the tobacco farms of Campania in Italy. These immigrants included children and adults who were forced to work up to 12 hours a day without contracts and enough health and safety equipment. They were also under-paid and most of them complained of body pains and lack of proper rest. See <https://www.theguardian.com/global-development/2019/may/31/i-had-pain-all-over-my-body-italys-tainted-tobacco-industry>, accessed 5 July 2019.

²²¹ Benson, *Tobacco Capitalism*, 67.

²²² Antony J. Badger, *Prosperity Road: The New Deal, Tobacco, and North Carolina* (Chapel Hill: University of North Carolina Press, 1980), 4.

²²³ Tilley, *The Bright Tobacco Industry*, 121.

²²⁴ NAZ, 982/T/2F- Rhodesia Tobacco Association General, 1 July 1954- 13 March 1955, Labour cost for tobacco.

²²⁵ Captain I.H. Morten, ‘Rhodesia Flue Cured Tobacco’, *Empire Journal*, XLI, 6 (1950), 6.

²²⁶ NAZ, 982/T/2F- Rhodesia Tobacco Association General, 1 July 1954- 13 March 1955, Labour cost for tobacco.

mines as farmers were not able to pay as high as mine owners.²²⁷ The shortage of labour was a national crisis and led to the creation of the Rhodesian National Labour Bureau (RNLB) in 1903 mostly to supply mine labour, but became a very useful conduit for the supply of *chibaro*²²⁸ labourers to farmers.²²⁹ During periods of critical labour shortages, however, some white settler farmers would coerce the company administration to use more effective methods of procuring labourers faster than the RNLB.²³⁰ In 1908, the position of most tobacco farmers with respect to labour was reported in the *Rhodesian Herald* as being so worse that many growers were obliged to suspend operations until the necessary labour had been procured.²³¹ In 1911, the native labour question was described as the “most acute crisis” in Southern Rhodesia, and in several districts the lack of labour had been so great that tobacco farmers were without “boys” for reaping their crops.²³² The importance of African labour as a raw material for tobacco was captured by one colonial official in debasing terms in which the tobacco crop and Africans are presented as objects for commercial exploitation:

Natives resemble tobacco in as much as they love veld where tropical and sub-tropical conditions make the struggle for a livelihood comparatively easy, and consequently they avoid the watersheds and are found in their numbers on the low veld, and a good supply of native labour is essential to the tobacco planter.²³³

Such views reflect how Africans were objectified as instruments for labour exploitation and raw materials in tobacco farms just as African slaves had been used as raw materials for the colonial tobacco plantation economy in the Americas.

Between 1925 and 1928, the endemic labour crisis in the tobacco farms was made worse by the tobacco rush that witnessed large numbers of settlers from Britain coming into Rhodesia to grow tobacco.²³⁴ The state also established a motor transportation system called *ulere* that operated between Northern Rhodesia and Southern Rhodesia to bring in migrant labour from

²²⁷ Hone, *Southern Rhodesia*, 75.

²²⁸ The word *chibaro* was used in Southern Rhodesia to refer to the colonial system of forced and contract labour enforced by the Rhodesia Native Labour Bureau from 1903-1933. The word was used differently in various regional colonial contexts to refer to colonial systems of coercive labour recruitment. In South Africa, the term was deployed as *Isibalo* to refer to forced labour in Natal during the late 19th century. During the mid-1920s the word *shibaru* in Mozambique was used to mean forced labour, and in Nyasaland *cibalo* was used to refer to contract labour. See van Onselen, *Chibaro: African Mine Labour in Southern Rhodesia*, 99.

²²⁹ Charles Van Onselen, *Chibharo: African Mine Labour in Southern Rhodesia*, 116. Also see J.M. MacKenzie, ‘Colonial Labour Policy and Rhodesia’, *Rhodesia Journal of Economics*, 8 (1974), 12-13.

²³⁰ Machingaidze, ‘The Development of Settler Capitalist Agriculture in Southern Rhodesia’, 39.

²³¹ J.S. Loosley, Secretary of the Rhodesian Agricultural Union in a letter to the Editor, *The Rhodesian Herald*, 27 November 1908.

²³² ‘Editorial’, *Rhodesia Agricultural Journal*, 9, 1 (October 1911), 3.

²³³ *Handbook of Tobacco Culture for Planters in Southern Rhodesia*, 92.

²³⁴ Machingaidze, ‘The Development of Settler Capitalist Agriculture in Southern Rhodesia’, 149.

Nyasaland and Northern Rhodesia.²³⁵ Despite these state initiatives, the labour situation in the whole colony remained dire for most farmers – but most significantly damaging to tobacco farmers. This latter group felt compelled to adopt nefarious recruitment methods that bordered on kidnappings, coercion and touting – much to the outrage and financial detriment of other farmers. The Victoria cattle and maize farmers complained to the Minister of Agriculture about tobacco growers’ recruiters and touts who had set up offices in various parts of the country using all forms of shrewd means to snatch up labourers.²³⁶ They noted with chagrin that tobacco farmers were “simply parasites who would send their native touts around the farms to try and lure employed natives away.”²³⁷

In another case, two African labourers were hoodwinked by a tobacco farmer to travel from Bulawayo to Salisbury (a distance of 430 kilometres) upon being promised work in a Salisbury factory only to find out that they had been forcibly recruited as tobacco labourers for a farm in Umvukwesi. They narrated their ordeal:

I was contracted by Mr Morrison in Bulawayo, he offered us £2/ month if we agreed to work in Salisbury, we agreed to his terms and 8 natives came to Salisbury with him. We were taken before the Native Commissioner Salisbury and we were told we would be required to work in his tobacco farms in the Umvukwesi for £1/month for 12 months. We refused the offer...Mr Morrison then said, alright you can walk back to Bulawayo where you will be arrested. We had neither money nor food, so we had to accept.²³⁸

Another disreputable practice was the employment of children in the tobacco farms. Although Rubert explained the practice and the nature of jobs children did in the tobacco farms he did not give much legislative context to it. In 1928, The Southern Rhodesian Legislative Assembly passed the Native Juvenile Employment Act to regulate the employment of “native” juveniles particularly in the European farms.²³⁹ The Act was simply an attempt to codify and legislate for something which was already a fact in many farms and economic sectors of Southern Rhodesia.²⁴⁰ During the debate of the bill, one legislator Sir Ernest Montagu pointed out that

²³⁵ Rubert, *A Most Promising Weed*, 30.

²³⁶ NAZ, S138/40, Labour recruitment, 1924-28, Victoria Farmers to Minister of Agriculture, 4 August 1925.

²³⁷ NAZ, S138/40, Labour recruitment, 1924-28, Victoria Farmers to Minister of Agriculture, 4 August 1925.

²³⁸ NAZ, S138/40, Labour recruitment, 1924-28, Extracts of a letter from Mr. R.K. Robinson, Forced recruitments: Tome and Pembi farms, 3 February 1928.

²³⁹ The Act came at the instigation of the Rhodesian Agricultural Union’s recommendation at its 1924 annual conference on the need to indenture native juveniles. The argument for the proposed Act was that most native juveniles were loafing around unemployed and could be a source crime and trouble if not occupied with work.

²⁴⁰ Charles van Onselen points out that child labour was used in mines since the days of the Rhodesian Native Labour Bureau (RNLB) when young boys in the rural areas were recruited forcibly for mine labour. This practice

on many tobacco and cotton farms women had arrived with very young and small children who had been rather useful in picking cotton and reaping tobacco.²⁴¹ The bill was celebrated as being in the interests of the native juveniles in order to safeguard them against the evils of loafing, undesirable employers and undesirable companions and surroundings.²⁴² The President of the Makoni section of the Rhodesian National Farmers Union (RNFU), however, noted that, the seriousness of the bill was clearly demonstrated by the fact that the League of Nations had laid it down that forced labour for private gain was slavery.²⁴³ Sir Lionel Cripps, the first Speaker of the Southern Rhodesian legislative assembly described the bill in his correspondence with the Governor of Southern Rhodesia as representing a “peculiarly odious form of child slavery”.²⁴⁴ In the House of Commons in Britain the bill received a lot of scrutiny and attack from British law-makers. One speaker who spoke in opposition to the bill pointed out that the law was due to the imperial preference given to empire grown tobacco that was now spurring Rhodesian growers to produce more while exploiting children.²⁴⁵

On 29 December 1927, the Chief Native Commissioner noted that there was a growing entry of small children into the tobacco industry, and children were seeking employment on a larger scale.²⁴⁶ He admitted that child employment was already a common practice long before the passage of the bill and during the past 30 years children had been regularly employed on tobacco farms.²⁴⁷ A concerned missionary pointed out in a private letter to the Chief Native Commissioner that in his view the tobacco industry was factory work, calling for factory work precautions with respect to children.²⁴⁸

had become pervasive by as early as 1905 and the “native” juveniles so recruited conducted such tasks as sweeping, cooking. On Asbestos mines child labour was used to separate mineral fibre from the rock. In the mica mines where half the labour force composed of children aged from 10 to 15 years. These children cut, split and sorted the mica. See van Onselen, *Chibaro: African Mine Labour in Southern Rhodesia*, 124-125. Van Onselen though does not discuss the nature and prevalence of child labour within the farms

²⁴¹ Southern Rhodesia Legislative Council Debates, 2 November 1928.

²⁴² NAZ, S138/255, The Native Juveniles Employment Act, 1926-28, Secretary to the Premier to Secretary Law Department, 27 March 1927.

²⁴³ NAZ, S138/255, The Native Juveniles Employment Act, 1926-28, A.C. Parkinson to the Chairman Peace Committee of the Society of Friends, 13 May 1927.

²⁴⁴ NAZ, S138/255, The Native Juveniles Employment Act, 1926-28, Sir Lionel Cripps to Governor Southern Rhodesia: Objections to the proposed bill, 29 August 1926.

²⁴⁵ NAZ, S138/255, The Native Juveniles Employment Act, 1926-28, Extracts from the House of Commons official report of 5 December 1927.

²⁴⁶ NAZ, S138/255, The Native Juveniles Employment Act, 1926-28, CNC to the Secretary to the Premier, 29 December 1927.

²⁴⁷ NAZ, S138/255, The Native Juveniles Employment Act, 1926-28, CNC to the Secretary to the Premier, 29 December 1927.

²⁴⁸ NAZ, S138/255, The Native Juvenile Employment Act, CNC to the Secretary to the Premier, 29 December 1927.

The use of child labour in the tobacco farms was justified in official circles as being desirable on the grounds that child labour was necessary for the success of the tobacco farms because child labour was cheap as children earned from 3 pence a day to four pence, and 5 shillings for a month.²⁴⁹ In addition, work in the farms was argued to be less strenuous than that performed by children in their traditional homesteads.²⁵⁰ Most importantly, children were considered better suited than adults for such tasks as grading and stringing of tobacco as they were “nimble fingered” and “sensitive to touch”.²⁵¹ The report of the Native Labour Committee vindicated the use of child labour on the tobacco farms by noting that “the light nature of several branches of work in the tobacco industry provides very suitable conditions for the employment of the native youth and will no doubt attract more and more in the near future.”²⁵² The report went further and noted:

Provided the work is arranged so that no great physical strain is placed upon them, and if when employed in such places as grading sheds care is taken to furnish proper ventilation and sanitary arrangements, we see no objection in the employment of juveniles. On the contrary, the native youngster forms the habit of work at his most impressionable age.²⁵³

Unfortunately, most of the conditions in the farming compounds and work environments were deplorably bad. The same report noted with concern that the lack of proper sanitary accommodation was a serious defect on almost all farms and most compounds had “grass shelters and leaky hovels detrimental to the health of the employees.”²⁵⁴ The Native Labour Supply Committee of Enquiry (1921) had noted that the major problem was that there were no inspectors on the farms as there were in the mines to examine the conditions of farm workers.²⁵⁵

The conditions of labour on the tobacco farms were in general deplorable. Rubert documents the use of labour discipline methods such as gang labour and task work for control.²⁵⁶ Task work was usually used for stumping, and during the period of cultivation.²⁵⁷ Gang labour was employed during transplanting, priming, topping, reaping and grading.²⁵⁸ There was also use of physical violence to instil discipline through canning, whipping and clouting.²⁵⁹ The

²⁴⁹ Rubert, *A Most Promising Weed*, 164.

²⁵⁰ Rubert, *A Most Promising Weed*, 164.

²⁵¹ Rubert, *A Most Promising Weed*, 64.

²⁵² NAZ, S235/473, Report of the Native Labour Committee, 1927-28.

²⁵³ NAZ, S235/473, Report of the Native Labour Committee, 1927-28.

²⁵⁴ NAZ, S235/473, Report of the Native Labour Committee, 1927-28.

²⁵⁵ Rubert, *A Most Promising Weed*, 93.

²⁵⁶ Rubert, *A Most Promising Weed*, 90.

²⁵⁷ Rubert, *A Most Promising Weed*, 90.

²⁵⁸ Rubert, *A Most Promising Weed*, 90.

²⁵⁹ Rubert, *A Most Promising Weed*, 95.

working conditions were bad as labourers worked in sheds with high levels of tobacco dust, poor ventilation and long working hours of between 14 and 18 per day.²⁶⁰ In Northern Rhodesia labour exploitation also existed in the tobacco farms. In 1912, a so-called “master’s servant” ordinance was proclaimed and readily used to prevent loafing and desertion in the tobacco plantations.²⁶¹ The proclamation gave settlers powers to enforce discipline and abuse workers within the tobacco estates to make labour more efficient.²⁶²

In the final analysis, the conditions of labour on the tobacco farms in Southern Rhodesia must be understood with the global context of the political economy of the crop which in the end inevitably constructs labour recruitment and exploitation regimes. Tobacco is a labour-intensive crop, and because of this its production across history has always imposed a hierarchical social order that accentuates, rigidifies and perpetuates inequalities. It is in this regard that the tobacco crop should be seen as exercising its own social agency and in contemporary production system the labour exploitation dynamic remains one of the most enduring heritages of the crop across history.

CONCLUSION

This chapter has shown that beyond the triumphalist and whiggish narratives of agrarian pioneer entrepreneurship, ingenuity and industriousness, the early history of tobacco farming in Southern Rhodesia was a story of exploitation of both the environment and human beings. This sinister episode in tobacco production has often been left out in traditional “virgin land” narratives that sought to write triumphal tobacco histories glorifying settler pioneer tobacco farmers. Indeed, later historians transcended this narrow historiography and included the role of the state to the pioneering endeavours of these early tobacco farmers and the social conditions of labour in the tobacco farms, but they missed out on the environment. These historians also did not construct their histories around a broader global perspective on tobacco to illuminate on how local tobacco production system are in themselves not unique but part of a global historical heritage that makes the crop carry certain socio-environmental baggage and historical meaning. The role of the crop in history, in defining agrarian frontiers, creating new farming settlements, bringing in chaotic environmental change, creating new social hierarchies and rigidifying class and racial relations must be understood as one of its enduring legacies

²⁶⁰ Rubert, *A Most Promising Weed*, 109.

²⁶¹ Ackson Kanduzza, ‘The Tobacco Industry in Northern Rhodesia’, *The International Journal of African Historical Studies*, 16, 2 (1983), 201-229.

²⁶² Kanduzza, ‘The Tobacco Industry in Northern Rhodesia’, 201-229.

across history. This chapter has sought to show that across history crops have always had agency that define how humans construct environmental landscapes and social systems.

CHAPTER THREE

‘MISERABLE DERELICT FARMS AND IMPOVERISHED SOILS’: STATE INTERVENTION IN PRODUCTION AND CONSERVATION ON THE SETTLER TOBACCO FARMS IN SOUTHERN RHODESIA, 1930-1945.

“One sees a number of farms which are entirely useless for tobacco production, and will be for many years to come, with not one piece of timber worthy of that name left; with soil erosion tremendously hastened because of its barrenness and with the soil palpably exhausted, so that a reduction of acreage is not all loss for it extends the life of the farm and reduces working costs.”

Rhodesia Tobacco Association (RTA) call for tobacco production control by the state, in 1935.

INTRODUCTION

In 1928, on the cusp of a financial depression that was to wreak havoc on a global scale, Rhodesia experienced its own foretaste with a severe tobacco slump. This crash was caused by overproduction with access to too few markets. It had disastrous consequences for the industry; tobacco farming tottered on the brink of total collapse from 1929. A year later, this precarious situation was exacerbated by the Great Depression, which saw a precipitous drop in agricultural commodities’ prices around the world. Most white commercial tobacco farmers were ruined and abandoned production, while others scaled down operations; creating a very unstable production terrain.

To assuage this situation and salvage the economy, the state decided upon direct intervention to save the agrarian sector. In fact, as other historians have shown, this became the most prominent and conspicuous feature of agricultural policy in Southern Rhodesia in the 1930s.¹ Commodity control boards and marketing institutions were set up and production became a key area within which the state came to play an active role. This newly extended top-down and state-directed role in agriculture found expression in the *The Report of the Commission of Enquiry into the Economic Position of the Agricultural Industry* (1934) commonly also known

¹ See Ian Phimister, *An Economic and Social History of Zimbabwe* (London: Longman, 1988), 173-176; V.E.M. Machingaidze, ‘The Development of Settler Agriculture in Southern Rhodesia with particular Reference to the Role of the State, 1908-1939’, PhD Thesis, University of London, 1980; M. Rukuni, ‘The Evolution of Agricultural Policy, 1890-1990’, in M. Rukuni and C.K. Eicher (eds), *Zimbabwe’s Agricultural Revolution* (Harare: University of Zimbabwe Publications, 1993); D.J. Murray, *The Governmental System in Southern Rhodesia* (Oxford: Clarendon Press, 1970); N. Samasuwo, “‘There is Something About Cattle’: Towards an Economic History of the Beef Industry in Colonial Zimbabwe, with Special Reference to the Role of the State, 1939-1980’, PhD Thesis, University of Cape Town, 2000.

as *The Danziger Report*, which was to set the tone for the post-depression era. The tobacco farming sector went through a period of a debilitating crisis during much of the 1930s as a result of the stochastic marketing environment caused by over production and speculative farming prompting the state to intervene with production controls from 1935. Also, for the first time beginning in 1929, the state had put in place inchoate mechanisms for natural resource conservation within the settler farming environment.

Despite these initiatives, however, state intervention had a limited impact in changing much of the white agrarian world: on the tobacco farms over-production, wasteful farming practices and the cavalier spirit of speculation and gambling continued. This chapter critically examines key state initiatives in the 1930s on production control and natural resource exploitation and how these impacted on tobacco farms and farming environments more broadly and then examines how these shaped production patterns and altered the very geography of the tobacco farming landscape. The chapter links the patterns of state intervention in the tobacco landscape to the global agrarian and ecological concerns aroused by over-production in the 1930s and the accompanying environmental disasters reflected by the Dust Bowl storms in the USA. It weaves these within the local historiographies of colonial state and conservation. In the USA state-aided production and conservation intervention programs during the 1930s shaped landscapes within the tobacco farm environments. This chapter argues that in Southern Rhodesia, however, state intervention typified by production controls and conservation legislation failed to alter the agrarian environment in the tobacco farms. These were by and large dominated by “derelict farms and impoverished soils”.

THE DUST BOWL AND THE GREAT DEPRESSION: A HISTORIOGRAPHY

American environmental history literature on the Great Depression of the 1930s reflects a general consensus that the economic crisis was linked to wasteful agricultural practices and rampantly exploitative capitalist modes of production which wreaked havoc on the natural environment.² This environmental havoc was largely showcased by the Dust Bowl disaster

² There is a lot of literature from American environmental history school focussing on the environmental crisis that spanned the Great Depression in the Great Plains of the southern states. This literature links methods of rapacious capitalist farming practised in the southern plains with environmental degradation. See Donald Worster, *Dust Bowl: The Southern Plains in the 1930s* (Oxford: Oxford University Press, 1979); R. Douglas Hurt, *Dust Bowl* (Chicago: Nelson Hall, 1981); Leslie Hewes, *The Suitcase Farming Frontier: A study in the Historical Geography of the Central Great Plains* (Lincoln: University of Nebraska Press, 1973); Richard Lowitt, *The New*

spanning from 1930 to 1936 which precipitated great droughts, low farm commodity prices and great distress in most parts of the USA southern plains.³ The drought was accompanied by heat waves, locust outbreaks, dust storms and land degradation which resulted in the loss of 4500 human lives, US\$25 million in farm losses per day such that the financial cost amounted to one-half the money America put into World War I.⁴ Donald Worster argues that there was an analytic link between the Dust Bowl and the Great Depression as both revealed the fundamental weaknesses of American consumption and production culture in ecological and economic terms respectively. He firmly concludes that the Dust Bowl came about as a result of the expansionary energy of agricultural capitalism encountering a “volatile marginal land, destroying the delicate ecological balance”.⁵

Worster ties the expansion of agricultural capitalism in the 1910s and 20s in the USA to the wheat boom, as Europe abandoned its traditional reliance on Russian grain and looked upon America for its supplies.⁶ As a result of this boom, between 1914 and 1919 wheat lands expanded in most southern states such as Nebraska, Oklahoma and Kansas by 13.5 million acres resulting in the “great plowing up” of 11 million acres of native grass. With high wheat prices speculation went rife and the plunder of marginal lands continued on an extensive scale despoiling soils in the semi-arid regions as new migrants flocked in to cash on the wheat boom resulting in conditions for dust storms, drought and depression during the “dirty thirties”. Between 1925 and 1930, farmers in the southern plains depleted 5 260 000 acres of vegetation for wheat production resulting in production jumping up by 300% to create a glut in 1931.⁷

Although most environmental historians of the Dust Bowl concur that the disaster was not natural but a result of human activity, others have constructed alternative historiographical viewpoints. Paul Bonnifield glorified the farmers of the Great Plains and portrays them not as culprits of environmental degradation but victims of nature, toiling in a hostile environment to

Deal and the West (Bloomington: Indiana Press, 1984); Donald Worster, ‘The Dirty Thirties: A Study in Agricultural Capitalism’, *Great Plains Quarterly*, 6, 2 (Spring 1986), 107-116.

³ For a chronological historical understanding of conditions during the Dust Bowl see Hurt, *Dust Bowl*; Paul Bonnifield, *The Dust Bowl: Men, Dirt and Depression* (Albuquerque: University of New Mexico Press, 1979); Worster, *Dust Bowl*.

⁴ Worster, *Dust Bowl*, 28.

⁵ Worster, *Dust Bowl*, 5-6.

⁶ Worster, ‘The Dirty Thirties’, 107-116.

⁷ Worster, ‘The Dirty Thirties’, 107-116.

build a better tomorrow with “resourcefulness, fortitude and courage.”⁸ James Malin also contends that the Dust Bowl was the work of nature, an inevitable disaster and the folks in the Great Plains were its victims and not perpetrators.⁹ However, these historiographical viewpoints are less popular and have received little traction in Dust Bowl scholarship because of their fatalism and failure to connect the impact of anthropogenic activity on nature (which has come to be more quantifiable with the advent of satellite surveillance technology from the 1970s).¹⁰

Worster makes the compelling argument that the expansion of the American culture of exploitative and rampantly speculative farming to other nations had already begun to create a chain of environmental disasters all over the world.¹¹ In Canada soil erosion on a massive scale had accompanied the intensive cultivation of the wheat prairies to meet the demands of the export market during the boom years as wheat was the chief export and source of foreign currency.¹² The practice of extreme monoculture practised on the prairies escalated the problem, threatening the collapse of the wheat economy, the country’s financial survival and the whole edifice of prairie farming.¹³ The political leaders who had encouraged the expansion of wheat and pastoral fields as lands of opportunity were later confronted with the problem of soil erosion.¹⁴ To salvage, the economic and ecological backlash of prairie agriculture the state in Canada had to intervene through controlling wheat marketing and production from 1931 to 1935.¹⁵

The production spree in the 1920s to meet the demands of a huge boom in agricultural commodity prices was not solely a feature of American agricultural capitalism, but a global production norm that in the end led to over production and a glut that caused a deep agricultural

⁸ Bonnifield, *The Dust Bowl*, 202. Also see William Cronon, ‘A Place for Stories: Nature, History, and Narrative’, *The Journal of American History*, 78, 4 (March 1992), 1347-1376. Cronon discusses the different and contrasting perspectives about the Dust Bowl between Worster and Bonnifield. For Bonnifield, the dust storms were a natural disaster and people had to struggle for their farms and clean nature’s mess, while for Worster the Dust Bowl represented the failure of humans to accommodate nature.

⁹ To make his point Malin wrote a series of four articles which appeared in the *Kansas Quarterly* in 1946. See J. Malin, ‘Dust storms: Part One, 1850-1860’, *Kansas Historical Quarterly*, 14 (May 1946), 129-40.

¹⁰ In 1977 when another dust storm happened in Oklahoma, meteorologist used satellite photography to show that the storms were a result of human land use practises. See Worster, ‘The Dirty Thirties’, 107-116.

¹¹ Worster, *The Dust Bowl*, 239.

¹² André Magnan, *When Wheat was King: The Rise and Fall of the Canada-UK Grain Trade* (Vancouver: University of British Columbia Press, 2016), 45.

¹³ Magnan, *When Wheat was King*, 45.

¹⁴ Paul Warde et al, *The Environment: A History of An Idea* (Baltimore: John Hopkins University Press, 2018), 74.

¹⁵ Magnan, *When Wheat was King*, 50-51.

crisis that was referred to the League of Nations in 1926.¹⁶ In 1931, the International Economic Conference of the League of Nations pointed out in its report that the crisis was a result of low agricultural prices in comparison with production expenditure caused by overproduction.¹⁷ It noted that overproduction spurred by a rise in commodity prices, improvements in technical methods, and the cultivation of new areas had all advanced more rapidly than consumption needs.¹⁸ The US Secretary for Agriculture in his Report for 1930 echoed the general refrain that production was out of balance and there was need for an adroit balancing of crop production and market demands, and pointed out that if readjustment was not brought by “intelligent action”, it would be effected more brutally through blind economic forces at an “excessive cost”.¹⁹

For tobacco growers in the USA, flue-cured tobacco prices, which had hitherto never fallen below 20 cents/lb between 1920 and 1927, dropped to 17.3 cents in 1928, 12 cents in 1930 and plummeted disastrously to 8.4 cents in 1931.²⁰ During 1930, 150 000 pieces of tobacco farm property were forcibly sold in North Carolina, and in Nash County, 3 500 of the 5 250 tobacco farms were foreclosed.²¹ The depression was so severe that tobacco tenants and farmers were facing conditions of poverty, homelessness, unemployment and forced migration.²² To contain the problem the state had to introduce the Agricultural Adjustment Act (AAA) under the New Deal in 1933 which placed limits on tobacco production in order to combat the problems of overproduction and low prices under the Federal Tobacco Program.²³

¹⁶ The global dynamics in agricultural production in the late 1920s reflected an acute drop in profit margins because of falling commodity prices, exacerbated by the Great Depression of 1929 to 1930. Prices for agricultural commodities had been maintained in the post-World War I years until the spring of 1921 but had begun to drop in 1922 by a margin of approximately 30% – largely because of the deflation of money in Great Britain and America. This development devalued the capital invested in farms by 50%, significantly affecting those who had bought their farms during the post-war boom period when property prices had been high. These conditions were particularly bad in England, such that the state had to ameliorate the situation through the promulgation of the Agricultural Credit Act of 1923 to afford relief via cheap mortgages to farmers who had purchased their holdings for corn production. See The Danziger Report, 6. The Report on the Economic Position of the Agricultural Industry in Southern Rhodesia discusses the background to the global agricultural crisis of the 1930s and gives interesting perspectives.

¹⁷ The Danziger Report, 12.

¹⁸ The Danziger Report, 14. Also see Giovanni Federico, ‘Not Guilty? Agriculture in the 1930s and the Great Depression’, *Journal of Economic History*, 65,4 (2005), 949-978.

¹⁹ The Danziger Report, 12.

²⁰ Antony J. Badger, *Prosperity Road: The New Deal, Tobacco and North Carolina* (Chapel Hill: University of North Carolina Press, 1980), 21.

²¹ Peter Benson, *Tobacco Capitalism: Growers, Migrant Workers and the Changing Face of a Global Industry* (Princeton: Princeton University Press, 2012), 77.

²² Benson, *Tobacco Capitalism*, 77.

²³ Evan P. Bennett, ‘Dubious Heritage: Tobacco, History, and the Perils of Remembering the Rural Past’, *Agricultural History*, 86, 2 (2012), 23-40.

Farmers agreed to limit their production in exchange for price support, and tobacco production was frozen geographically in areas where it had taken place to limit further expansion. The Soil Conservation and Domestic Allotment Act, which replaced the AAA in 1936, also based farm aid from the state on conservation programs as farmers were paid an average \$10/an acre to limit and shift from soil depleting crops such as tobacco to soil conserving crops such as grass, legumes and other forage crops.²⁴ Payments were also made upon installation of conservation works like terraces and this integrated soil conservation and farm income support objectives.²⁵ Historian Antony Badger has shown how these patterns of state intervention encouraged better farming methods, soil conservation and agricultural diversification in North Carolina tobacco farms throughout the Great Depression.²⁶

African historiography on colonial conservation concurs that the Great Depression and Dust Bowl in the USA had significance leverage in shaping state responses to conservation on both the settler white farms and African areas.²⁷ This body of scholarship agrees that colonial officials were prompted both by the economic pressures of the Depression and the apocalyptic fears of similar catastrophes in the face of expanding cash crop production in the colonial economy.²⁸ David Anderson in his study of the Great Depression and conservation in east Africa, however, notes that this settler concern about soil erosion aroused by the Dust Bowl

²⁴ Randall A. Kramer and Sandra S. Batie, 'Cross Compliance Concepts in Agricultural Programs: The New Deal to the Present', *Agricultural History*, 59, 2 (1985), 307-319.

²⁵ Kramer and Batie, 'Cross Compliance Concepts in Agricultural Programs', 307-319.

²⁶ See Badger, *Prosperity Road*.

²⁷ See William Beinart, 'Soil Erosion, Conservation and Ideas about Development: A Southern African Exploration, 1900-1960', *Journal of Southern African Studies*, 11, 1 (1984), 52-83. In 2003, Beinart, however revised the importance he had attached to the USA experiences as a model for intervention in South Africa. He, however, still maintained that South African environmental consciousness had grown from the 18th century within the international and imperial context. He points to particular American influences such as dry farming and soil conservation committees. See William Beinart, *The Rise of Conservation in South Africa: Settlers, Livestock and the Environment, 1770-1950* (Oxford: Oxford University Press, 2003), 333-334. For other historians who acknowledge American development influence on conservation in colonial Africa see J. McGregor, 'Conservation, Control and Ecological Change: The Politics and Ecology of Colonial Conservation in Shurugwi, Zimbabwe', *Environment and History*, 1 (1995), 257-279; David Anderson, 'Depression, Dust Bowl, Demography, and Drought: The Colonial State and Soil Conservation in East Africa during the 1930s', *African Affairs*, 83, 332 (1984), 321-343.

²⁷ Anderson, 'Depression, Dust Bowl, Demography, and Drought', 321-343.

²⁸ This point is more accentuated in David Anderson's study, which argues that the colonial patterns of state intervention in African agriculture in eastern Africa were influenced by the pressures of the Great Depression and the fears generated by the Dust Bowl particularly as conditions of overpopulation were contributing to land degradation in the African Reserves during the 1930s. Anderson further adds that the question of land degradation was politicised and solely blamed on Africans' wasteful agriculture even though settler farms were experiencing similar problems as a result of over production and monoculture. Anderson further argues that the Great Depression hit both settlers and Africans and in Tanganyika and Kenya European settlers experienced bankruptcy as the export markets collapsed. This was further worsened by the fact most areas in the white highlands were experiencing soil degradation and decline in fertility as a result of over production and monocropping of cereals.

disaster was not purely environmental, but rather a convenient way of preserving white settler rights to land ownership by stigmatizing African husbandry practices as wasteful and soil depleting.²⁹ This chapter builds on this historiography and juxtaposes the Rhodesian tobacco industry's economic crisis in the 1930s with environmental degradation caused by over production and speculation. The chapter argues that the American culture of exploitative and rampantly speculative farming, which led to over production and environmental degradation in the 1930s was a key attribute of the Southern Rhodesia tobacco industry. In addition, the financial pressures of the depression led many growers to attempt to maximise their profits through expanding tobacco acreages. This over-production had begun to worry the state and resulted in calls by colonial agricultural officials for the need for production control from 1935.

Literature on Southern Rhodesia during this period has focussed on how the Great Depression affected the agricultural sector economically and the various levels of state interventions which were largely limited to control of marketing through statutory marketing boards.³⁰ Although this literature acknowledges the speculative nature of tobacco farming during this period, it little engages with the environmental dimension of the tobacco depression located in over production caused by high tobacco prices in the 1920s that in turn led to wasteful land and resource utilisation that was consistently pointed out by several state commissions of enquiry beginning with the 1934 *Danziger report*. Machingaidze's 1980 doctoral thesis is the most solid and comprehensive historical accounts of the Rhodesian tobacco industry from 1918-39, concentrating on the marketing and production aspects during the Depression years particularly the difficulties in securing a sound market in the face of global financial volatility brought in by the depression.³¹ Clements and Harben examine the disastrous economic impact of the tobacco crush in 1928 and the accompanying financial depression on tobacco farming. However, they construct a glorified Bonnifield-sque interpretation of the plight of tobacco

²⁹ Anderson, 'Depression, Dust Bowl, Demography, and Drought', 321-343. Also see David Anderson and David Throup, 'Africans and Agricultural Production in Colonial Kenya: The Myth of the War as a Watershed', *The Journal of African History*, 26, 4, World War II and Africa (1985), 327-345. Anderson and Throup argue that the banner of soil conservation was used by white settler farmers to secure their occupation of the highlands against the expansion of African cultivation during the 1930s.

³⁰ See Machingaidze, 'The Development of Settler Capitalist Agriculture'; Selby Angus, 'Commercial Farmers and the State: Internal Group Politics and Land Reform in Zimbabwe', PhD Thesis, University of Oxford, 2006; John MacKenzie, 'Commercial Farmers in the Governmental System of Colonial Zimbabwe', PhD. Thesis, University of Zimbabwe, 1989; Richard Hodder-Williams, *White Farmers in Rhodesia: A History of the Marandellas District, 1890-1965* (London: Macmillan Press, 1983); Frank Clements and Edward Harben, *Leaf of Gold: The Story of Rhodesian Tobacco* (London: Methuen and Co., 1962).

³¹ Machingaidze's third chapter examines the tobacco industry from the international market perspective and the role of state intervention to the marketing crisis.

farmers in Southern Rhodesia during the Great Depression concentrating much on showing the resilience of farmers to prevail against financial and natural disasters, praising “the temper of steel which formed the backbone of an industry which, in spite of its insecurities and disappointments never once would recognise defeat.”³²

Maravanyika’s 2013 research looks at soil conservation during the Great Depression period in the settler farms and the various facets of state intervention including marketing, financial assistance through debt adjustment in 1935 and soil conservation.³³ His work provides a rich analysis of conservation history in settler farms including the activities and reports of various natural resources commissions of enquiry during this period and notes some of the environmental challenges accompanying tobacco production. However, his thrust is more focussed on the general settler farming sector. This chapter scrutinises the nuanced environmental problems as they related to specific tobacco farming practices and production factors that promoted them as well as how the ecology of diseases and pests such as nematodes and *Alternaria* affected land use in the tobacco farms. Also, the nature of state intervention in tobacco farming was much different from the rest of settler agriculture particularly as tobacco experienced a lot of speculation and gambling from growers during much of the 1930s. Tobacco farming also drew a more significant amount of state scrutiny than other crops during the 1930s as the state sought to reduce acreages, control production and regulate the use of natural resources at a time the crop was squandering most of the colony’s resources and threatening food production. Angus Selby notes the nuanced differentiation between tobacco farmers and others by pointing out that tobacco farmers were largely “farmer speculators”, while the rest of the farmers were just “ordinary farmers”.³⁴ This chapter, thus focusses on tobacco farmers from the Great Depression to the end of the Second World War in 1945. It expands on the historiography on soil conservation in white settler farms in Southern Rhodesia by revealing how the production systems in the tobacco farms, tobacco cultural practices and the economic conditions of the 1930s combined and resulted in endemic land degradation and exploitation of natural resources. The chapter uses archival material from the National Archives of Zimbabwe to reconstruct the environmental narratives that were paramount to tobacco farmers and the state during this period.

³² Clements and Harben, *Leaf of Gold*, 126.

³³ Simeon Maravanyika, ‘Soil Conservation and the White Agrarian Environment in Colonial Zimbabwe, 1908-1980’, Ph.D. Thesis, University of Pretoria, 2013.

³⁴ Selby, ‘Commercial Farmers and the State’, 53.

THE GLOBAL DEPRESSION AND THE TOBACCO CRISIS IN SOUTHERN RHODESIA, 1930-34.

The global agricultural, ecological and economic crisis explained and illustrated with examples at the beginning of the previous section also intruded in the Southern Rhodesian agrarian sector, particularly in tobacco, which had experienced a ruthlessly destructive burst in 1928 as explained in the previous chapter. Thus, when the Great Depression arrived in Africa, it found a tobacco sector that was already struggling. In fact, it was a completely new *kind* of crisis: facing overproduction, insufficient markets and a concomitant dramatic fall in prices. “Success” had come at a terrible price. The drop in the value of the tobacco crop was most conspicuous in the production figures that reflected that while tobacco exports had contributed 46.4% and 42.7% of all agricultural exports in 1927 and 1928 respectively, the figure had dropped precipitously to 17.1% and 17.4% in 1929 and 1930 respectively creating a huge deficit in agricultural export earnings and ruining most of the commercial farmers who were forced to close shop.³⁵ The disaster of the 1929 crop eliminated 700 growers in the 1930 season, which saw the figure drop off from 987 growers to 272, claiming the scalp of three quarters of the total producers and saw production falling to 5 500 000 lbs in 1930 from a record high of 24 943 044 lbs during the 1927/1928 season.³⁶ One tobacco grower in the Umvukwesi area Mr. H.J. Quinton portrayed this gloomy scenario, noting that “in 1928, you couldn’t sell tobacco, in 1929, you couldn’t sell tobacco, and in 1930, you couldn’t sell tobacco”.³⁷ A Marandellas farmer Noel Brettell recalled that in his district during the time there were abandoned homesteads with “broken windlasses and flapping doors, and the empty cavernous tobacco barns”.³⁸ The depression obliterated all the progress that had been made in the sector during the previous ten years.³⁹ Many of the hopeful immigrants who had come to Southern Rhodesia from Great Britain returned home bitterly with empty pockets and the brave or stubborn few who were determined to remain on the farms abandoned tobacco and joined the ranks of the penniless unemployed.⁴⁰

Another financial blow followed the dissolution of the Customs Union between Southern Rhodesia and South Africa in 1930, which further restricted the market for Rhodesian

³⁵ Machingaidze, ‘The Development of Settler Capitalist Agriculture’, 183.

³⁶ Clements and Harben, *Leaf of Gold*, 114.

³⁷ NAZ, ORAL/QU2, Interview with H.J. Quinton, May 1977-May 1978.

³⁸ Hodder-Williams, *White Farmers in Rhodesia*, 130.

³⁹ Clements and Harben, *Leaf of Gold*, 115.

⁴⁰ Clements and Harben, *Leaf of Gold*, 115.

tobacco.⁴¹ The agreement reduced duty free leaf imports from Southern Rhodesia into South Africa to only 2 000 000 lbs of Virginia tobacco and 400 000 lbs of Turkish tobacco every year – the rest had to pay customs.⁴² The agreement also provided that 150,000 lbs of the Union’s tobacco would be allowed into Southern Rhodesia duty free.⁴³ This agreement thus denied Southern Rhodesia the all-important South African market that had been key for the growth of its tobacco industry by consuming 7 million lbs of its export leaf annually.⁴⁴ The percentage of this to total production always fluctuated annually. In 1928 it was 33.2% of total exports, 70.2% in 1929, and 29.6% in 1930.⁴⁵ The result of the Customs Union Agreement of 1930 and the accompanying restrictions on Rhodesian tobacco to the South African market was the Tobacco Sales and Export Control Act (1931), which established the Tobacco Control Board responsible for equitable allocation of the Union quota to the buyers and planters.⁴⁶

However in 1931, the UK market had begun to respond quite positively to Rhodesian leaf as consumption rose by 18% to 6 262 000 lbs, which prompted the Chief Tobacco Officer D.D Brown to remark with reserved confidence that the state of the industry was “sound”.⁴⁷ Overall consumption increased from 2 million lbs in 1927 to 7.8 million lbs in 1932, an increase of 294% in 6 years as the graph below does show.

⁴¹ During the 1928 season, South Africa experienced its own surplus of tobacco production by 19 million lbs prompting the South African planters to pass a resolution demanding control of production and marketing of tobacco and urged the government to restrict imports from Southern Rhodesia. The Customs Union had afforded Southern Rhodesian tobacco duty free access to the South African market and was instrumental for much of the growth of the Rhodesian tobacco industry. Thus, its collapse further compounded the marketing woes during a financial depression.

⁴² J.M. Tinley, ‘Control of Agriculture in South Africa’, *South African Journal of Economics*, 8 (1940), 243-263.

⁴³ Tinley, ‘Control of Agriculture in South Africa’, 243-263.

⁴⁴ ‘The Tobacco Industry of Southern Rhodesia’, *The Countryside*, May 1929.

⁴⁵ D.D. Brown, ‘The Economics of the Rhodesia Tobacco Industry: Marketing and Disposal of the Crop’, *Rhodesia Agricultural Journal*, 30, 7 (July 1933), 538-563.

⁴⁶ Southern Rhodesia Statutes, Tobacco Sales and Export Control Act, (1931).

⁴⁷ NAZ, S1194/201/1, D. D Brown to Secretary, Department of Agriculture and Lands, 27 June 1932.

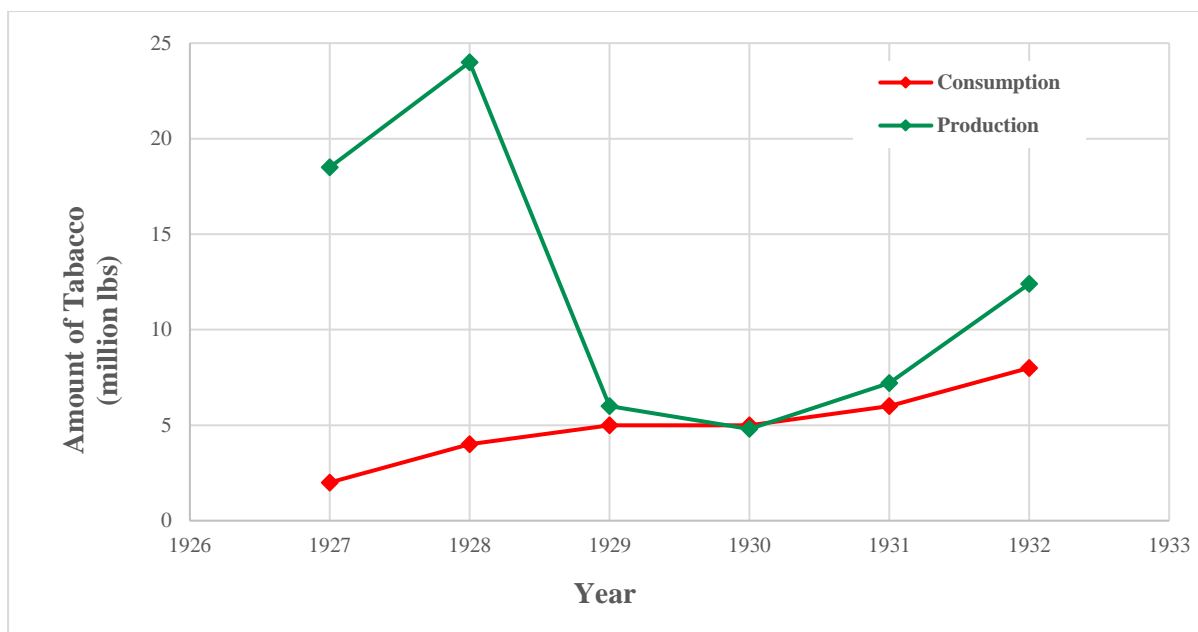


FIGURE 3 TOBACCO PRODUCTION IN SOUTHERN RHODESIA AND TRENDS OF CONSUMPTION IN THE UNITED KINGDOM, 1927-1932.⁴⁸

This positive surge was given greater impetus by the 1933 Ottawa Conference which guaranteed an Imperial Preference of 2s. ½ d./lb for ten years and catalysed a robust response from growers accompanied by a steady increase in production from a nadir of 5 500 000 lbs in 1930 to 14 500 000 lbs in 1933.⁴⁹ As a result of this steady increase in production the state had started to believe that to preserve the state of the industry, they needed the state to *control* the industry. The state-proposed infrastructure for tobacco production control was, however, vehemently rejected by a big section of the growers who had become a powerful lobby under a reconstituted Rhodesia Tobacco Association (RTA) promulgated by the Tobacco Marketing Levy Act in 1933 that made all growers members of the Association and liable to contribute subscriptions of one twentieth per lb of their tobacco exports.⁵⁰ The growing power of the RTA was reflected during the drafting of the Bill when politician cum large-scale tobacco farmer Edward Walter Lionel Noaks, the Secretary of the RTA, insisted that farmers should be the custodians of the levy funds and that control over the use of the funds should not be ceded to the Minister.⁵¹ The Act that was passed conformed to RTA demands as they were given control

⁴⁸ D.D. Brown, 'The Economics of the Rhodesia Tobacco Industry', 538-563.

⁴⁹ Clements and Harben, *Leaf of Gold*, 115.

⁵⁰ Clements and Harben, *Leaf of Gold*, 118.

⁵¹ NAZ, S1193/T3/5, Memorandum on Proposed Tobacco Cesspool legislation", L.M. Hastings, President RTA.

of the fund.⁵² The levy funding gave the RTA independence and influence in the crafting of tobacco policy in the succeeding years. This explains why growers were able during much of the period to resist state-imposed production controls despite the huge threat of overproduction, rampant speculation and wasteful use of resources in the 1930s and 40s. In addition, in 1933, when the Reform Party defeated the Rhodesia Party at the General Elections, they had to secure their primary supporters amongst white farmers, particularly the Mashonaland tobacco growers who were opposed to a system of production control.⁵³ The position of the RTA though with regards to production control was to change around 1935 after realising the need to reorganise the industry in all facets so as to separate out speculators and “chance growers” from the bona fide farmers. The final section of this chapter will deal with that aspect and reflect on how significant production control was in changing the tobacco farm terrain and eliminating chance growers and wasteful cultural practices.

SETTING THE TONE FOR STATE INTERVENTION? THE DANZIGER REPORT (1934) AND THE TOBACCO CRISIS.

Thus, the state began to take an active role on an unprecedented level (mirroring developments in North America and Europe) in white settler agriculture from 1930 owing to the agricultural crisis explained in the previous section. This crisis prompted several interventions – chief among those being the creation of commodity control boards to regulate the production and marketing of maize, cotton, beef, dairy products – and, of course, tobacco. D.J. Murray notes that political and administrative reasons were paramount in this extended scope of intervention as the state stopped its reliance on unregulated activities of private farmers and farming companies.⁵⁴ While the nature of state intervention in outlook tended to be political and administrative, it is important to note that the main reasons for intervention were economic as the state endeavoured to restrain the effects of the Depression from taking a heavy economic toll on agriculture and destabilise the whole colonial economic edifice. Globally, state intervention particularly through marketing boards was fashionable during the depression years to stabilise prices and salvage farmers from inevitable economic ruin. The main purpose for the control schemes were restriction of production for the purposes of balancing supply with

⁵² Subject to the creation of a legally constituted representative body of tobacco planters.

⁵³ Murray, *The Governmental System in Southern Rhodesia*, 84.

⁵⁴ Murray, *The Governmental System in Southern Rhodesia*, 83.

the needs of the market and ensure orderly marketing.⁵⁵ In Canada, after the disastrous collapse of wheat prices in 1929 which extended into 1931, the state had to assume control of the Central Selling Agency until 1935.⁵⁶ In France, the tobacco industry was so regulated by the state that no one was allowed to grow, import or manufacture tobacco without official authorisation and cultivation of tobacco was only permitted in certain particular areas where the soils were suitable.⁵⁷ Each year, separate requests for the permission to raise tobacco would be filed by producers who would be allocated specific acreage to be grown, number of plants per acre and the date of delivery to the market.⁵⁸

In Southern Rhodesia, the state abandoned its laissez faire approach of the pre-1930s to direct intervention in order to channel assistance to farmers.⁵⁹ In 1930, the Tobacco Control Board had been set up, and the following year saw the creation of the Maize Control Board and the Dairy Industry Control Boards.⁶⁰ The state, wary of the precarity of the agricultural industry, thus instituted a Commission of Enquiry under the Chairmanship of Mr Max Danziger, the then Minister of Finance. The terms of reference of the committee were, to review the farming position of the colony in general and suggest measures which might be taken to enable farming to be conducted more profitably with a view to securing to the producer a return more in keeping with reasonable cost of production.⁶¹ So *The Commission of Enquiry into the Economic Position of the Agricultural Industry* gathered evidence from many farmers.

The position of the growing side of the tobacco industry was described as by one grower as “parlous and insolvent” and the prospects of meeting a successful tobacco farmer as strenuous as those of finding “a top hat in a nudist camp”.⁶² Most of the farmers consulted correctly blamed the tobacco crisis on the speculative spirit that had been rampant in Southern Rhodesian agriculture where during the boom years a deluge of speculative farmers joined the industry, produced a glut, and abandoned it leaving the bona fide farmers to face the stormy years of depression. Mr E.C. Holmes, a tobacco farmer in Salisbury in his written evidence to the

⁵⁵ J.W. Downie, ‘Control Boards and Their Functions’, *Rhodesia Agricultural Journal*, 28, 10 (October 1931), 899-902.

⁵⁶ Magnan, *When Wheat was King*, 50.

⁵⁷ ‘Tobacco Cultivation in France’, *Rhodesia Agricultural Journal*, 27,4 (April 1930), 409-411.

⁵⁸ ‘Tobacco Cultivation in France’, 409-411.

⁵⁹ Rukuni, ‘The Evolution of Agricultural Policy’, 23.

⁶⁰ Rukuni, ‘The Evolution of Agricultural Policy’, 23.

⁶¹ ‘Editorial’, *Rhodesia Agricultural Journal* (December 1933), 106.

⁶² NAZ, S1246/5/30 (C), Evidence of farmers on the farming Enquiry, Evidence given by Daniel Edward, 19 December 1933.

Commission, faulted the prevailing conditions on the tobacco and land boom as well as the easy way money and credit had been obtainable.⁶³ He complained that the government was at fault in encouraging farmers to go all out on tobacco, as they should have insisted on farmers going for mixed farming before lending them huge sums of money, so that if tobacco failed they would have something to fall back on.⁶⁴ A Gweru farmer, H.B. Cummings, blamed speculation by immigrants attracted by the lure of cheaper land, the majority of whom had squatted on the land praying that it would rise in value so that they could make some profit.⁶⁵ He added that: “the next lot are those attracted by the discovery of some fortune making crop...in our case it was tobacco. Many of these had little capital and less experience. These soon vanish and they either abandon their holdings or look up to the government to assist them”.⁶⁶

The farmers contended that the land settlement policies of the Responsible Government under the Rhodesian Party, which had come into power in 1923 were much to blame for the speculative spirit destroying Rhodesian farming.⁶⁷ The inefficient farmer who had been a product of a more liberal minded land settlement and immigration policy had come to try his luck on every agricultural enterprise, rolling fortune’s dice on every crop and making farming a mere game of luck. The Farmers Association of Rusapi, one of the dominant tobacco growing areas, blamed the agricultural crisis on farming by the ignorant and begged the state to ensure that before anyone became a farmer in the colony, he had to be educated as one.⁶⁸ Huge numbers of would-be farmers had been enticed into Rhodesia from Britain as long as they had capital and government had paid little attention to their suitability with the result that (as one Sinoia farmer testified before the Committee) 75% of the tobacco farmers had no business being on the land.⁶⁹ The result of this in the tobacco sector had been the production of low

⁶³ NAZ, S1246/530(E), Statements forwarded by those unable to give evidence to the farming enquiry, Memorandum by E.C. Holmes, 14 June 1934.

⁶⁴ NAZ, S1246/530(E), Statements forwarded by those unable to give evidence to the farming enquiry, Memorandum by E.C. Holmes, 14 June 1934.

⁶⁵ NAZ, S1246/530(E), Statements forwarded by those unable to give evidence to the farming enquiry, Memorandum by H.B. Cummings, 16 June 1934.

⁶⁶ NAZ, S1246/530(E), Statements forwarded by those unable to give evidence to the farming enquiry, Memorandum by H.B. Cummings, 16 June 1934.

⁶⁷ NAZ, S1246/530(E), Statements forwarded by those unable to give evidence to the farming enquiry, Memorandum handed by Mr. H. Kneiser of Sinoia, 9 January 1934.

⁶⁸ NAZ, S1246/5/30 (C), Evidence of farmers on the Farming Enquiry, Evidence of the Rusapi Farmers Association deputation, 5 January 1934.

⁶⁹ NAZ, S1246/530(E), Statements forwarded by those unable to give evidence to the farming enquiry, Memorandum handed by Mr. H. Kneiser of Sinoia, 9 January 1934.

grade tobacco by the inefficient growers which in 1933 constituted 50% of the crop.⁷⁰ The Chief Tobacco Officer in his evidence concurred with this view and pointed out that 90% of the problems confronting tobacco production could be traced to the farm as growers had tried to economise by spending very little time on cultivation and good farming practices.⁷¹

The speculative tendencies rampant in white settler agriculture ruined more than the economy – they ruined the environment. In the USA, the destruction of southern plains’ soils and the Dust Bowl had been a result of a similar speculative and mercenary attitudes particularly the practice of viewing farming as ‘interim employment’ as land was taken up by townfolks who only wanted to farm for as long as it was profitable.⁷² Much land susceptible to depletion was taken up and because these transient speculators felt no sense of permanence or belonging they expressed little interest in conservation measures.⁷³ Theodore Saloutos noted that in the Dust Bowl of the southern plains there was a great need of checking wind erosion on “nuisance lands owned by absentee owners”.⁷⁴ In Southern Rhodesia’s tobacco farms monocultural over-cropping and soil erosion resulted in localised land degradation. There were calls for the government to discourage settlement on virgin land, or any settlement beyond the replacement of men who had left farming.⁷⁵ This was necessary because most of the tobacco speculators would abandon the land during times of low prices after a few years cropping.⁷⁶ In American historiography of the Dust Bowl such farmers are portrayed as being endemic to the south and the major reason for the environmental disaster.⁷⁷ These farmers applied dry farming techniques to the sensitive red chest nut soils of the plains destroying the regenerative processes which had kept them “intact and fertile”.⁷⁸ Leslie Hewes termed them “brief case farmers” as their livelihoods did not depend on their staying on the land, and if a crop failed or did not look

⁷⁰ NAZ, S1246/5/30(C), Evidence of farmers on the farming enquiry, Evidence of G. Rawson, tobacco farmer, 12 January 1934.

⁷¹ NAZ, S1246/530 (B), Complete evidence of witnesses: Government officials, Evidence of D.D Brown, Chief Tobacco Officer, 12 December 1933.

⁷² Studies by social scientists on the socio-economic reasons for the destructive agricultural practises that culminated in the Dust Bowl revealed that the migratory nature of the population in the Great Plains and the prevalence of tenant farming created a farming culture of slackness that violated the soils. See Harry C. McDean, ‘Social Scientists and Farm Poverty in the North American Plains, 1933-1940,’ *Great Plains Quarterly*, 3 (Winter 1983), 17-29.

⁷³ Harry C. McDean, ‘Dust Bowl Historiography’, *Great Plains Quarterly*, 6, 2 (Spring 1986), 117-126.

⁷⁴ Theodore Saloutos, ‘The New Deal and Farm Policy in the Great Plains’, *Agricultural History*, 43 (July 1979), 345-55.

⁷⁵ NAZ, S1246/5/30 (C), Evidence of farmers on the farming enquiry, Evidence of Albert William Vincent Crawley (Macheke farmer).

⁷⁶ NAZ, S1246/5/30 (C), Evidence of farmers on the farming enquiry, Evidence of Albert William Vincent Crawley (Macheke farmer).

⁷⁷ See Hewes, *The Suitcase Farming Frontier*, 35-58.

⁷⁸ McDean, ‘Dust Bowl Historiography’, 117-126.

profitable, they would simply abandon the farm and seldom returned to apply conservation techniques to the land.⁷⁹ On most tobacco farms in North Carolina during the 1920s, absentee landlordism and tenant farming created problems of soil erosion, exhaustion, dependence on artificial fertilisers and the cultivation of tobacco as a mono crop.⁸⁰ The tobacco tenant farmer was described in 1924 as a thriftless parasite as “he does no permanent work; starts a crop and leaves it half-made; destroys firewood and fruits...refuses to be interested in gardening and flowers; and has for his motto: Take no thought for the morrow”.⁸¹ The bubble in tobacco prices during World War I had destroyed the prospects of diversified farming and in 1924 the exclusive cultivation of tobacco was singled out as the greatest hindrance to farm prosperity in North Carolina counties.⁸² Soil erosion was hastened by careless cultivation by itinerant farmers who saw no value in cover crops and only wanted rapid monetary returns from one crop.⁸³

Similarly, the itinerant monocropping of tobacco was also pointed out as one of the major problems in Southern Rhodesia. In Hartley district one witness before the Commission testified that there were not more than 10% of the farmers left on the land who obtained a living from it, with most of the land on the farms developed with barns and houses but now deserted, yet six years ago such land had been occupied.⁸⁴ Both the long-term farmers and speculative farmers were single cropping tobacco and growing very little (if any) maize, and when they grew maize it was largely for their own domestic consumption. In the words of one farmer, it was not possible for the tobacco grower to do anything apart from tobacco which takes the whole of his time. He went on, “I do not think that any crop could be combined with tobacco. It has been tried and failed”.⁸⁵ These single-crop farmers were a liability to the farming industry as monoculture compounded the erosivity of the soil.⁸⁶

⁷⁹ Hewes, *The Suitcase Farming Frontier*, 38.

⁸⁰ Nannie M. Tilley, *The Bright Tobacco Industry, 1860-1929* (Chapel Hill: University of North Carolina Press, 1948), 103.

⁸¹ Tilley, *The Bright Tobacco Industry*, 103.

⁸² Tilley, *The Bright Tobacco Industry*, 103. During the 1920s most counties spent more on food imports than the entire proceeds from their tobacco crops.

⁸³ Tilley, *The Bright Tobacco Industry*, 110.

⁸⁴ NAZ, S1246/5/30(C), Evidence of farmers on the farming enquiry, Evidence of Arnold Pearson, 21 December 1933.

⁸⁵ NAZ, S1246/5/30(C), Evidence of farmers on the farming enquiry, Evidence of Daniel Thomas De Kock, Tobacco grower, Inyazura, 19 December 1933.

⁸⁶ NAZ, S1246/5/30(C), Evidence of farmers on the farming enquiry, Evidence of Mr Riley Bindura farmer, 20 December 1933.

When the question of tobacco production control as the means to curb speculation and over-production was raised by the RTA during the enquiry, the idea was vigorously rejected by the farmers who maintained that the proponents of control were simply bad farmers of little means, and no successful grower would ask for state control in any way. Winston Field, one of the most prominent tobacco growers and a man who was to play a significant role in the politics of the country as Prime minister between 1962 and 1964, asserted that he was against production control by legislation because any industry that could not expand was not worthwhile.⁸⁷ This view was echoed by a lot other farmers including Fred Cooksey of Sinoia, a tobacco and cattle farmer who pointed out that the scheme for production control would not fix production and the only way of restricting expansion would be by limiting credit to tobacco farmers.⁸⁸ The incompetent farmer could come into the country, borrow money from the bank, employ a manager and spend much of the time off the farm. It was these kinds of opportunistic farmers benefitting from the fortune crops who cared less about the land, were responsible for overproduction and had very little to lose during the turbulent times of price depressions.⁸⁹

The report of the Commission was tabled before the Southern Rhodesian Legislative Assembly. It highlighted the issues of agricultural production and conservation which had been raised by the farmers and declared that Southern Rhodesian forests had long been abused by tobacco farmers with the result that the colony was now confronted with falling timber supplies. The report observed:

Although regeneration of indigenous forests takes place easily and naturally, it is unfortunately a slow process. The process is slow to the extent that the rate of natural increment is not equal to the rate of consumption. In other words, this colony is eating into its forest capital and actual destruction apart from natural agencies is taking place. The farmer could practice conservation by less wasteful felling, by fire protection, by systematic growing and in tobacco operations by employing more economic furnaces in his barns. The farmer must realise that the indigenous forests on his farm is an asset which must be protected. If the timber is insufficient to supply his annual needs, steps must be taken to augment it by planting.⁹⁰

The report also referred to the problem of soil erosion as a national question that if ignored would turn the country into a desert.⁹¹ With an apocalyptic catastrophism, it offered as evidence that what thirty years ago was good land and grew good crops of grain was now desert land

⁸⁷ NAZ, S1246/5/30 (C), Evidence by Winston Field, 9 January 1934.

⁸⁸ NAZ, S1246/5/30 (C), Evidence by Fred Cooksey, 9 January 1934.

⁸⁹ NAZ, S1246/5/30 (C), Evidence by Albert William Vincent, Macheke farmer, 03 January 1934.

⁹⁰ The Danziger Report, 45.

⁹¹ The Danziger Report, 45.

where white farmers could no longer make a living. The report exhorted farmers to adopt contour ridging of cultivated land, reclaim washed up gullies; it also recommended the building of small storage dams on the small rivers and spruits to hold up water for irrigation of wheat, Lucerne, foodstuffs, the afforestation of catchment areas and the sinking of boreholes in dry parts of the country.⁹² The report acknowledged the slow pace of tobacco research and the need for a more proactive government sponsored program.⁹³ The first tobacco research station had been opened in 1924, the Hillside experimental station in Salisbury. The station put much attention into tobacco rotations, green manuring, use of fertilisers, variety trials and methods of planting and cropping.⁹⁴ The station provided young settlers with a two years free course training in tobacco culture and those who completed the course qualified as extension officers and managers of tobacco farms. However, because of the government fiscal stringency during the Depression the station was closed in 1931.⁹⁵ Another research unit was set up at Trelawney in 1934 on 4000 acres of land a few miles out of Salisbury.⁹⁶ In 1935, because of the recommendations of the Danziger report the Tobacco Research Act was passed to propel research in tobacco. Under the Act, the RTA and the leading tobacco buyers and manufacturers contributed financially to research funds which were matched pound to pound by the government up to £5000 pounds per annum.⁹⁷ This research infrastructure, however, remained primarily basic throughout much of the 1930s and 1940s as a result of poor funding and thus it failed to become a significant pillar of conservation in the tobacco farms until the late 1940s.

TOBACCO CULTURE AND THE ENVIRONMENT IN SOUTHERN RHODESIA, 1930-45.

The Danziger report had established that speculative production and gambling lay at the core of the tobacco crisis which spanned from 1928. Along with overproduction, another enduring long-term problem with speculative growers was the neglect of natural resources, the wilful plunder and mining of the soil as well as the wanton destruction of farmlands which were severely depleted. These problems rose particularly as a result of several wasteful cultural practices that were popularised in the tobacco farms. Virgin lands were touted in official discourse as the most suitable areas for an ideal tobacco crop. The Chief Tobacco Officer D.D.

⁹² The Danziger Report, 48.

⁹³ The Danziger Report, 47.

⁹⁴ Shepherd Masocha, 'Tobacco Research Board: A History with Special Reference to the Flue-cured Virginia Tobacco Industry, 1935-1965', BA Hon. Thesis, University of Zimbabwe, 1996, 8.

⁹⁵ Machingaidze, 'The Development of Settler Capitalist Agriculture', 160.

⁹⁶ Masocha, 'Tobacco Research Board', 11.

⁹⁷ See The Tobacco Research Act, Act no.24, 24 May 1935, Section III, Subsection II.

Brown encouraged farmers to appropriate lands requiring heavy stumping since the timber was required for fuel for curing the tobacco and land with timber also contained more humus and was better drained.⁹⁸ With vast areas of forested lands, cheap land prices, large farms measuring over 3000 hectares the practice of stumping virgin land every year came with very low costs to the farmer and the standard opinion was that this was an effective way of opening up the country for further settlement.⁹⁹

The cultural practice of stumping virgin lands every year for a new crop also became more prevalent as a result of the eel worm and nematode¹⁰⁰ problem. The nematodes problem was so pervasive that in 1920, entomologist R.W. Jack had advised growers to totally abandon lands that showed heavy infestations.¹⁰¹ In 1935, the problem was described by the Tobacco Research Board as “the gravest danger to the tobacco growing industry in Southern Rhodesia”.¹⁰² In 1938, J.C. Collins from the Branch of entomology sent out questionnaires to determine the exact nature of the problem, and the survey revealed that nematodes were ubiquitous on all soils except newly opened virgin lands.¹⁰³ Of the 153 farms which were part of the survey 118 (77.1%) were infested by eelworms, while only 35 farms were not.¹⁰⁴ On 11 of the farms 50% of the total cultivated land was infested, and in one instance, the intensity of the infection was so severe that the owner was driven out of the tobacco business owing to it being impossible to grow a remunerative crop.¹⁰⁵ As a result of this heavy infestation, large areas of land were opened up and cleared every year in the tobacco districts such that there were hundreds of abandoned farms and derelict lands, a situation which compounded the soil erosion problem of the colony.¹⁰⁶

⁹⁸ D.D. Brown, ‘Tobacco Culture’, *Rhodesia Agricultural Journal*, 29, 11 (November 1931), 1036.

⁹⁹ W.E. Haviland. ‘Tobacco Farm Organisation, Costs and Land-Use in Southern Rhodesia’, *South African Journal of Economics*, 21 (1953), 368.

¹⁰⁰ Nematodes is a tobacco parasitic disease caused by eel worms. The disease attacks roots and make them develop cysts. It is usually caused by continuous planting of tobacco in the same land and general poor soil management. The disease depletes the soil to a point where cultivation of any other crop on affected lands might be costly without rehabilitation of the soil fertility.

¹⁰¹ W.R. Jack ‘Tobacco Pests of Southern Rhodesia’, *Rhodesia Agricultural Journal*, 17.1 (February 1920), 28-33.

¹⁰² Report of the Tobacco Research Board, 1936.

¹⁰³ J.C. Collins, ‘Tobacco Eelworm’, *Rhodesia Agricultural Journal*, 35, 4 (April 1938), 264-278.

¹⁰⁴ Collins, ‘Tobacco Eelworm’, 264-278.

¹⁰⁵ Collins, ‘Tobacco Eelworm’, 264-278.

¹⁰⁶ Ian Phimister, ‘Discourse and the Discipline of Historical Context: Conservatism and Ideas about Development in Southern Rhodesia, 1930-1950’, *Journal of Southern African Studies*, 12, 2 (April 1986), 263-275.

To make matters worse before the introduction of nematicides in the 1940s the only practically effective method of control for eelworm was exploitation of virgin lands. Although incipient research beginning from the 1930s was pointing towards the use of grass in rotation with tobacco as a palliative, the scenario for most tobacco farmers was either virgin soil or abandoning production altogether since they did not have other crop or animal husbandry lines to integrate such rotations.¹⁰⁷ Although the ideal was for every tobacco farmer to be a mixed farmer, this did not work out well in practice. The best tobacco was grown on the sand veld, and maize on the heavier soils.¹⁰⁸ On the sand veld maize production was seldom a paying enterprise and when utilised as a rotation with tobacco it would deplete the soil so severely as to make the lands useless for future tobacco crops.¹⁰⁹ Thus, as a result thousands of acres of land had to be abandoned after one year cropping for want of a suitable rotation.

The crisis of overproduction and speculation also created other pest and disease problems in the tobacco farms particularly from the late 1920s as production spread into new areas. In 1932, *Leaf curl* the first insect borne disease was reported in the Matepatepa area by entomologist H. H. Storey who identified the vector as white flies.¹¹⁰ The culture of nomadic farming prevalent in tobacco farms meant that growths from the previous seasons were left unattended and as breeding points for vectors to spread. This prompted the Government to pass the Tobacco Pest Suppression Act in 1933 that made it mandatory for tobacco farmers to destroy their residual tobacco stalks by 1 August of each year.¹¹¹ In 1937, the Division of Entomology reported that *Leaf curl disease* was decreasing as a result of the enforcement of the law concerning the removal of stalks and tobacco plants from the field after harvest and white fly was only found in a few farms in Mashonaland.¹¹² In 1938, however, the most serious outbreak of another

¹⁰⁷ Tobacco experimental trials at the Hillside station in Salisbury had revealed the fundamental value of in cooperating grasses and legumes in tobacco rotations over a five-year rotation cycle. The first plantings had tobacco on virgin land and produced 366 lbs per acre yield. The second year the land was planted to Sudan grass for hay and reverted to tobacco in the third year resulting in an increased yield per acre of 418 lbs. The fourth-year green manuring with velvet beans was introduced before tobacco being planted in the fifth season and resulting in increased yields to 545 lbs per acre. See E.A. Kelsey Harvey, 'Tobacco Experimental Station, Salisbury; Report of General Crop Experiments', *Rhodesia Agricultural Journal*, 28, 9 (September 1931), 919-926.

¹⁰⁸ African Explosives and Industries Limited, 'Rhodes Grass for the Rhodesian Tobacco Grower', *Rhodesia Agricultural Journal*, 32, 10 (October 1935), 700.

¹⁰⁹ African Explosives and Industries Limited, 'Rhodes Grass for the Rhodesian Tobacco Grower', 700.

¹¹⁰ H.H. Storey, 'Leaf Curl of Tobacco in Southern Rhodesia', *Rhodesia Agricultural Journal*, 29, 3 (March 1932), 186-192.

¹¹¹ Clements and Harben, *Leaf of Gold*, 118.

¹¹² Report of the Division of Entomology, December 1937.

insect borne diseases *Rosette* caused by aphids occurred in Umvukwesi.¹¹³ The diseases caused bushy top – the dwarfing and stunting of growth of tobacco plants.¹¹⁴ The result was severe losses to most tobacco farmers.

From 1937 to 1944 there was a huge outbreak of another tobacco disease called *Alternaria* (or brown spot disease, a fungal infection affecting the lower and mature tobacco leaves) in most tobacco producing areas of Southern Rhodesia.¹¹⁵ From 1937 to 1939 heavy losses had followed in all parts of the colony resulting in the lightness of the crop.¹¹⁶ By March 1940 estimates were that the disease had caused loss amounting to 3,5 million lbs of tobacco.¹¹⁷ In 1944, the senior plant pathologist wrote to the Secretary Department of Lands and Agriculture noting that he had visited the Sinoia district to inspect the damage caused by *Alternaria leaf spot* and on the 7 farms he had visited *Alternaria leaf spot* was present and had caused severe losses on most.¹¹⁸

The plant pathologist further recorded that over the last three years on the 7 tobacco farms that he had visited 205 acres of tobacco had been lost.¹¹⁹ The disease wrecked so much havoc in the Sinoia and Karoi areas, which were chief tobacco producing areas that reservations were being expressed on the suitability of those lands as tobacco growing areas.¹²⁰ The Land Settlement Board was severely perturbed by this outbreak as constituting a threat to land settlement for tobacco farming in the area and investigated the matter.¹²¹ They ascertained from tobacco growers who had been established in the area for a long period that owing to climatic and soil conditions, Virginia tobacco grown on second and third year lands generally suffered from severe *Alternaria leaf spot*, and crops grown on new lands were relatively free from attack, and there was no reason why new settlers could not be settled in the area provided their

¹¹³ G.M. Wickens, 'A New and Serious Disease of Tobacco in Southern Rhodesia', *Rhodesia Agricultural Journal*, 35, 3 (March 1938), 181-182.

¹¹⁴ Wickens, 'A New and Serious Disease of Tobacco in Southern Rhodesia', 181-182.

¹¹⁵ NAZ, S1828/PP/20A, Tobacco *Alternaria*, 1937-44.

¹¹⁶ NAZ, S1828/PP/20A, Tobacco *Alternaria*, 1937-44.

¹¹⁷ NAZ, S1828/PP/20A, Tobacco *Alternaria*, 1937-44.

¹¹⁸ NAZ, S1828/PP/20A, Tobacco *Alternaria*, 1937-44, Senior plant pathologist to Secretary Department of Lands and Agriculture, 20 March 1944.

¹¹⁹ NAZ, S1828/PP/20A, Tobacco *Alternaria*, 1937-44, Senior plant pathologist to Secretary Department of Lands and Agriculture, 20 March 1944.

¹²⁰ NAZ, S1828/PP/20A, Tobacco *Alternaria*, 1937-44, Senior plant pathologist to Secretary Department of Lands and Agriculture, 20 March 1944.

¹²¹ NAZ, S1828/PP/20A, Tobacco *Alternaria*, 1937-44, Secretary Land Settlement Board to Secretary Department of Agriculture, 13 June 1945.

tobacco was grown on first year lands.¹²² The clearing and stumping of new lands for tobacco each year however would naturally add to the cost of production, and if this system of disease control had to be adhered to for any lengthy period, it was going to be a serious handicap for the new settlers.

The Board discussed the matter with the Senior plant pathologist and the Chairman of the Tobacco Research Board (TRB) who advised that experiments conducted on private farms had done very little to resolve the problem of *Alternaria leaf spot*.¹²³ As a resolution the Board concluded that in view of the importance of the Karoi area from the point of view of land settlement with 120 farms available, and in view of the serious losses which the growers of tobacco had suffered from *Alternaria* and other diseases demonstration work with tobacco on pest control had to be undertaken in collaboration with TRB.¹²⁴ Two experimental farms were established at Chelvern and Dundrennan farms in Chinhoyi and Karoi respectively.¹²⁵ As a result field spraying experiments were conducted on a large scale and the amount of fungicides and pesticides used annually for seed bed spraying steadily increased from around 1939.¹²⁶ The impact of the use of these tobacco pesticides on the human and natural environment will be discussed more comprehensively in chapter five. In the final analysis over production and speculative farming generated ecological conditions for the spread diseases and pests in the tobacco farms such as nematodes. The result was an even more extensive exploitation of forests as farmers sought to assuage the scourge of such diseases by moving to fresh lands and breaking new ground. Ironically this itinerant practice in settler tobacco cultivation was happening at a time when colonial officials were being overtly critical and abhorrent of the practice of “shifting cultivation” amongst African farmers describing it as primitive and wasteful to the environment.¹²⁷ In 1928, a forester Kelly Edward described the activities of shifting farmers as more destructive to forests than commercial extraction.¹²⁸ In 1934, he further pointed out that

¹²² NAZ, S1828/PP/20A, Tobacco Alternaria, 1937-44, Secretary Land Settlement Board to Secretary Department of Agriculture, 13 June 1945.

¹²³ NAZ, S1828/PP/20A, Tobacco Alternaria, 1937-44, Secretary Land Settlement Board to Secretary Department of Agriculture, 13 June 1945.

¹²⁴ NAZ, S1828/PP/20A, Tobacco Alternaria, 1937-44, Secretary Land Settlement Board to Secretary Department of Agriculture, 13 June 1945.

¹²⁵ NAZ, S1828/PP/20A, Tobacco Alternaria, 1937-44, Secretary Land Settlement Board to Secretary Department of Agriculture, 13 June 1945.

¹²⁶ NAZ, S25101/1, TRB Tobacco pest spraying scheme, J. C. F. Hopkins, ‘Field Spraying and the Control of Leaf Diseases on Tobacco: Review Report’.

¹²⁷ JoAn McGregor, ‘Woodland Resources: Ecology, Policy and Ideology: An Historical Case Study of Woodlands Use in Shurugwi Communal Area, Zimbabwe’, PhD Thesis, Loughborough University of Technology, 1991, 39.

¹²⁸ McGregor, ‘Woodland Resources: Ecology, Policy and Ideology’, 40.

shifting cultivation was damaging to the environment, inhibited regeneration of the veld and depleted soils.¹²⁹

THE TEXTURE OF STATE INTERVENTION IN SOIL CONSERVATION IN THE TOBACCO FARMS 1930-45.

Geographer J.A. Elliot in her 1989 study of soil erosion and conservation in Zimbabwe points out that before 1930, a regime of “rapacious settler farming” dominated much of the land use patterns in Southern Rhodesia where the response of the state to the problem of soil erosion was “minimal and essentially cosmetic”.¹³⁰ William Beinart reasons that conservation did not seem a priority in much of colonial southern Africa until the 1921 South African Drought Investigation Committee Report and the subsequent National Soil Erosion Council which was established in 1929 to coordinate conservation efforts throughout the Union.¹³¹ Beinart, however, maintains that during much of the late 1920s and early 1930s fluctuations in agricultural commodity prices and the power of white farmers as a political block meant that ideologies about conservation drew very little enthusiasm from the state and conditions were not conducive for conservation farming.¹³² The major preoccupation of most states in colonial Africa during much of the depression years was to alleviate the agricultural crisis in dwindling markets and commodity prices rather than land degradation.¹³³ Nevertheless, Beinart argues that in Southern Rhodesia, the state had begun taking a number of conservation initiatives from 1929 with the result that by the late 1930s one quarter of all settler land was contour ridged – a figure he reckons was significant and probably higher than had been achieved in South Africa.¹³⁴ Ian Phimister rejects Beinart’s more modest appreciation of state conservation efforts in Southern Rhodesia amongst settler farms and points out that such efforts were only energetically pursued in the late 1930s when the pressures of the Great Depression had ceded particularly beginning in 1938 with the Natural Resources Commission of Enquiry.¹³⁵ While Beinart is right in pointing to the significant progress in conservation works during this period, it is important to note that the practice of building conservation works was generally

¹²⁹ McGregor, ‘Woodland Resources: Ecology, Policy and Ideology’, 40.

¹³⁰ J.A. Elliot, ‘Soil Erosion and Conservation in Zimbabwe: Political Economy and Environment’, PhD Thesis, Loughborough University of Technology, 1989, 54.

¹³¹ William Beinart, ‘The Politics of Colonial Conservation’, *Journal of Southern African Studies*, 15, 2 (1989), 143-162.

¹³² Beinart, ‘The Politics of Colonial Conservation’, 143-162.

¹³³ Beinart, ‘The Politics of Colonial Conservation’, 143-162.

¹³⁴ Beinart, ‘The Politics of Colonial Conservation’, 143-164.

¹³⁵ Phimister, ‘Discourse and the Discipline of Historical Context’, 263-275.

uncommon amongst tobacco farmers and this was pointed out by various agricultural officials as this chapter will show. The Beinart-Phimister debate is explored in depth in chapter four. Thus, during much of the late 1930s, despite the general progress in conservation works in most settler farms, tobacco farms remained primitive, derelict and even despoiled.

The control of soil erosion and conservationism in Southern Rhodesia in general was lagging until the 1930s when global developments forced the state's hand.¹³⁶ In the USA, in 1930, the urgency of soil erosion as a national problem was so well appreciated that the Federal Government appropriated \$160 000 for investigating its causes and prevention, and the conservation of rainfall by terracing and other means.¹³⁷ In Ceylon, the government appointed a committee to study soil erosion with a view to introducing legislation conferring compulsory powers on authorities in cases where it was found to be necessary and quantitative studies on erosion control were carried out.¹³⁸ There was thus a global movement on erosion control and soil conservation whose ideas slowly proliferated to officials in Southern Rhodesia.

In 1929, only 76 miles of contour ridging had been constructed under the aegis of the Department of Agriculture to protect an estimated 2 250 acres of land.¹³⁹ By 1931, however, soil erosion came to occupy a key concern amongst most farmers such that it was put on the agenda of the Rhodesian National Farmers Union Congress and a resolution passed to urge the government to adopt a national policy.¹⁴⁰ A special committee was appointed and mandated to enquire into the factors causing soil erosion and to formulate suggestions for its prevention.¹⁴¹ District conservation boards were also appointed to look at soil conservation matters and report these issues to a Conservation Advisory Council which would advise the state on general policy.¹⁴² This nascent movement consummated in 1934 with the appointment of two soil

¹³⁶ Maravanyika's Ph.D. thesis offers a comprehensive discussion on the evolution of the soil erosion and conservation ideology in Southern Rhodesia's agrarian sector from the 1930s and links it with developments in other parts of the world particularly the United States where the Dust Bowl Storms had ruined much of the agricultural lands in the 1930s and prompted a number of state aided conservation programs during the Depression era. While Maravanyika does a whole survey of the problem in the Settler farms, this chapter focusses on the tobacco farm environments where a unique set of production circumstances prevailed such as the huge profit margins in tobacco farming which stultified a speculative element unseen in all the other crops, the practice of stumping virgin lands every year for wood fuel and new lands to grow tobacco, and the general political leverage tobacco growers had to influence state production intervention which no other group of farmers had.

¹³⁷ 'Notes from the Irrigation Branch', *Rhodesia Agricultural Journal*, (April 1930), 308.

¹³⁸ 'Notes from the Irrigation Branch', 308.

¹³⁹ Report of the Natural Resources Commission of Enquiry, 42. This report of this commission is also referred to as Report of the Commission of Enquiry into the Conservation of the Colony's Natural Resources (1939).

¹⁴⁰ Report of the Natural Resources Commission of Enquiry, 43.

¹⁴¹ Report of the Natural Resources Commission of Enquiry, 43.

¹⁴² Report of the Natural Resources Commission of Enquiry, 43.

conservation advisory councils for the two national regions of Mashonaland and Matabeleland with the task of giving legislative and policy recommendations to the Minister of Agriculture.¹⁴³ The councils did much work in collaboration with the Division of Irrigation in convincing many farmers to adopt erosion works such that by 1938, 4 355 miles of ridge terracing had been done protecting 114 190 acres of land.¹⁴⁴ The graph below shows the progress made annually in construction of anti-erosion works from 1929 to 1938. While the graph reflect cumulative positive initiatives in land conservation in the agricultural countryside, it may be misleading to conflate the figures with a similar pattern of land protection in the tobacco farms where the cultural practices of persistent annual and bi-annual clearance of virgin bushes made construction of permanent conservation works redundant. The graph shows the trends in the progress in mechanical land conservation in Southern Rhodesia between 1929 and 1938. The length of land terraces constructed annually rose from 76 miles in 1929 to 1 742 miles in 1938. At the same time, the area of land protected by terraces increased from 2,280 acres annually to 43 550 acres over the same period. Cumulatively, by 1938, 4 355 miles of terracing had been constructed – protecting 114 190 acres of land.¹⁴⁵

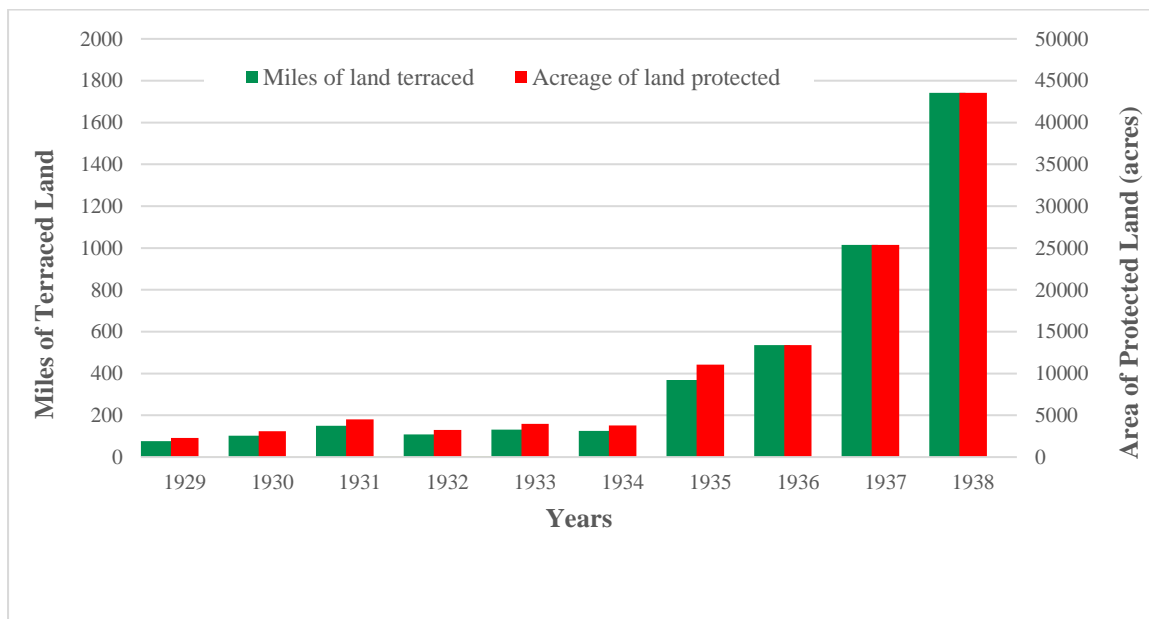


FIGURE 4 ANNUAL PROGRESS IN LAND CONSERVATION IN SOUTHERN RHODESIA, 1929-1938.¹⁴⁶

¹⁴³ Report of the Natural Resources Commission of Enquiry, 44.

¹⁴⁴ Report of the Natural Resources Commission of Enquiry, 45.

¹⁴⁵ Report of the Natural Resources Commission of Enquiry, 45.

¹⁴⁶ Natural Resources Commission of Enquiry, 1939.

The state-sponsored erosion councils taught contour ridging, soil and water conservation to settler farmers – indeed, by 1935, the Division of Irrigation noted that the propaganda conducted by the advisory councils had resulted in a considerably increased demand for advice by farmers in setting up the necessary works.¹⁴⁷ The reported added “if this pace can be maintained, or even accelerated for a few more years, there will be some hope of conserving soil on all arable land that require protection before they have been entirely ruined by soil erosion”.¹⁴⁸

Members of the Soil Erosion Propaganda Subcommittee pointed out in 1937 that the soil erosion problem was heavily linked to the rapacious farming practices of the settler tobacco growers who in the quest of maximisation of profits had adopted continuous and irresponsible cropping which was impoverishing the soil. They warned:

In Mashonaland the areas of rich virgin land which has been opened up since the days of the early settlers has been mined and the soil impoverished by continuous cropping and erosion until many of the lands have been abandoned as useless...in other cases farmers have continued to flog the dead horse by trying to extract a living from an impoverished soil owing to the reduced yield, the acreage is extended in order to obtain a larger crop, and this process continues whether prices are low or high. When prices are high, the farmer is anxious to take advantage of the opportunity for a bigger return.¹⁴⁹

This practice of flogging the dead ‘natural resources’ horse was conspicuous in the tobacco farms where in the 1930s bad cropping practices were being pointed out. In February 1935, the Rhodesia Tobacco Association sent out a circular to growers deploring the catastrophic state of affairs in the farms. The circular pointed out that there were several farms which were “entirely useless for tobacco production and will be for many years to come, with not one piece of timber worthy of that name left; with soil erosion tremendously hastened because of its barrenness and with the soil palpably exhausted, so that a reduction of acreage is not all loss for it extends the life of the farm and reduces working costs”.¹⁵⁰ The circular sent in 1937 further highlighted on this problem and appealed for a hastened state response. The circular noted that the matter of re-afforestation has become better understood as the evils due to lack

¹⁴⁷ Annual Report of the Division of Irrigation, 1935.

¹⁴⁸ Annual Report of the Division of Irrigation, 1935.

¹⁴⁹ D. Ayles and R. Hamilton Roberts, ‘Soil Erosion Technical Bulletin’, *Rhodesia Agricultural Journal*, (February 1937), 64.

¹⁵⁰ NAZ, S1827/1245/3, Tobacco cultural practices; 1931-1941, RTA circular to growers, February 1935: Regulation of production.

of it has become more pronounced and finally hit the farmers' pockets. The circular pointed out:

Miserable derelict farms, mostly reminiscent of the Sahara are only too familiar, therefore it is unnecessary to labour the point, but as a magnificent counter to soil erosion, and loss of rainfall, as an enhancement to the capital value of the farm with a promise of future income, and as an assurance of the continuity of the fuel supply, trees and more trees are essential, therefore we plead that this item will form one of the vast number of annual and day to day problems to be considered by the farmers... we believe this, or some future government will have to make these matters the subject of compulsory legislation.¹⁵¹

In 1938, as a result of these compounding problems in settler farms, the state installed the Natural Resources Commission under the Chairmanship of Water Court Judge Robert McIlwaine. The objective of the committee was to investigate how the resources of the colony were being destroyed by soil erosion, destruction of trees, grasses, other vegetation in the course of farming, mining, improper and undesirable methods of farming and land use.¹⁵² The Commission gathered evidence across a wide spectrum of settler farmers and other entrepreneurs on the land and compiled a report. This report contained several key findings that were relevant to tobacco farmers. The report began by noting the severity of the environmental crisis; "large area of the colony's land...has been impoverished by soil erosion, and some of it ruined beyond repair, beyond remedial measures in the form of green manuring and anti-erosion works".¹⁵³ It pointed out the importance of tobacco as an export crop to the colony, the value of whose export receipts for the 1936/37 season amounted to a little less than £ 1 million, creating employment for large numbers and making possible the utilisation of large areas of land unsuitable for maize farming.¹⁵⁴ However, the report deplored the restrained pace of conservationism amongst tobacco growers.¹⁵⁵ It pointed out that anti-erosion measures had made the least progress amongst tobacco growers, because of the general tendency amongst growers to abandon their lands after two successive crops as a result of the prevalence of eelworm infestation in old tobacco lands:

A certain amount of indifference as to what happens in the meantime might result in the case of a careless farmer or in one attempting to plant an excessive area, but a doubt as to the effects of contour ridging on the eelworm menace possibly accounts for a

¹⁵¹ NAZ, S1827/1245/3, Tobacco cultural practices; 1931-1941, RTA circular to growers, February 1935: Regulation of production.

¹⁵² NAZ, S2496/1080/1/5, Conservation of the colony's natural resources, Report of the Commission of Enquiry into the Conservation of the Colony's Natural Resources, 1939.

¹⁵³ Report of the Commission of Enquiry into the Conservation of the Colony's Natural Resources, 19.

¹⁵⁴ Report of the Commission of Enquiry into the Conservation of the Colony's Natural Resources, 22.

¹⁵⁵ Report of the Commission of Enquiry into the Conservation of the Colony's Natural Resources, 23.

hesitation on the part of many to spend on a project which might after all be found to be disadvantageous in another direction.¹⁵⁶

The destruction of timber resources on the tobacco farms was another key finding by the Committee. The report highlighted that through bad management overcutting of indigenous timber had taken place to such an extent that if the present rate of cutting continued, the native timber supplies would be exhausted within the next dozen years or so with the result that there would be a break in the tobacco industry “for probably 15 to 20 years until middle aged trees which are now unfit for cutting are mature”.¹⁵⁷ This situation had reached a climax in the Umvukwesi area where according to the report 30% of the tobacco growers had been compelled to acquire new farms abandoning old ones as a result of depletion of timber resources.¹⁵⁸ In 1930, an editorial in the *Rhodesia Agricultural Journal* had pointed out rather tersely that there was the necessity of afforestation in the district to make good the wastage caused by the cutting of timber by tobacco farmers, as there was a “distinctive danger of a timber famine” if extensive remedial measures were not taken.¹⁵⁹ The Conservator of forests buttressed the need for tobacco growers to adopt afforestation programs:

We are continuously getting at the tobacco farmer to look upon the product of fuel as a necessary part of ordinary tobacco operations. After all, if he has not got the fuel, he cannot cure his tobacco, and if he has got not the sufficient indigenous timber to give him his annual requirements, then afforestation with fast growing trees is needed. The situation for the tobacco grower is much simpler than for the miner because it is a fact that the tobacco growing areas can grow trees.¹⁶⁰

Reforestation with eucalyptus trees was encouraged as these trees were fast growing and could put an increment of fuel at the rate of 2 cords per acre/annum and produce fuel in as little as five years. If a seven-year eucalyptus rotation were to be adapted, an acre would produce 14 cords sufficient for the curing of 7 000 lbs of tobacco.¹⁶¹ The Conservator of forest pointed that “if we use only eucalyptus timber for the curing of the colony’s tobacco, it would mean we would need to plant 3 500 acres a year for seven years to produce a total reserve of 25 000 acres and that would cure the present crop.”¹⁶²

¹⁵⁶ Report of the Commission of Enquiry into the Conservation of the Colony’s Natural Resources, 25.

¹⁵⁷ Report of the Commission of Enquiry into the Conservation of the Colony’s Natural Resources, 23.

¹⁵⁸ Report of the Commission of Enquiry into the Conservation of the Colony’s Natural Resources, 24.

¹⁵⁹ ‘The Umvukwesi Farmers and Tobacco Growers Association’, *Rhodesian Agricultural Journal*, 27,8 (August 1930), 793.

¹⁶⁰ Report of the Commission of Enquiry into the Conservation of the Colony’s Natural Resources, 25.

¹⁶¹ Report of the Commission of Enquiry into the Conservation of the Colony’s Natural Resources, 26.

¹⁶² Report of the Commission of Enquiry into the Conservation of the Colony’s Natural Resources, 26.

In 1942, the Natural Resources Board (NRB) which had been set up in 1941 to exercise general supervision over the colony's natural resources instituted a farming enquiry into the conditions of agriculture in the colony which were creating food shortages.¹⁶³ The speculative tendency amongst tobacco grower was once again pointed out as one of the most disastrous problems facing the industry's uncertain future and contributing much to land degradation as most tobacco growers were more interested in making a quick profit out of the land and abandon it. Captain A.D. Collins of Tsungwesi Farm in Waterfalls more compellingly revealed this predatory brand of rapacious farming where land was treated with a high-handed and peremptory careless attitude and exploited for ruthless private aggrandisement by mercenary farmers:

At Inyazura you will see an outstanding example of what I call "the get rich quick tobacco grower". You will see it from the Claires Estate to the Inyazura river. Every one of these farmers have acquired more land and the same thing is happening there. There is no doubt whatsoever that it has to be stopped otherwise this country has only another 5 or 10 years of tobacco life in front of it...the whole of the Claire Estates has been taken up now.¹⁶⁴

He added that the reason for this was that at the back of the farmers' mind was the thought that the tobacco market may collapse any year, and "therefore the policy is to get rich quick".¹⁶⁵ Collins considered it necessary in view of this for the state to intervene by giving tobacco growing licences to farmers on the basis of conformity to regulations enforcing them to do proportional conservation works, soil building with rotational crops, contour ridging, re-forestation, and permanent pastures for every 100 acres of tobacco.¹⁶⁶

In the Odzi district a similar pattern was also developing where tobacco farmers were fast encroaching into bigger areas with the majority of them "merely exploiting the land", and if they had two or three good years for tobacco, they had no further use for that land.¹⁶⁷ In the Umvukwesi district, mass production of tobacco and the wastage of land had created farmers in the area who denuded the land, timber and then just left the ground to be washed out.¹⁶⁸ The appalling situation for the tobacco farmlands was more comprehensively summarised by one farmer Jacobus Petrus De Kock:

¹⁶³ The Enquiry was known as the Natural Resources Board Farming Enquiry.

¹⁶⁴ NAZ, S987/1, Oral evidence; Farming Enquiry, Evidence by Captain A.D. Collins, 25 July 1942.

¹⁶⁵ NAZ, S987/1, Oral evidence; Farming Enquiry, Evidence by Captain A.D. Collins, 25 July 1942.

¹⁶⁶ NAZ, S987/1, Oral evidence; Farming Enquiry, Evidence by Captain A.D. Collins, 25 July 1942.

¹⁶⁷ NAZ, S987/1, Oral evidence; Farming Enquiry, Evidence by J.T. Mungle, 24 July 1942.

¹⁶⁸ NAZ, S987/1, Oral evidence; Farming Enquiry, Evidence of Mr George Grey, 26 June 1942.

Speaking not from the tobacco market point of view, but from the tobacco soil point of view...I am afraid tobacco growers are mining their land. I have been in the district for 23 years and I have seen what happened here. I would prevent any tobacco grower if I had the power from planting unless the soil was contour ridged..... We grow tobacco mostly on the ridges, the crop is reaped, and the tobacco stalks are pulled out, but land is left unploughed for years afterwards and that encourages erosion. I have preached that to tobacco growers for many years, but it does not carry much weight with them. They just want to make as much money as possible with no eye to the future.¹⁶⁹

For their part, the tobacco farmers felt that most of the problems associated with land degradation and the lack of a more cogent conservationist thrust were a result of low prices and the absence of a satisfactory rotation with tobacco which could make second year lands useful. Under such circumstances the value of a potential tobacco proposition was determined by the amount of virgin land there could be on the property.¹⁷⁰ Farmers were also unable to afford to rehabilitate their land because they lacked capital, labour and implements, and they lacked the experience to carry out the planned programs of storm draining.¹⁷¹ The farmers wanted steady prices for their products, as the recurrent booms and slumps in the market hindered investment in soil conservation and some of them felt that any further legislation on natural resource use would involve the farmer in additional expense and therefore was not desirable.¹⁷²

On the other hand, however, despite the general condition of despair and ruination that characterised the tobacco farm environment, several positive developments had begun taking shape. In 1942, when the Chairman of the Natural Resources Board enquired while addressing farmers in Headlands what steps tobacco farmers were taking to look after their lands, he was informed that some of the farmers had begun green crops and more and more were contour ridging their lands.¹⁷³ A Salisbury farmer also testified that:

I think however that of late a change has been apparent, and there are signs of a grower taking pride in his lands, purchasing cattle, growing maize sufficient for his requirements, developing side-lines, and this is all to the good, and shows a healthy and welcome spirit. Mixed farming should be practised by all farmers. It is unsafe to depend on one crop or line. Cattle should be an integral part of the farm and it is pleasing to

¹⁶⁹ NAZ, S987/1, Oral evidence; Farming Enquiry, Evidence by Jacobus Petrus De Kock, 16 July 1942.

¹⁷⁰ NAZ, S987/1, Oral evidence; Farming Enquiry, Evidence by Mr Harland (Rusapi Farmers Association).

¹⁷¹ NAZ, S987/1, Oral evidence; Farming Enquiry, Evidence by Mr D.A Wilson (Agricultural Advisor and Inspector of farms Land Bank), 26 June 1942.

¹⁷² In his evidence to the Commission of Enquiry, one farmer Mr Worsely pointed out that erosion was a world-wide problem and there was nothing uniquely peculiar about it to deserve legislation which would bring additional expenses to farmers who were already hard pressed by low commodity prices and uncertain markets. He pointed out that the legislation being proposed to Parliament was parochial and was trying to deal with a world-wide evil.

¹⁷³ NAZ, S987/1, Oral evidence; Farming Enquiry, Evidence given by Headlands farmers, 24 July 1942.

note that the farmer is cattle minded. This will help considerably in the appeal for better management of the soil.¹⁷⁴

To give momentum to this conservation thrust, the Natural Resources Act promulgated in 1941 provided for the establishment of the Intensive Conservation Areas (ICAs)¹⁷⁵ in white settler farming communities to engage in collective control of soil erosion and building of mechanical works.¹⁷⁶ In 1944 the first ICA was created in the tobacco producing area of Inyazura.¹⁷⁷ The proclamation for the ICAs included a number of set conservation objectives which included to avoid cultivating any land less than 30 metres from the high flood level of any river, controlled burning of grass, avoiding unnecessary destruction of indigenous trees, and where wood fuel was used to cure tobacco to ensure adequate supplies by adopting alternatives.¹⁷⁸ These alternatives included each year an acreage of plantations of a type approved by the Conservator of forests equal to and not less than half of the average acreage of flue-cured tobacco until such a time as the total acreage of approved plantations was equal to two thirds average annual acreage of the flue cured crop.¹⁷⁹ Much work of the ICAs on conservation was more visible and progressive from around 1948 when the Department of Conservation and Extension (Conex) was set up and will be discussed in the next chapter. Thus, the texture of state intervention in soil erosion and conservation in the settler tobacco farms significantly shifted from ad hoc ad disparate initiatives in 1930 and morphed into systematic policy initiatives to address the problems of land degradation by 1945. However, these measures had significantly limited impact in changing the cultural attitudes of tobacco producers where over production and speculation remained rife despite the attempts by state to impose production controls. The next section examines how the state invoked production control to stem the tide of “wanton growers”.

¹⁷⁴ NAZ, S987/1, Oral evidence; Farming Enquiry, Memorandum by G.N. Fleming (Salisbury Farmer), 1 July 1942.

¹⁷⁵ Intensive Conservation Areas (ICAs) were modelled along the American conservation districts which were introduced in 1937 by the Standard State Soil Conservation District Law as a brainchild of M.L. Wilson, Undersecretary for Agriculture. The conservation districts were local units organised around local capacities to meet the needs of soil and water conservation with the technical and financial assistance of the Federal government. The first conservation district was established on 4 August 1937, the Brown Soil Creek Conservation District in the tobacco producing state of North Carolina.

¹⁷⁶ NAZ, S989, The Natural Resources Act, 1941.

¹⁷⁷ The Natural Resources Board, ‘25 Years of Progress in Conservation in Rhodesia’, Salisbury, 1966.

¹⁷⁸ NAZ, S2532/1080/1/1, Darwendale ICA, Petition for the declaration of an ICA by Darwendale farmers, 11 December 1945.

NAZ, S2532/1080/1/1, Darwendale ICA, Petition for the declaration of an ICA by Darwendale farmers, 11 December 1945.

¹⁷⁹ NAZ, S2532/1080/1/1, Darwendale ICA, Petition for the declaration of an ICA by Darwendale farmers, 11 December 1945.

STEMMING THE TIDE WITH BROKEN VESSELS? STATE INTERVENTION IN TOBACCO PRODUCTION CONTROL, 1935-1945

The problem of tobacco overproduction had reared its ugly head again in 1934 when production totalled 26 792 092 lbs – provoking *déjà vu* in farmers, reminding them of the disastrous record crop of 1928.¹⁸⁰ Their fears of another slump drove the state's imperative for production control during the 1935-36 season. The RTA observed that the main cause of the Depression enveloping the industry and amounting almost to actual insolvency was the fact that growers were producing more tobacco than the market could handle.¹⁸¹ The Association maintained that the aim was to place the industry on a sound economic basis, eliminate the fear of general insolvency on the one hand and the gambling element on the other hand:¹⁸²

The only person who would wish or could afford to take the gamble of producing more than his share would be the speculator, the chancer or the man of big money, and what might be a big gamble to him would be a very definite harm to the bona fide settled tobacco grower, and it is the economic stability of this type of producer which it is our very special business to safeguard.¹⁸³

The RTA considered it necessary to reconstruct the industry and proposed for legislation dealing with production control, which would entail with holding from the market all increases of production by growers over their 1933/34 crops. It also proposed the establishment of an Appeal's Board where hardships would clearly be sustained by individuals by taking as a measure their production during the 1933/34 season.¹⁸⁴ The Tobacco Quota Commission of Enquiry into applications from tobacco growers for increased production in the 1934/35 season was appointed by the Ministry of Agriculture under the Chairmanship of Mr William Brown.¹⁸⁵ The RTA placed before the Committee principles to be adopted regarding the quota. The Quota Commission received applications from growers, allocated quotas to every grower and made recommendations to the Ministry of agriculture of the viable national quota capable of meeting facilities and market requirements.¹⁸⁶

¹⁸⁰ Clements and Harben, *Leaf of Gold*, 115.

¹⁸¹ NAZ, S1194/1217, Tobacco: Restriction of output, 1934-1935, Consideration for the production and disposal of the 1934/35 tobacco crop, Department of the Prime minister, 19 May 1934.

¹⁸² NAZ, S1194/1217, Tobacco: Restriction of output, 1934-1935, Consideration for the production and disposal of the 1934/35 tobacco crop, Department of the Prime minister, 19 May 1934.

¹⁸³ NAZ, S1194/1217, Tobacco: Restriction of output, 1934-1935, Consideration for the production and disposal of the 1934/35 tobacco crop, Department of the Prime minister, 19 May 1934.

¹⁸⁴ NAZ, S1194/1217, Tobacco: Restriction of output, 1934-1935, RTA control of production, 1934/1935.

¹⁸⁵ 'The Tobacco Quota Commission of Enquiry', *Rhodesian Agricultural Journal*, 32,2, (February 1935), 78.

¹⁸⁶ 'The Tobacco Quota Commission of Enquiry', 78.

The principle of production control that the state and the RTA were pushing through had been adopted in the USA to control overproduction and had been effective in allaying some of the production and marketing fears brought forth by the Great Depression. In 1930, Governor of the tobacco-growing state of North Carolina, Max Gardiner had launched a “Live at Home” propaganda campaign to exhort tobacco and cotton farmers to diversify into food crops and utilise agricultural resources more efficiently through cash crop acreage reductions.¹⁸⁷ In 1932, the New Deal looked at the problems of tobacco cultivators such as overproduction and marketing so that farmers would not suffer from price depressions that accompanied the Great Depression. The Agricultural Adjustment Act (AAA) was passed on 12 May 1933 and set up the requisite institutions and machinery to provide farmers and tobacco growers a route out of their economic misery.¹⁸⁸ There were production controls through the Voluntary Domestic Allotment Plan that established a quota system in which farmers could only cultivate tobacco on a portion of their lands.¹⁸⁹ In return for acreage and output reductions tobacco growers were offered guaranteed prices, as well as benefit support which resulted in improved prices.¹⁹⁰ Those who did not sign up and produced more than their allowance had their crops taxed at between 25 to 33.3%, and a sum of \$ 28 million was offered growers for reduced acreages.¹⁹¹

The acreages taken out of tobacco had to be left idle or cultivated with food crops.¹⁹² The AAA became unconstitutional in 1936, but its key points were simply resurrected a month later under the Soil Conservation and Domestic Allotment Act which re-established the quota system under the regime of conservation.¹⁹³ The Soil Conservation and Domestic Allotment Act added to existing soil conservation legislation incentives for farmers to plant soil building crops and taking out soil depleting crops out of production.¹⁹⁴ Tobacco was one such crop and production control was to be maintained through soil conservation. The New Deal encouraged better

¹⁸⁷ The “Live at Home” Campaign was necessitated by North Carolina heavy dependence on tobacco which was grown on more than a third of the state’s 280,000 farms. There was thus a wasteful dependence on tobacco characterised by a relative absence of livestock and poultry in the state farms. The state had to rely heavily on other states for food and spent \$250 million each year outside the state on foodstuffs. See Badger, *Prosperity Road*, 26.

¹⁸⁸ Katie Algeo, ‘The Rise of Tobacco as a Southern Appalachian Staple: Madison County, North Carolina’, *South-eastern Geographer*, 37,1 (1997), 46-60.

¹⁸⁹ Jordan Goodman, *Tobacco in History: The Culture of Dependence* (London: Routledge, 1993), 197.

¹⁹⁰ Goodman, *Tobacco in History*, 197.

¹⁹¹ NAZ, S1827/1245/3, Tobacco production control: 1935, RTA circular to growers, February 1935: Regulation of production.

¹⁹² Badger, *Prosperity Road*, 74.

¹⁹³ Goodman, *Tobacco in History*, 197.

¹⁹⁴ Badger, *Prosperity Road*, 123.

farming methods and attention to soil conservation. Tobacco cultivated lands were protected by strip cropping across with bands of grass, Lespedeza (a resilient legume that makes protein-rich hay), sorghum and other dense crops planted along the contours.¹⁹⁵ As a result of these measures, Lespedeza – an insignificant crop in 1929 – had the second largest acreage in the state by 1941.¹⁹⁶ Known as “poor man’s Lucerne” (now rebranded “prosperity Lucerne”) it was able to thrive on the worst soils and offered forage to livestock. The number of milk cows, beef cattle, sows and poultry increased significantly, and corn acreages expanded by 2% over the decade.¹⁹⁷ Thus, the soil conservation programs under the New Deal and the AAA created new agricultural landscapes in which were planted the seeds of a reconfigured political geography that “helped to tie the farming communities more closely to the Federal government”.¹⁹⁸

Therefore, production control in the USA under the AAA and subsidiary legislations had the net effect of reshaping the agricultural countryside and etching more indelibly the state’s imprint in shaping soil and land conservation programs that were part of these policy interventions. To this extent, production control was an effective state tool used for conservation during much of the 1930s. Production control also led to significant improvement of farm incomes as in 1933, the average price paid to tobacco growers stood at 15.3 cents up one third from the previous year’s price and double the 1931 figures.¹⁹⁹ In North Carolina, the 1933 crop brought in \$ 112 million, compared to just over \$ 56 million in 1932.²⁰⁰ Intensive use of land was also greatly stimulated as a result of acreage allotments as the ideal of the small farm was upheld; the average tobacco farm size in North Carolina for instance fell from 5.8 acres to 4 acres between 1930 and 1950.²⁰¹

However, unlike in the USA, this extended top-down conservation paradigm tying state sponsored tobacco production control and conservation programs was weaker in Southern Rhodesia. The controls failed to institute ecological changes to the agricultural landscape

¹⁹⁵ Extract of H.H. Bennet (Director USA Soil Erosion Service), ‘The Relation of Grass Cover to Soil Erosion Control’, *Journal of Agronomy*, (March 1935), cited in *Rhodesia Agricultural Journal*, 32,6 (June 1935), 385-394.

¹⁹⁶ Badger, *Prosperity Road*, 207.

¹⁹⁷ Badger, *Prosperity Road*, 207.

¹⁹⁸ Neil Maher, ‘Crazy Quilt Farming on Round Lands: The Great Plains: The Soil Conservation Scheme and the Politics of Landscape’, *Western Historical Quarterly*, 31,3 (2000), 319-339.

¹⁹⁹ Badger, *Prosperity Road*, 65.

²⁰⁰ Badger, *Prosperity Road*, 65.

²⁰¹ G.P. Green, ‘The Political Economy of Flue-cured Tobacco Production’, *Rural Sociology*, 52, (1987), 221-41.

between 1935 and 1945 as farm sizes remained large, acreages expanded, production increased sharply putting more pressure on the land and natural resources. The RTA had warned growers in 1935 that if their crop exceeded 80% of the 1933/34 crop, it would be far in excess of market requirements for the Union and the UK.²⁰² In spite of this warning, the 1934/35 crop was in excess leaving an in disposable surplus and forcing the state to pass the Tobacco Reserve Pool Act which took off 20% of every growers' crop from the Union and British markets and placed it in a reserve pool to be disposed of elsewhere at cheaper prices.²⁰³ On their part, the growers were virulently opposed to government control of production through legislative means. A Mr J.B. Parham of Romsley Estates pointed out that the agitation for control was being peddled by men who either did not grow tobacco, at all or who did not produce the right article.²⁰⁴ In his view, "the expert tobacco grower does not ask for assistance, all he wants is to be left alone." He added that there would not be any surplus of the leaf which the market wanted as the farmers could always sell a good thing".²⁰⁵ Farmers felt that it was fundamentally uneconomic to socialise production by legislation. They argued that the proposed legislation would not have any effect on the fluctuations of trade, and for a young country like Rhodesia it was important to take advantage of the improving global conditions.²⁰⁶

Despite this, in 1936, the Tobacco Market Stabilisation Act established the Tobacco Marketing Board to register growers, organise the compulsory sale of all tobacco through licensed auction floors and buyers, and to advise the government on the requisite production quotas.²⁰⁷ The Act stipulated that should a grower grow an amount of tobacco in excess of what was allowed on his grower's certificate, the proceeds of the sale would be confiscated. The feeling was that gamblers and nomadic tobacco growers who had no strong attachment to Southern Rhodesia had been responsible for much of the reckless speculation, overproduction and land degradation, a point that was stressed poignantly by Mr K. Killef to the Prime-minister Godfrey Huggins in 1936:

If he (the grower) has had enough faith in Rhodesia to buy some of its land, he is obviously of greater value than a man who grows from lease to lease, taking what he can of the soil and using up the timber reserves. Such a man may be of value to himself,

²⁰² NAZ, S1827/1245/3, RTA circular to growers, February 1935: RTA warning to growers September 1935.

²⁰³ Clements and Harben, *Leaf of Gold*, 115.

²⁰⁴ NAZ, S1194/1217, Tobacco: Restrictions of output legislation, 1934-35, Papers submitted for perusal by Mr Vernall to the Department of Agriculture, 8 September 1934.

²⁰⁵ NAZ, S1194/1217, Tobacco: Restrictions of output legislation, 1934-35, Papers submitted for perusal by Mr Vernall to the Department of Agriculture, 8 September 1934.

²⁰⁶ NAZ, S1194/1217, Tobacco: Restrictions of output legislation, 1934-35, Papers submitted for perusal by Mr Vernall to the Department of Agriculture, 8 September 1934.

²⁰⁷ Murray, *The Governmental Systems in Southern Rhodesia*, 85.

but his value to the industry or colony is very questionable and is not to be compared to the man who has planted his roots in this colony, who farms his land well and replaces his timber because the farm is his own.²⁰⁸

The RTA on its part encouraged “progressive farmers” by reminding them that the quota system allowed them the opportunity to try a rotation of crops, and rest some of their tobacco lands for two years.²⁰⁹ The encouragement was indeed relevant to conservation on the tobacco farms as crop rotations would go a long way in bringing to a halt the further exploitation of land and natural resources by limiting the amount of land under tobacco and restricting the encroachment of tobacco farms further into the land and forestry resources. Unfortunately, the war boom in tobacco prices beginning in 1939 spurred another wave of large-scale production so much that production control was drowned by the incentive of huge prices payable for tobacco.

By 1939, when World War Two broke out, tobacco prices improved significantly to 10.11d. per lb as British buyers began looking at Southern Rhodesia as a reliable source of tobacco supplies.²¹⁰ Vast acres of unutilised tobacco virgin soils and abandoned tobacco barns from the boom of the 1920s created a conducive environment for new growers to enter the industry.²¹¹ In 1940, a record crop of 34 500 000 lbs was produced in the colony with prices rising by 3d.²¹² These somewhat improved conditions spurred the entry of many growers into the industry which created fertiliser shortages.²¹³ During the 1940/41 season total sales of fertiliser amounted to 18 383 tonnes, of which about 50% were tobacco fertilisers.²¹⁴ The fertiliser crisis had grown so severely that the state was forced to intervene in 1940 through the proclamation of The Fertiliser Prices Order which controlled the fertiliser market, fixed prices and made allocations to growers on the basis of special permits obtainable from the Department of Agriculture.²¹⁵ Despite this, most tobacco farmers ordered more fertilisers than they could use creating a case of hoarding and speculation.²¹⁶

²⁰⁸ NAZ, S482/114/39, Tobacco, 1936-1939, K Killef to Prime Minister, 27 January 1936.

²⁰⁹ NAZ, S482/114/39, Tobacco, 1936-1939, Production quotas: 1936.

²¹⁰ Clements and Harben, *Leaf of Gold*, 128.

²¹¹ Clement and Harben, *Leaf of Gold*, 128.

²¹² Clement and Harben *Leaf of Gold*, 128.

²¹³ NAZ, S1215/1710/1, Fertilisers General, Chief Chemist to Controller of Supplies, 26 March 1941.

²¹⁴ NAZ, S1215/1710/1, Fertilisers General, Chief Chemist to Controller of Supplies, 26 March 1941.

²¹⁵ NAZ, S1215/1710, Fertilisers General, Chief Chemist to Controller of Supplies, 26 March 1941.

²¹⁶ NAZ, S1215/1710, Fertilisers General, Cartwright to Secretary Department of Agriculture, 22 June 1940. Cartwright complained that there was one farmer who had bought 30 tonnes of fertiliser for 300 acres of tobacco but only grew 200 acres.

By 1942, the state was also facing an acute food deficit as a result of fertiliser and labour shortages caused by excessive production of tobacco. Food production committees were set up to allocate resources towards food production.²¹⁷ In its interim report for the period ending May 1942, the Food Production Committee noted the need for severe restrictions imposed on the use of artificial fertilisers for the tobacco crop during the 1942/43 season.²¹⁸ The Secretary for Agriculture recommended that no tobacco grower should be supplied with more than 75% or 80% of fertiliser sold to that grower during 1941/42.²¹⁹ This was to ensure that enough fertiliser could be available for food production as, in his words, “tobacco farmers may not eat all the visible cake in one season.”²²⁰

The growing of tobacco on crown land²²¹ was prohibited in 1942, and all crown land lease holders were compelled to produce food crops and livestock only to meet the growing demand for food during the war years.²²² The state also came in with a number of initiatives to curtail production of any tobacco grown at the expense of food production. Government Notice Number 207 of 1941 made agriculture a state-controlled industry and legislated that no person who had not grown Virginia tobacco during the 1939/40 season could grow it after June 1943 without the consent of the Ministry of lands.²²³ The legislation also stipulated that old growers were not supposed to increase their 1939/40 acreages without seeking similar consent from the Tobacco Advisory Committee. During the latter part of 1941, a committee of 3 members of the Council of the RTA with the Secretary Department of Lands had acted as consultative committee to which the control of industrial manpower would refer advice to the entry of new growers into the tobacco industry.²²⁴ From 1942 to 1946, a number of measures were put in place to curtail production that included ensuring that increased production was only permissible if it did not conflict with the colony’s need to recruit fighters or the production of

²¹⁷ NAZ, S482/20/42, Food Production Committees, FPC Meeting, 23 March 1942.

²¹⁸ NAZ, S955/22, Food production local committees, FPC interim Report for period ending 5 May 1942.

²¹⁹ NAZ, S482/32/42, Control of production, tobacco, 1942-46, Secretary Department of Agriculture to the Parliamentary Secretary to the Prime minister, 26 March 1942.

²²⁰ NAZ, S482/32/42, Control of production, tobacco, 1942-46, Secretary Department of Agriculture to the Parliamentary Secretary to the Prime minister, 26 March 1942.

²²¹ Crown lands were areas with unalienated land which could be leased to white settlers for farming. They were a product of the Land Apportionment Act of 1930.

²²² NAZ, S955/22, Food Production local committees, Crownlands: Use of unoccupied crown land for food production, 20 April 1942.

²²³ NAZ, S482/32/42, Control of production; tobacco, 1942-46, Parliamentary Secretary to Secretary Department of Agriculture: Control of entry into the agricultural industry to new settlers and particularly persons desiring to enter flue cured tobacco production, 5 March 1942.

²²⁴ NAZ, S482/32/42, Control of production; tobacco, 1942-46, Parliamentary Secretary to Secretary to the Prime minister, 23 March 1942.

food crops, and prohibiting the opening up of new farming areas for tobacco production without the consent of the consultative committee.²²⁵

Despite these measures, a huge tide of tobacco farmers joined the industry during the war prompting a Mr Geoffrey Syfret of Inyazura district to complain to the Minister of Lands and Agriculture in May 1942 that he was alarmed by the number of ‘Dutchmen’ [Afrikaners] from South Africa who were entering the district and obtaining permits to grow tobacco.²²⁶ War production of flue-cured Virginia tobacco soared significantly from 35 000 000 lbs in 1939 to 47 500 000 lbs in 1944.²²⁷ Turkish tobacco production also grew significantly between 1943 and 1945. In 1943, there were 273 growers producing 250 000 lbs, in 1945, the number increased to 1000 registered growers with a production of 5 000 000 lbs.²²⁸ The tobacco production control legislation and the food production drive which the state had put in place from 1936 thus failed to stem the tide of rapacious production and land degradation. Phimister argues that most of these intervention measures during the war failed because there were emergency measures and could not compensate for the long-term comprehensive planning of ensuring national food self-sufficiency and land conservation.²²⁹

Subsequently, the ecological pattern in the tobacco landscape remained largely unaltered. A vast number of speculators and gamblers were still on the land eliciting the view from one observer that, “there are too many tobacco growers who boast openly that it is their intention to make a killing while prices are high and retire to Great Britain after the war when prices declined.”²³⁰ In a letter to the editor in 1943, a Marandellas farmer complained about the exploitation of thousands of acres of heavily timbered veld by many tobacco farmers:

I have the impression perhaps erroneously that because the tobacco industry has been prosperous for some years, the Natural Resources Board may not have examined the destruction of the country’s natural resources by the tobacco industry as closely as by the general farmer. Yet the damage is appalling and a tour of some tobacco producing

²²⁵ NAZ, S482/32/42, Control of production; tobacco, 1942-46, Parliamentary Secretary to Secretary to the Prime minister, 23 March 1942.

²²⁶ NAZ, S482/32/42, Control of tobacco production 1942-1946, Geoffrey Syfret to Minister of Lands and Agriculture, 8 May 1942.

²²⁷ Rubert, *A Most Promising Weed*, 7.

²²⁸ NAZ, S482/108/39, Turkish Tobacco 1944-1948, Minutes of the special meeting of the Turkish Tobacco Cooperative Company of Southern Rhodesia, 4 October 1945.

²²⁹ Although concurring with Phimister’s argument that much of the state interventions during the war on conservation and food production had a very negligible effect on transforming the agrarian landscape, this study is at variance with his reflections that the pattern continued into the late 1940s and 1950s. I argue in the next chapter that the post-war tobacco boom and the rising prices of land infused the dynamic of capital and intensive cultivation that transformed the tobacco farms and changed much of the Southern Rhodesian countryside.

²³⁰ Letter to the Editor by Huntley Wilkinson (Marandellas farmer), *Vuka*, December 1943.

areas will show large areas of played out sand veld, timber less, lacking any form of soil conservation and simply abandoned because the owner has moved to new ground.²³¹

He advocated for some form of control by legislation preventing any farmer from taking out more than 50 % of his capital out of the country unless he could satisfy the government that he had not exploited the land, as he had witnessed in despair “the destruction of what was once first class tobacco lands within 30 years”.²³²

Another major problem was the traditional vertical ridge ploughing for tobacco which was severely catalysing the erosion problem. The straight and vertical tobacco rows which were generally adopted by farmers departed from the curve of the contour with the ridge not having the necessary ability to hold and pass on water. This resulted in a concentration of silt laden run off into the contour ridges, choking and breaking them. The Conservation officer, Irrigation Department, noted of this practice:

Recently I visited a farm where this was causing a fantastic amount of erosion, though the land was contour ridged. To have flattened the slope of the tobacco rows to a safe gradient would have been impossible, owing to the irregularity of the ground caused by old erosion and in despair I remarked to the farmer, ‘if you don’t get rid of your ridging ploughs, you will get rid of your farm.’²³³

He went on: “I have heard a variety of explanations given to explain the custom of ridging up rows of tobacco, but I am beginning to think no advantage gained by listing up the plants is sufficiently great to warrant the damage caused by this process”.²³⁴ Most tobacco lands were badly ploughed down by ridging ploughs which left behind deep furrows that made most fields vulnerable to an extended amount of gully erosion. In the USA, beginning from the early 1930s the Department of Soil Conservation Service had replaced straight contour rows with contoured crop rows in what was termed “crazy quilt farming” or “contour farming”.²³⁵ This slowed water run-off and decreased both the severity of washing away topsoil and the severity of gullying.²³⁶

²³¹ Letter to the Editor by Huntley Wilkinson (Marandellas farmer), *Vuka*, December 1943.

²³² Letter to the Editor by Huntley Wilkinson (Marandellas farmer), *Vuka*, December 1943.

²³³ NAZ, S1828/PP60, Conservation Officer to Irrigation Department, Ridging ploughs for erosion, 19 March 1945.

²³⁴ NAZ, S1828/PP60, Conservation Officer to Irrigation Department, Ridging ploughs for erosion, 19 March 1945.

²³⁵ Maher, ‘Crazy Quilt Farming on Round Lands’, 319-339.

²³⁶ The growing of tobacco on ridges constructed across the contour continued to be standard practice in Southern Rhodesia until the Department of Conservation and Extension (Conex) which had been set up in 1948 issued a technical bulletin in 1953 on erosion control in tobacco lands which encouraged farmers to adopt contour farming and construct tobacco ridges along the contours to minimise surface runoff and sheet erosion.

Thus, the production control and state regulation of tobacco in Southern Rhodesia from 1935 failed to transform farmers' attitudes to conservation of land and natural resources. The instinct to gamble and profiteer from the unstably fickle tobacco prices while exploiting the finite land resources remained. The tobacco planter unsure of his future and haunted by the memories of the 1928 to 1930 crash always looked at state conservation prescriptions with immense distaste, all he had to do was plant as much tobacco as he would and get as much money as he could before the bubble could burst.

CONCLUSION

This chapter has engaged with the historiographical tradition of the Dust Bowl and Great Depression and used it as a lens into understanding ecological change in colonial agrarian systems driven by the primary desire to accumulate. It has argued that there are parallels between the cyclical economic and ecological crisis of the Great Plains in the USA and the tobacco crisis in Southern Rhodesia as both were linked to wasteful agriculture, speculation and the attendant woes of over production. In doing so this chapter has not only explained how the Dust Bowl and the Great Depression influenced settler agrarian communities but extended it to show that Dust Bowl systems were endemic to colonial agrarian practices in Africa particularly within cash crop production. Unlike other histories of colonial settler agriculture in Southern Rhodesia that viewed the Great Depression as merely an economic crisis, which required state marketing and technical production assistance, this chapter has illuminated how the economics of production were shaped by environmental factors that in turn were regulated by various tobacco cultural practices such as deforestation, mono-cropping, itinerant farming and neglect of rotation of crops, green manuring and mixed farming. This chapter has reflected on the American historiography that link capitalist agricultural systems, overproduction, exploitation of the resources of nature and economic recessions. The chapter thus contributes to the historiography of conservation in Southern Rhodesia by showing the extended nature of the problems of environmental degradation in white settler farms and how this was linked to global production patterns and discourses. Settler tobacco farming in Southern Rhodesia between 1930 and 1945 induced several environmental problems that the state's new conservation and interventionist thrust beginning from the 1930s could not contain. The result within the farming landscape was "miserable derelict farms and impoverished soils."

CHAPTER FOUR

“YOU ARE EITHER LIVING HERE ON THE MONEY YOU MAKE FROM TOBACCO, OR ON THE MONEY OTHER PEOPLE MAKE FROM TOBACCO”: THE POST-WAR TOBACCO BOOM AND THE DEVELOPMENT OF CONSERVATIONISM IN SOUTHERN RHODESIA, 1947-1960.

Almost equally marked for one who had no real opportunity of visiting tobacco districts for ten years was the healthy change in appearance of the farms. No longer did one see tobacco farms but general farming with fine herds, sheep, and poultry, many new dams, much contour ridging, schools, clinics, good farm roads, native churches and so on and all achieved through tobacco... It has been my aim to discourage the word planter and insist on the fact that our tobacco producer is a farmer with herds and flocks.

Captain H.L. Morten, Southern Rhodesia Tobacco Representative to London in his Annual Report in 1949.

INTRODUCTION

The war boom in tobacco prices continued its upward swing into the post-war era on the back of two main factors, the dollar shortages in Europe and the 1947 London Agreement. Dollar shortages in war torn Europe as a result of the European Economic Recovery Program forced countries to shift their tobacco import priorities from the traditional American suppliers to other major producers such as Southern Rhodesia. In 1947, the United Kingdom tobacco manufacturers and the Southern Rhodesian government signed an agreement that guaranteed the latter preferential access to the British market. These two factors produced a huge demand for Rhodesian leaf and prompted post-war production to soar until tobacco overtook gold as Southern Rhodesia's chief export in 1946.¹

The post-war tobacco boom culminated in several changes. Many new entrants joined tobacco farming and a lot of capital was invested by farmers into tobacco production. Subsequently, new patterns of growth and accumulation also etched themselves on the agrarian landscape as this chapter will show. These new patterns were most conspicuous in the disproportionate share of national agricultural resources such as labour and capital that the tobacco sector exploited relative to other segments of Rhodesian agriculture, such as beef production and maize. The wave of agrarian developments precipitated by the tobacco boom has been subject to scrutiny

¹ Peter Scott, 'The Tobacco Industry of Southern Rhodesia', *Economic Geography*, 28, 3 (1952), 189-206.

within the conservation historiography of Southern Rhodesia. This scrutiny has focussed on the role of tobacco in agricultural growth and the adoption of good land husbandry methods such as biological conservation, the integration of field husbandry and livestock farming in the European farms.

This chapter joins the historiographical debates on conservationism in Southern Rhodesia and uses these debates to explain the development of conservation ideology during the post-war tobacco boom. The chapter uses the seminal Phimister-Beinart historiographical debate as a lens to view agrarian change and the evolution of conservationism in Southern Rhodesia. It extends the contours of the debate by examining how production practices and systems in the tobacco farms evolved during the post-war years and how this evolution transformed the agricultural landscape and the environment between 1947 and 1960. This chapter focuses on the changes in the production patterns and tobacco farmers' attitudes to the land and environment. It integrates these into reconstructing narratives of the changes in land use, methods of farming and conservation discourses amongst the tobacco growers beyond 1950. In doing so, this chapter extends the historiography on the development of conservation thinking in Southern Rhodesia beyond the first half of the twentieth century.

LOCATING THE TOBACCO BOOM IN COLONIAL CONSERVATION HISTORIOGRAPHY AND THE PHIMISTER-BEINART DEBATE.

In 1989, the *Journal of Southern African Studies* published its special issue on the 'Politics of Conservation in southern Africa'.² The special issue starred a cast of historians on colonial conservation ideologies in southern Africa such as Richard Grove, Jane Carruthers, Kate Showers, William Beinart, and Terence Ranger.³ The compilation offered a suite of essays on several themes on colonial conservationism: its intellectual roots, the development and evolution of the ideology in the sub-continent, the nature of state conservation policy in African and white settler areas, the development of national parks and game sanctuaries and the problem of soil erosion. This collection discussed the nature of colonial conservation ideology,

² See *Journal of Southern African Studies*, 15, 2 (1989).

³ Contributions in the Issue included Jane Carruthers, 'Creating a National Park, 1910-1926', 188-216; Ranger, 'Whose Heritage? The Case of the Matobo National Park', 217-249; Kate Showers, 'Soil Erosion in the Kingdom of Lesotho: Origins and Colonial Responses, 1830-1950s', 263-280; Richard Grove, 'Scottish Missionaries, Evangelical Discourses and the Origins of Conservation Thinking in Southern Africa, 1820-1900', 163-184; William Beinart, 'The Politics of Colonial Conservation', 143-162.

the texture of state intervention and the overall pattern of settler and African responses to the state conservation prescriptions.

The 1989 special issue came at the end of an ongoing historiographical debate between Ian Phimister and William Beinart. In 1984, William Beinart pointed out that the single most conspicuously ubiquitous strand in colonial agricultural archives between the 1930s and 50s was an immense preoccupation with soil erosion and the preservation of natural resources.⁴ Beinart further asserted that the ideology of conservation in southern Africa was not a progeny of the interaction between the colonial state and the African peasantry. Rather, he argued, conservation ideologies arose at the Cape from concerns about the difficulties facing settler agriculture in the environs of rapidly expanding agricultural enterprise in fragile African ecologies.⁵ Beinart further pointed out that these ideas had proliferated into the subregion and in Southern Rhodesia a number of conservation initiatives had been set up by the state beginning in the early 1930s such that by the late 1930s there had been significant progress in the construction of mechanical conservation works in the settler farms.⁶

In 1986, Ian Phimister challenged Beinart's argument for lacking context.⁷ He issued a rejoinder, arguing in his rebuttal that these roots were shallower in Southern Rhodesia and conservation doctrines were first applied more assiduously to African peasants and then only later to white settler farmers during the first half of the 20th century.⁸ Phimister took the debate further to reveal the limited patterns of state conservation intervention in Southern Rhodesia by arguing that the post-war tobacco boom slackened the pace of conservation as it created unbalanced agricultural development between tobacco farmers and other agricultural practitioners resulting in food deficits and inadequate labour for conservation works. Phimister argued that while much progress had been done on mechanical conservation works, biological

⁴ William Beinart, 'Soil Erosion, Conservationism and Ideas about Development: A Southern African Exploration, 1900-1960', *Journal of Southern African Studies*, 15, 1 (October 1984), 52-83.

⁵ Beinart's argument is in sync with Richard Grove who propounds that early conservation laws were directed towards the control of the ecological effects of settler agriculture. While Beinart begins his conservation ideology thread with developments in the Cape around the 19th century. Grove takes it back to the 17th century in the island colonies of Mauritius and St Helena where British and French colonial officials were probed by declining forestry resources to promote conservation. Grove points to how a series of droughts in southern Africa from 1821-1863 stimulated new ways in which colonial scientist began to interpret environmental change and human activity. See Richard Grove, *Green Imperialism: Colonial Expansion, Tropical Island Edens and the Origins of Environmentalism, 1600-1860* (Cambridge: Cambridge University Press, 1996).

⁶ Beinart, 'The Politics of Colonial Conservation', 143-162.

⁷ See Ian Phimister, 'Discourse and the Discipline of Historical Context: Conservatism and Ideas about Development in Southern Rhodesia, 1930-1950', *Journal of Southern African Studies*, 12, 2 (1986), 263-275.

⁸ Phimister, 'Discourse and the Discipline of Historical Context', 263-275.

conservation integrating field husbandry and livestock farming was still retarded in the white farms in Southern Rhodesia between 1930 and 1950.⁹

The Phimister-Beinart debate was perhaps a transient historiographical exchange, but it became significant in providing helpful insights into understanding the development of conservation ideologies in southern Africa. Phimister had sought to establish an empirical context to Beinart's general contention by pointing to a specific period in Southern Rhodesia's agrarian history (the post-war tobacco boom) and revealing the production dynamics in settler agriculture during the war and immediate post-war years.

Although the historiographic exchange between the two ended in the 1980s, the debate on conservationism lived on in many ways, both visceral and dormant. In 2003, Beinart maintained his historiographical stance that progressive conservationism was an inherent attribute of European agrarian communities in colonial southern Africa.¹⁰ He examined settler pastoral communities at the Cape from the late 18th century to mid-20th century and concluded that in spite of droughts, diseases and the threat of environmental degradation these communities were progressive in harnessing environmental concerns and influencing state policy towards regulating the pastoral economy and encouraging more intensive use of natural resources. Therefore, from the 1830s when the ovine population increased and wool became the Cape's major export, conservation and scientific ideas about the state of the veld and its improvement were becoming established.¹¹ Beinart sums up by pointing out that between 1913 and 1952, the pastoral farmers had progressively embraced intensive production and environmental management such that from the 1950s livestock farmers in arid and semi-arid regions had switched to wildlife farming and wine farming creating extended progressive ecological implications for wildlife and bio-diversity within the Cape whose ecological heritage is still visible in contemporary landscapes.¹²

Beinart's 2003 publication sparked another debate- this time an abrasive, dramatic and apoplectic exchange between him and Lance Van Sittert in the *Journal of African History* that reopened the Phimister-Beinart debate. Beinart's progressive conservation ideology was

⁹ Phimister, 'Discourse and Discipline of Historical Context', 263-275.

¹⁰ See William Beinart, *The Rise of Conservation in South Africa: Settlers, Livestock, and the Environment, 1770-1950* (Oxford: Oxford University Press, 2003).

¹¹ Beinart, *The Rise of Conservation in South Africa*, 64.

¹² Beinart, *The Rise of Conservation in South Africa*, 386.

scathingly reviewed by Van Sittert as an overblown and hyperbolic hagiography of the white farming communities at the Cape, and an apologetic corrective project to redeem the white settler farmers from the charge of environmental degradation levelled against them by Randcentric radical historians.¹³ Furthermore, Van Sittert criticised Beinart for lacking context and for having conceded and recanted some of the earlier historiographical arguments he had made in 1984.¹⁴

This chapter uses the post-war tobacco boom in Southern Rhodesia to enter this historiographical dialogue with Phimister and Beinart – and thereby make it a more open exchange. It uses the debate as an entry point for a critical conversation with both Beinart and Phimister on the changing post-war production dynamics on tobacco farms and how these altered the farming landscape and ideologies about conservation. It engages both to build new insights and narratives on conservationism in Southern Rhodesian tobacco farms. The chapter counterbalances the “environmental declensionist”¹⁵ narratives of Ian Phimister by showing how positive and progressive conservation attitudes were also spontaneously and simultaneously generated by the tobacco boom. Phimister’s environmental declensionism misses out an appreciation of the role of white tobacco farmers and private capital in

¹³ Lance Van Sittert, ‘The Nature of Power: Cape Environmental History, The History of Ideas and Neo-liberal Historiography’, *Journal of African History*, 45 (2004), 305-313.

¹⁴ Beinart himself modified three points he had previously argued in his 1984 article. He conceded that he had laid too much emphasis on the influence of the USA model for conservation intervention in South Africa since much of the development of conservation concern was local and specific. Secondly, he revised the notion that conservation and environmental regulation was only coercively applied by the state to Africans. Beinart argued that, in certain instances, the state was coercive towards both Africans and Europeans. Thirdly, he toned down his critique on ambitious scientific colonial interventions in African ecologies as authoritarian and argued that colonial scientific knowledge on African environments and ecologies constitute invaluable knowledge towards understanding the history of conservation and ecology in colonial Africa. See Beinart, *The Rise of Conservation in South Africa*, 333-334

¹⁵ New environmental history scholarship has emerged in the 2000s challenging historical narratives that only tell stories of environmental decline and human degradation of the environment and ecosystems. These histories emphasize that stories of man’s interaction with nature are more nuanced and complex than simple narratives framing humans as agents of destruction. The alternative to declensionist narratives is “Georgic narratives” (named after classical Roman Idyllic and pastoral poet Virgil’s poetry collection glorifying man and nature’s symbiosis called *The Georgics*) that view humans and nature working together as counterparts to produce ecological value. See Daniel Richter, ‘The Crisis of Environmental Narratives in the Anthropocene’, in “Whose Anthropocene? Revisiting Dipesh Chakrabarty’s ‘Four Theses’”, in Robert Emmett and Thomas Lekan (eds), *RCC Perspectives: Transformations in Environment and Society*, 2 (2016), 97–100; Ted Steinberg, ‘Down, Down, Down, No More: Environmental History Moves Beyond Declension’, *Journal of the Early Republic*, 24, 2 (2004), 260-266; Thomas Berry, *The Dream of the New Earth* (New York: Sierra Club Books, 1990); Mark McLaughlin, ‘Counterbalancing Declensionist Narratives in Environmental History’, Network in Canadian History and Environment (NiCHE), 3 February 2016, available at <http://niche-canada.org/2016/02/03/counterbalancing-declensionist-narratives-in-environmental-history/>, accessed 29 August 2019. Ted Stenberg critiques William Cronon 2003 work which firmly concluded that capitalism and environmental degradation went hand in hand. See William Cronon, *Changes in the Land: Indians, Colonists, and the Ecology of New England* (New York: Hill and Wang, 2003), 13.

conservation and embracing modern methods of farming during the second half of the 20th century.

At the same time Beinart's progressive conservation discourse is too embedded in optimism to be helpful in understanding that the changes that were happening after the tobacco boom were not as rapid and linear as his Cape conservation *Georgic* narrative. Furthermore, Beinart's discursive context of the Cape and the pace of change in the institutionalisation of conservation ideas within that physical landscape presents a unique set of circumstances that cannot be directly extrapolated into Southern Rhodesia as Phimister and Van Sittert correctly point out.¹⁶ Thus, while the fundamental conservationist logic posited by Beinart about the kinetic nature of environmental systems is a relevant conceptual beginning, his overall conclusions must not be superimposed on all settler colonial experiences in southern Africa. Even then, Beinart himself was aware of the need for historiographic revisionism and he pointed out in 2005 (referring to his 1984 article) that "ten years on I have problems with this article, but it may yet form the basis of further regional history."¹⁷

This chapter argues that while Phimister was certainly right about the restrained pace of biological conservation in Southern Rhodesia from the 1930s to 1950, his pessimistic narrative of the tobacco boom perhaps throws the baby with the bath water as conservation was not static and several changes were taking place on the land as a result of the dynamic of tobacco capital, catalysed by the necessity to meet new production environments such as rising labour cost, cost of land as well as cost of production. The chapter further argues that as a result of these dynamics, by 1960 significant changes *had* taken place in integration of farm planning into conservation farming, research in effective tobacco rotational practices, biological conservation and livestock husbandry. Overall, there was a general transition of tobacco farms from planter agricultural schemes into integrated production systems based on more intensive land use and more efficient models of biological conservation. Therefore, this chapter simultaneously explains a facet of tobacco history in Southern Rhodesia and reanimates a dormant but important historiographical debate in southern African environmental history.

¹⁶ Van Sittert particularly points out that "the tendency to disregard context has plagued Phimister's project from the start". See Van Sittert, 'The Nature of Power: Cape Environmental History', 305-313.

¹⁷ William Beinart, 'Academic Amnesia and the Poverty of Polemics', *Journal of African History*, 46, 1 (2005), 127-137.

THE LONDON AGREEMENT, THE TOBACCO BONANZA AND THE LAND BOOM, 1947-50.

The conditions created by the Second World War (1939-1945) set the tone for the prosperity of the Southern Rhodesian tobacco industry. During the war, cigarette consumption increased sharply, and between 1939 and 1945 tobacco prices more than doubled. The average price of Virginia tobacco rose from 10.11d per lb during the 1939/40 season to 21.78d per lb during 1945/46.¹⁸ The immediate post-war years opened another window of opportunity as countries in Europe (reeling from the effects of the European recovery program) had to confine their dollar expenditures to a minimum and find substitute supplies of tobacco away from their traditional American market. During the 1947 season, British buyers had found difficulty in obtaining desired quantities of leaf on the Rhodesian tobacco floors. To guarantee adequate supplies of Rhodesian leaf the United Kingdom and Southern Rhodesia signed the London Agreement in 1947.

This agreement reached between the Tobacco Advisory Committee to the Board of Trade in London and the Tobacco Marketing Board (TMB) of Southern Rhodesia saw the UK guaranteeing to purchase two thirds of Southern Rhodesia flue-cured crop (up to 70 million lbs) over a period of five years until 1953.¹⁹ It was subject to renewal thereafter. Even if there was to be a fall in consumption, UK manufacturers guaranteed to take at least 40 million lbs annually from the Rhodesian market over five years.²⁰ To guarantee the supply to British buyers, a system of export control was introduced by TMB so that exports to other markets would be restricted to 33.3 % of the crop.²¹ After signing the London Agreement, the Southern Rhodesian Tobacco Representative in London Major L.H Morten, wrote with a sense of optimism that:

There is no longer doubt or question, Southern Rhodesia flue-cured tobacco is firmly and permanently established in the British market, it is now penetrating into factories and brands which have never used it before and is smoked for the first time by many Britons, the continuation of this admirable trend depends so largely on the producer himself.²²

¹⁸ Annual Reports of the Tobacco Marketing Board, 1939/40 and 1945/46.

¹⁹ Richard Hodder Williams, *White Farmers in Rhodesia, 1890-1965; A History of the Marandellas District* (London: Macmillan Press, 1983), 190.

²⁰ Annual Report of the Tobacco Representative in London, 1948.

²¹ Annual Report of the Tobacco Representative in London, 1948.

²² Annual Report by the Tobacco Representative in London, 1948.

As a result of the Agreement, Southern Rhodesia tobacco exports to the United Kingdom in 1948 totalled 48 989 790 lbs constituting 65.4 % of total exports with the rest reserved for the local market, the SA market and other markets as the pie chart below shows.

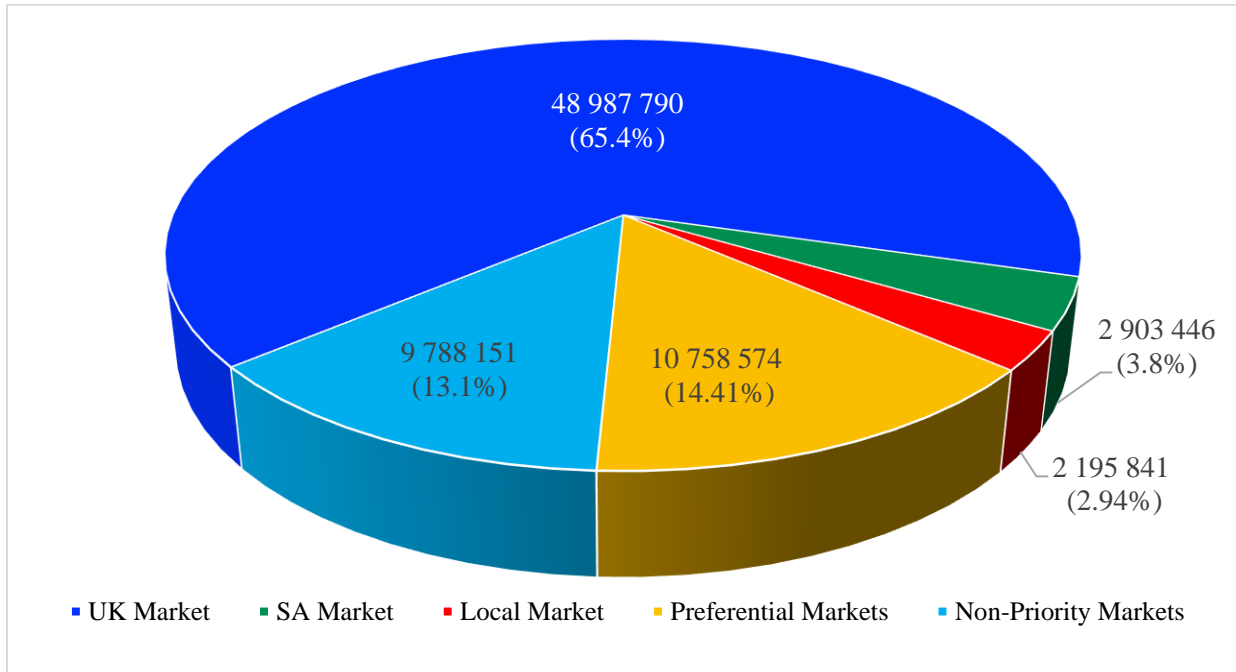


FIGURE 5 SOUTHERN RHODESIA TOBACCO EXPORTS DESTINATIONS 1948.²³

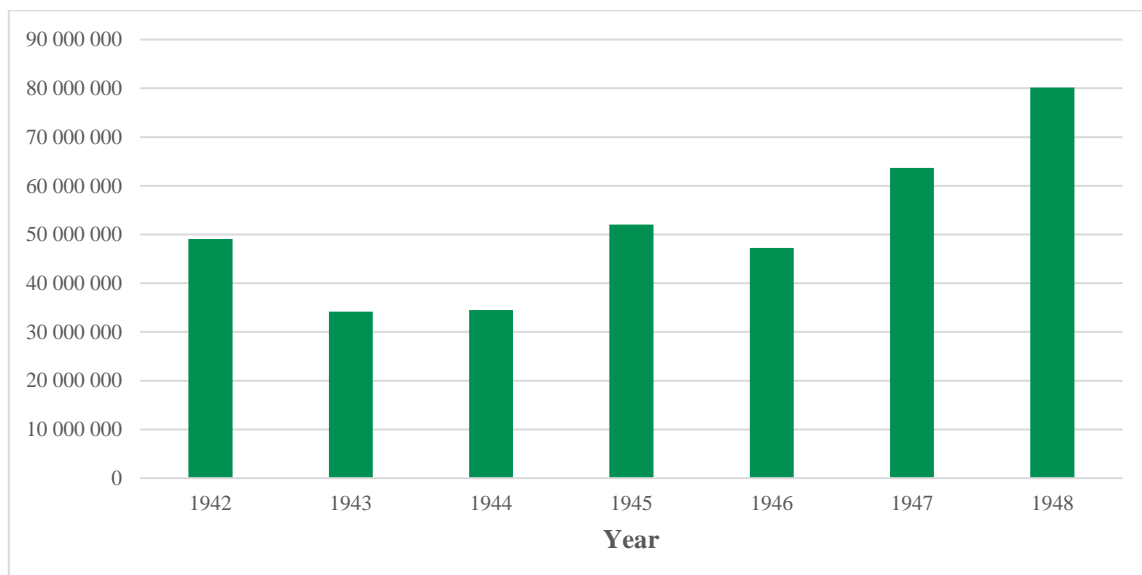


FIGURE 6 TOBACCO PRODUCTION (LBS) IN SOUTHERN RHODESIA, 1942-48.²⁴

²³ Annual Report of the Chief Tobacco Officer, 1948.

²⁴ Annual Report of the Chief Tobacco Officer, 1948.

The lucrative export incentives guaranteed by the London Agreement catalysed a tobacco boom that lured many new entrants into tobacco farming as well as new applications for land from European settlers wanting to settle in Southern Rhodesia.²⁵ Tobacco production control measures and acreage quotas (discussed in the previous chapter) that had been put in place during the war were removed to give impetus to increased production for the export market.²⁶ A restriction that had been put during the war years on the growing of flue-cured Virginia tobacco on crown land leases to prioritise food production was cancelled and the holders of such leases were allowed to grow up to 40 acres of flue-cured Virginia tobacco during the 1949/50 season.²⁷

The post-war tobacco boom propelled a wave of applications from European and South African immigrants who wanted to come to Rhodesia and grow tobacco. Privately owned property began changing hands for high figures on account of this huge demand for tobacco. Prices of land were determined by proximity to rail or town, but the undeveloped farmland suitable for tobacco was fetching between 30/- £5 an acre, while developed and semi-developed tobacco farms were realising from £10 000 to £40 000 with an average farm being approximately 2 000 acres in extent.²⁸ The high prices paid for tobacco were responsible for the substantial increase in the value of farmland, which now ranged from between £4 to £8 an acre as compared to £2 in 1939.²⁹ Fully developed tobacco farms were being advertised at the rate of £10 to £12 an acre.³⁰ On an undeveloped tobacco farm the additional capital outlay required for buildings and equipment amounted to approximately £3 000 to £4 000.³¹ Recurrent expenditure for African wages and food and general working expenses amounted to £2 000 a year.³² The number of Virginia tobacco growers rose from 1 228 in 1947 to 1 893 in 1948, and the number of Turkish tobacco growers grew from 725 to 882.³³ The total number of black labourers employed on

²⁵ Many settlers who applied for land during this period wanted to cultivate tobacco. These were largely from South Africa and Britain. One of the applicants Mr. Wallace from the Transvaal was 33 years of age and had served in the South African Air Force during the war and was employed in gold mining. He wrote to the Secretary of Agriculture on 14 January 1948 saying that he was keen to migrate to Southern Rhodesia and learn "tobacco culture".

²⁶ Annual Report of the Chief Tobacco, 1948.

²⁷ NAZ, S2570, Tobacco 1946-1950, Circular on Food Production in Crown Land Leases, 20 August 1949.

²⁸ NAZ, S2570, Tobacco: 1946-1950, Chief Tobacco Officer to K. Balfour (Natal Farmer) 6 September 1948.

²⁹ NAZ, S2570, Tobacco: 1946-1950, Chief Tobacco Officer to Major Lloyd (England), 10 June 1949.

³⁰ NAZ, S2570, Tobacco: 1946-1950, Chief Tobacco Officer to Major Lloyd (England), 10 June 1949.

³¹ NAZ, S2570, Tobacco: 1946-1950, Chief Tobacco Officer to Major Lloyd (England), 10 June 1949.

³² NAZ, S2570, Tobacco: 1946- 1950, Chief Tobacco Officer to Major Lloyd, 10 June 1949.

³³ NAZ, S2570 Tobacco: 1946-1950, Chief tobacco officer to Secretary of Agriculture, 23 January 1949.

tobacco farms in 1947 was 80 060 which rose in 1948 to 92 640, which was equivalent to over half the total number of Africans employed in the agricultural industry.³⁴

The maps below reveal the general dominance of tobacco farms within Southern Rhodesia's agricultural landscape between 1949 and 1950. More than two fifth of the farms had tobacco as a principal crop by 1950.³⁵ The number of tobacco farms rose from 800 out of a total of 3 400 European farms in 1945 to 2 200 out of 5 000 farms in 1950.³⁶ At the same time, the proportion of tobacco farmers to the total number of farms within the tobacco belt increased from one quarter to three quarters.³⁷ The ideal tobacco farm consisted of roughly 2 500 acres, with most of them undeveloped.³⁸ Summer cropping rarely utilised more than 250 acres, on which tobacco occupied an average of 70 acres, and winter crops 15 acres.³⁹

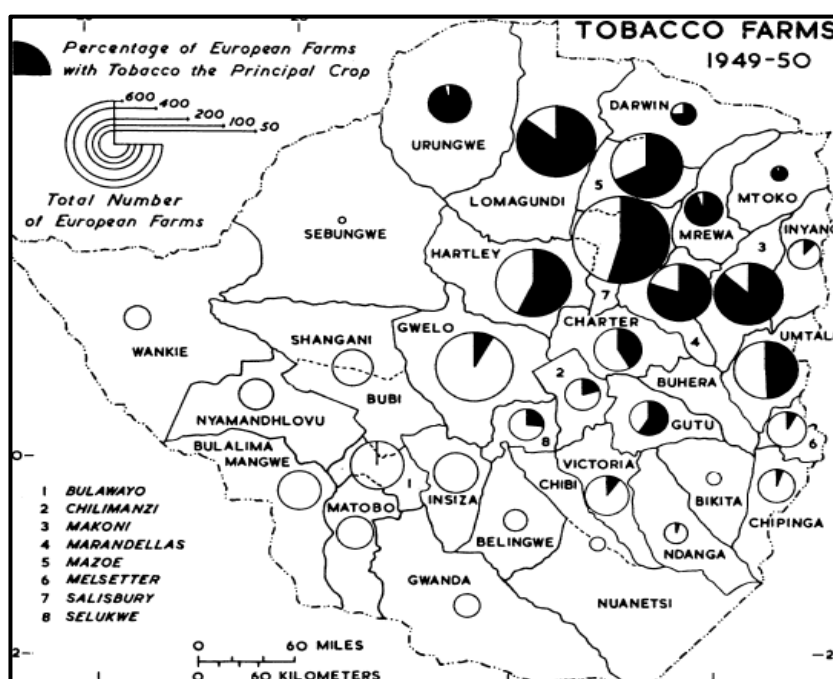


FIGURE 7 DISTRIBUTION OF EUROPEAN FARMS WITH TOBACCO AS THE PRINCIPAL CROP IN SOUTHERN RHODESIA, 1949-50.⁴⁰

³⁴ NAZ, S2570, Tobacco: 1946-1950, Chief Tobacco Officer to Secretary Department of Agriculture, 23 January 1949.

³⁵ Scott, 'The Tobacco Industry of Southern Rhodesia', 189-206.

³⁶ Scott, 'The Tobacco Industry of Southern Rhodesia', 189-206.

³⁷ Scott, 'The Tobacco Industry of Southern Rhodesia', 189-206.

³⁸ Scott, 'The Tobacco Industry of Southern Rhodesia', 189-206.

³⁹ Scott, 'The Tobacco Industry of Southern Rhodesia', 189-206.

⁴⁰ Scott, 'The Tobacco Industry of Southern Rhodesia', 189-206.

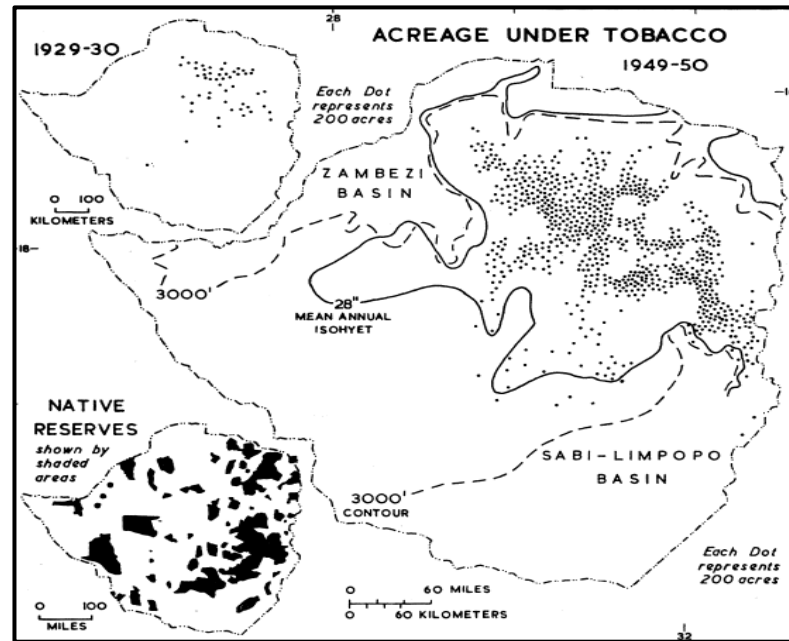


FIGURE 8 DISTRIBUTION AND CONCENTRATION OF TOBACCO ACREAGES IN SOUTHERN RHODESIA, 1949-50.⁴¹

THE POST-WAR TOBACCO BOOM AND DEBATES ABOUT CONSERVATION AND DEVELOPMENT IN THE EUROPEAN FARMS IN SOUTHERN RHODESIA

The flow of capital and agricultural resources into tobacco production discussed above unleashed and sustained a series of forces that placed tobacco at the core of settler farming in Southern Rhodesia. Tobacco became key within the ideas about conservationism and development. This generated debates about the role of the crop in promoting balanced agricultural development and conservation of natural resources in the white owned farms. These debates focussed on how the post-war tobacco complex could endanger the prospects of balanced agricultural development, resource conservation, and the actualisation of a diversified agricultural sector. Phimister points to the post-war flow of capital and resources into tobacco production as having impacted negatively on developments in other agricultural sectors particularly beef and maize production.⁴²

⁴¹ Scott, 'The Tobacco Industry of Southern Rhodesia', 189-206

⁴² Phimister points out that during World War II and immediately after the war, the pace of domestic beef consumption was failing to catch up with supply resulting in deficits that had to be met by sacrificing export beef and slaughtering young cattle each year. From 1937 to 1946 local consumption and beef slaughters for domestic consumption had increased by 107% resulting in a 56% decrease in slaughter for the export market. At the same time maize output had declined in volume between 1945 and 1949 so that the colony was spending £750,000 per year on maize imports.

Between 1945 and 1947, an estimated £7 million was invested by farmers into tobacco growing.⁴³ This expansion represented a shift of resources from other crops to tobacco production creating an imbalance. This imbalance not only created deficits in other agricultural products as more successful tobacco planters muscled out other farmers for the control of capital and labour but also resulted in a huge cut back in labour-intensive conservation and land husbandry practices.⁴⁴ Within this context, Phimister notes that the role of state intervention in limiting the uneven flow of capital and agricultural resources into tobacco farms was highly curtailed by the importance of tobacco to the colonial cash economy where it contributed over a third of export earnings.⁴⁵ Consequently, with regard to promoting a discourse of conservation during the period, the state laid heavy emphasis on “politically neutral projects”⁴⁶ with the result that much of the state-led conservation efforts were centred on building mechanical conservation works. Thus, while between 1947 and 1950, 14 705 miles of contour ridging were constructed protecting 91.5% of total arable area on white commercial farms, Phimister argues that the development of a more comprehensive state-led paradigm of biological conservation involving the integration of livestock farming, field husbandry, grazing control and “correct farming in harmony with nature” lagged far behind.⁴⁷

Indeed, Phimister’s interpretation of the destabilising impact of the tobacco boom on agricultural development and conservation was evident in various sectors of the colonial state. A report by the Division of Agriculture and Lands noted that tobacco production between 1939 and 1949 had doubled and claimed a larger part of resources such as capital, equipment and building material creating a vulnerable agricultural imbalance.⁴⁸ Moreover, as a result of the higher prices, tobacco was being grown on an increasing scale in marginal areas.⁴⁹ Farms which were only suitable for grazing were now being offered as suitable for tobacco resulting in the growing of off-type tobacco.⁵⁰ In the Midlands districts of the country which was traditionally a cattle ranching area, farmers were switching in large numbers from food growing and cattle breeding to tobacco farming.⁵¹ A writer in the *Rhodesian Herald* pointed out this imbalance when he noted that:

⁴³ Phimister, “Discourse and the Discipline of Historical Context”, 263-275.

⁴⁴ Phimister, “Discourse and the Discipline of Historical Context”, 263-275.

⁴⁵ Phimister, “Discourse and the Discipline of Historical Context”, 263-275.

⁴⁶ Phimister, ‘Discourse and the Discipline of Historical Context’, 263-275.

⁴⁷ Phimister, ‘Discourse and the Discipline of Historical Context’, 263-275.

⁴⁸ *The Rhodesian Herald*, 20 April 1951.

⁴⁹ *The Rhodesian Herald*, 20 April 1951.

⁵⁰ *The Rhodesian Herald*, 26 April 1951.

⁵¹ *The Rhodesian Herald*, 4 May 1951.

I suggest that Southern Rhodesia far from having his fortunes founded on tobacco is rapidly being impoverished by it, and the disproportionate profits to be made from tobacco have forced the prices of farmlands far beyond the means of many who could augment the nation's internal supply and those who can find £ 10 000-20 000 for a farm are forced to put a crippling charge on their produce to get anything like a reasonable return on their investments.⁵²

In August 1947, J.C. Saseen, who identified himself as a tobacco farmer from Selukwe, wrote a letter to the Minister of Agriculture airing his concerns that tobacco farmers were limiting food crop production and contributing to deforestation. He noted that the government's appeal for farmers to grow more food crops was only going to meet with partial success amongst the tobacco growers unless if there were stringent regulations to force tobacco farmers to grow food crops and conserve their lands.⁵³ He reminded the government that:

The remedy lies in your hands and success is 100 % guaranteed, not only for food production but the conservation of the land which is slowly being ruined of its forests in the mad rush of clearing plenty large tracts of land for tobacco. I have seen land in some areas which in a few years would be semi-desert.⁵⁴

Saseen further expressed the general feeling that tobacco farmers were arrogant and most of them were simply profiteering rapaciously as a result of the boom while neglecting to play a bigger role in land conservation and food production. He noted that some farmers were simply putting assistants on their lands to grow tobacco for them on percentage basis and these assistants were not worried about foodstuff production and were simply planting the land to a desert jungle with tobacco to enable themselves to earn better commissions.⁵⁵

While this indeed was the case, it is important to contextualise some of the resentment towards tobacco farmers that was coming from other practitioners on the land who were struggling to keep up with the pace of tobacco growers in securing land, labour and capital, and who in the words of one tobacco farmer looked at the post-war success of tobacco farmers "with a jaundiced eye of jealousy".⁵⁶ Tobacco farmers had done so well after the war and this caused some resentment amongst the returning and immigrant soldiers. Even so the cattle ranchers and maize growers who had previously been chief producers of the colony and controllers of

⁵² *The Rhodesian Herald*, 2 April 1951.

⁵³ NAZ, S2570, Tobacco: 1946-1950, J.C. Saseen to Secretary Ministry of Agriculture and Lands, 9 August 1947.

⁵⁴ NAZ, S2570, Tobacco: 1946-1950, J.C. Saseen to Secretary Ministry of Agriculture and Lands, 9 August 1947.

⁵⁵ NAZ, S2570, Tobacco: 1946-1950, J.C. Saseen to Secretary of Agriculture, 9 August 1947.

⁵⁶ *Industry in Commerce of Rhodesia*, December 1949.

agricultural policy could not be expected to defend the case for the men who had usurped them.⁵⁷ In the words of one tobacco farmer:

These focus their attention upon the four or five hundred old established growers, pioneers of the industry who have tasted the bitterness of hardship and sometimes even bankruptcy in the years when their tobacco was unwanted and unsold, but who today at long last are reaping the rich rewards of their courage and determination.⁵⁸

Even on its part the government felt that the huge financial success of the tobacco grower in the post-war years had to pay for the colony's balance of payments. The United Party led by Godfrey Huggins, which was in power from 1933 to 1956, had farmers in its leadership, but these were not tobacco growers and were naturally disinclined towards them.⁵⁹ In 1949, the Finance Minister Edgar Whitehead tried to impose a 20% tobacco tax without consulting the tobacco establishment. The government felt that the general rate of development had to be maintained and the best means of raising additional funds amounting to £1.5 million with the least injury to the country's economy was through an export duty on tobacco.⁶⁰ The growers through the RTA rejected the proposed tax. The state was forced to back down and accept a compromise levy as a five-year loan to the government.⁶¹ But what the incident did reveal was the growing general envy and hostility towards the success of tobacco growers. Historians therefore need to be cautious when constructing narratives around the tobacco boom to avoid being swayed by sentiments of envy hyperbolizing the negative effects of the tobacco boom on agricultural development and conservation. Equally, there is need to be cautious of overtly optimistic narratives from tobacco farmers' sources glorifying their conservation endeavours during the post-war boom.

Therefore, it is important to objectively evaluate the changes that were taking place on the physical farm landscapes after the tobacco boom. While Phimister was right in suggesting that the tobacco boom brought about unequal agricultural growth and a slackened pace of conservation in Southern Rhodesia, that aspect was but one phase in a series of evolutionary changes that were happening on the farms as a result of the dynamic introduced by tobacco capital. Phimister projects a rather monolithic conservation narrative in Southern Rhodesia

⁵⁷ Clements and Harben, *Leaf of Gold*, 157.

⁵⁸ *Industry and Commerce of Rhodesia*, December 1949.

⁵⁹ Selby Angus, 'Commercial Farmers and the State: Internal Group Politics and Land Reform in Zimbabwe', PhD Thesis, University of Oxford, 2006, 58.

⁶⁰ Clements and Harben, *Leaf of Gold*, 155.

⁶¹ David Rowe, *Manipulating the Market: Understanding Economic Sanctions, Institutional Change, and the Political Unity of White Rhodesia* (Ann Arbor: University of Michigan Press, 2001), 69.

from the late 1930s to 1950, which does not nuance the intricate and changing dynamics of capital accumulation caused by the tobacco boom and its impact on the physical farming landscapes. The impression constructed by a reading of Phimister that for much of the 1930s to 1950 the only noteworthy conservation development within settler tobacco farms was the construction of contour ridges limits the ability to gaze at environmental change as a non-linear process. Indeed, Carville Earle attacks such linear conceptions of environmental history that entrench the hypothesis of unchanging human behaviour towards the environment.⁶² In the end, Earle calls for “a heuristic paradigm that accommodates a dynamic environmental history and the recurrence of agricultural innovation”.⁶³ New scholarly approaches have further challenged declensionist environmental narratives and established that the history of resource exploitations are more complex. Daniel Richter’s study of the south Piedmont region of the USA which was once an epicentre of cotton production practices that degraded soils, gullied fields and eviscerated natural landscapes shows how years later new landscapes and environmental narratives were created within the region.⁶⁴ Conevery Bolton Valenčius challenged declensionist historians to also emphasize the “drama of the tumultuous ecological world”, exhorting them to pay attention to story-telling and the drama associated with it.⁶⁵ Indeed, Beinart transcended the historical declensionism of Phimister to frame conservation ideas as shifting concepts that changed across historical time and with them environmental management and landscapes.⁶⁶ He notes that environmental change cannot be described as a linear process of degradation and calling all change degradation was of static value in understanding human-nature interactions.⁶⁷

Phimister perhaps underestimates the dynamic changes that the flow of capital brought into production systems as the cost of land, labour and inputs became high and it was no longer profitable to cultivate land extensively. The pace of the integration of these ideas might have

⁶² Earle critiques the American conservation histories of the 1920s for their unrelenting polemics on agricultural practices in the southern states, particularly the tobacco and cotton soil farmers who were roundly scorned as mere ‘soil miners’. While conceding that southern farmers were soil miners, Earle condemned these histories for failing to understand that the agronomic practices of tobacco and cotton growers in the south were not static but changed and adapted to the cyclic economic conditions resulting in agronomic practices that maintained soil fertility and minimised erosion losses. See Carville Earle, ‘The Myth of the Southern Soil Miner: Macrohistory, Agricultural Innovation and Environmental Change’, in Donald Worster (ed), *The Ends of the Earth: Perspectives on Modern Environmental History* (Cambridge: Cambridge University Press, 1988), 175-210.

⁶³ Earle, ‘The Myth of the Southern Soil Miner’, 179.

⁶⁴ Daniel Richter, ‘The Crisis of Environmental Narratives in the Anthropocene’, 97-100.

⁶⁵ Conevery Bolton Valenčius, ‘Mudslides Make Good History’, *Journal of the Early Republic*, 24, 2 (Summer, 2004), 252-259.

⁶⁶ This is a central idea in Beinart’s works on conservation histories at the Cape.

⁶⁷ Beinart, *The Rise of Conservation in South Africa*, 390.

been slower than Phimister anticipated, but the changes taking place in the Rhodesian countryside as a result of tobacco capital such as land development and conservation works were conspicuous in the post-war years and must not be disregarded. Indeed, as this chapter will show, the development of the conservation discourse amongst tobacco farmers from the late 1940s was a dynamic intricately linked to the changing production environments where exorbitant land prices and high costs of production were ensuring profitability only to those farmers who could utilise their land more intensively.

Diversification of the tobacco farms and biological conservation had slowly become one of the key messages from agricultural planners in Southern Rhodesia even before the post-war tobacco boom. In 1945, the Natural Resources Board (NRB) had released a film “Mixed farming for the tobacco grower” whose focus was on encouraging tobacco farmers to adopt mixed farming methods and move away from reliance on the same crop.⁶⁸ The film emphasised the changing conditions now prevailing where there was less land “to go around” meaning that profitability was premised on intensive farming of the same soils year after year which necessitated crop rotations and use of organic fertilisation.⁶⁹ The film also emphasised the need for tobacco farmers to combine livestock and tobacco:

The successful tobacco growers combine livestock with tobacco to an advantage, as livestock is an economic means of utilising their surplus grass and rotational crops providing the necessary manure. The animals also enable the tobacco grower to obtain additional income and so give him another string to his bow should tobacco at any time suffer a slump.⁷⁰

Extensive farming (the exploitation of vast acres of land on limited capital) was becoming unprofitable and unviable by the late 1940s as a result of high land prices. Where suitable land was available for tobacco production and climate allowed the regeneration of the veld, farmers planted tobacco in the same fields for two seasons before reverting the land for 3-10 years under grass fallow.⁷¹ The most common rotation, however, was two successive tobacco crops followed by maize, then green manuring and three years of grass.⁷² As land and natural resources dwindled, and land costs rose, it became almost uneconomic for planters to continue with the practises of the inter-war years when land was cheap and readily available. Tobacco farmers could no longer continually stump virgin land each year as virgin lands had

⁶⁸ NAZ, S2570/1212, NRB, ‘Mixed farming for the tobacco grower’, 1945.

⁶⁹ NAZ, S2570/1212, NRB, ‘Mixed farming for the tobacco grower’, 1945.

⁷⁰ NAZ, S2570/1212, NRB, ‘Mixed farming for the tobacco grower’, 1945.

⁷¹ Scott, ‘The Tobacco Industry of Southern Rhodesia’, 189-206.

⁷² Scott, ‘The Tobacco Industry of Southern Rhodesia’, 189-206.

disappeared on some of the old established farms.⁷³ Also, the land was now becoming too expensive to be worked extensively and left for long in an unproductive state. Thus, the rising cost of production started to spontaneously and simultaneously shape tobacco farmers' conservation consciousness more than any state-led program.

In 1949, the Council of the RTA perturbed by the rising costs of tobacco production had sought the assistance of the Chief agricultural economist of the Department of Agriculture to assess the extent of this rise. The Chief agricultural economist after a cost of production survey noted that the structure of cost had risen significantly since the London Agreement of 1947, with wages having a significant bearing on the cost structure and contributing towards 54% of the cost of production.⁷⁴ The absolute cost determined by this enquiry was 16.3d per lb for the 1948/49 crop on the basis of cost indices which had been established at 14.2d/lb for the 1946/47 crop, 15.3 d per lb in 1947/48, 16.3d per lb in 1948/1949 and 18.8d per lb on the 1949/50 crop.⁷⁵

<i>Item</i>	<i>Cost of Production %</i>
<i>European Labour</i>	27.0
<i>Native Labour</i>	27.0
<i>Tractor work</i>	4.0
<i>Ox work</i>	1.0
<i>Fertiliser</i>	6.0
<i>Grading and Marketing</i>	9.0
<i>Transport</i>	5.5
<i>Land and Buildings</i>	2.0
<i>Sundries</i>	7.5
<i>Overheads</i>	11.0

FIGURE 9 TOBACCO COST OF PRODUCTION 1947-50 AS DETERMINED BY THE ENQUIRY INTO THE COST OF PRODUCTION.⁷⁶

⁷³ W.E. Haviland, 'Tobacco Farm Organisation, Costs and Land use in Southern Rhodesia' *South African Journal of Economics*, 21, 4 (December 1953), 367-80.

⁷⁴ NAZ, S983/2- Changes in Tobacco Production Costs 1947-1950, Chief Agricultural Economist to Secretary RTA, 21 January 1950.

⁷⁵ NAZ, S983/2, Changes in Tobacco Production Costs 1947-1950, Senior Agricultural Economist to Agricultural Economic adviser, 24 January 1950.

⁷⁶ NAZ, S983/2- Changes in Tobacco Production Costs 1947-1950.

While tobacco farming in most countries like the USA during this time was conducted on a smaller scale with employment of family labour, the Southern Rhodesian crop was grown on white-owned estates on a large scale.⁷⁷ It was thus impossible to grow tobacco properly without a large capital outlay as during the first decade after the war the price of land suitable for tobacco cultivation became five or six times higher, while wage and rations costs trebled.⁷⁸ At the same time the changing pattern of farming in Southern Rhodesia meant that tobacco growers were no longer able to draw on abundant resources of cheap land, inexpensive labour as they had done during the inter-war years and so increase production economically by merely increasing the acreage under cultivation.⁷⁹ The rising cost of labour was largely due to the acute labour shortages which were being experienced across the colony as demand outstripped supply. The labour situation became so desperate that the Secretary for Agriculture reported in 1948 that native labour remained a problem on many farms, and an acute shortage of labour hampered the harvesting of the crop.⁸⁰

Also, while during the inter-war years any grower who had a crop to deliver to the auction floors was assured of high prices and he could even get by with a poorly produced crop, with the ever-rising costs, efficiency was becoming essential.⁸¹ Machinery was much costlier than before, so was fertiliser and it was now increasingly uneconomical to have yields of around 600 lbs/acre.⁸² Production costs rose substantially, not only because of wage increases but also because the production of the desirable leaf entailed the use of recommended fertilisers, approved pesticides and modern methods of farming. Consequently, confronted by this hard squeeze between relatively stable world prices and continually rising costs Rhodesian tobacco farmers had to invest millions of dollars into scientific research into modern methods of farming so that they could maintain a margin of profit.⁸³

⁷⁷ NAZ, S2505/TOB/1/1 Tobacco Marketing Board Members Correspondence 1954-56, Report of the Chief classifier visit to the US tobacco markets, 1955. Also see Scott, 'The Tobacco Industry of Southern Rhodesia', 189-206.

⁷⁸ Barclays Bank, *Tobacco*, London, August 1961, 131.

⁷⁹ Barclays Bank, *Tobacco*, 140.

⁸⁰ Annual Report Secretary of Lands and Agriculture, 1948.

⁸¹ *The Rhodesian Herald*, 3 September 1955.

⁸² *The Rhodesian Herald*, 3 September 1955.

⁸³ *The Rhodesian Herald*, 3 September 1955.

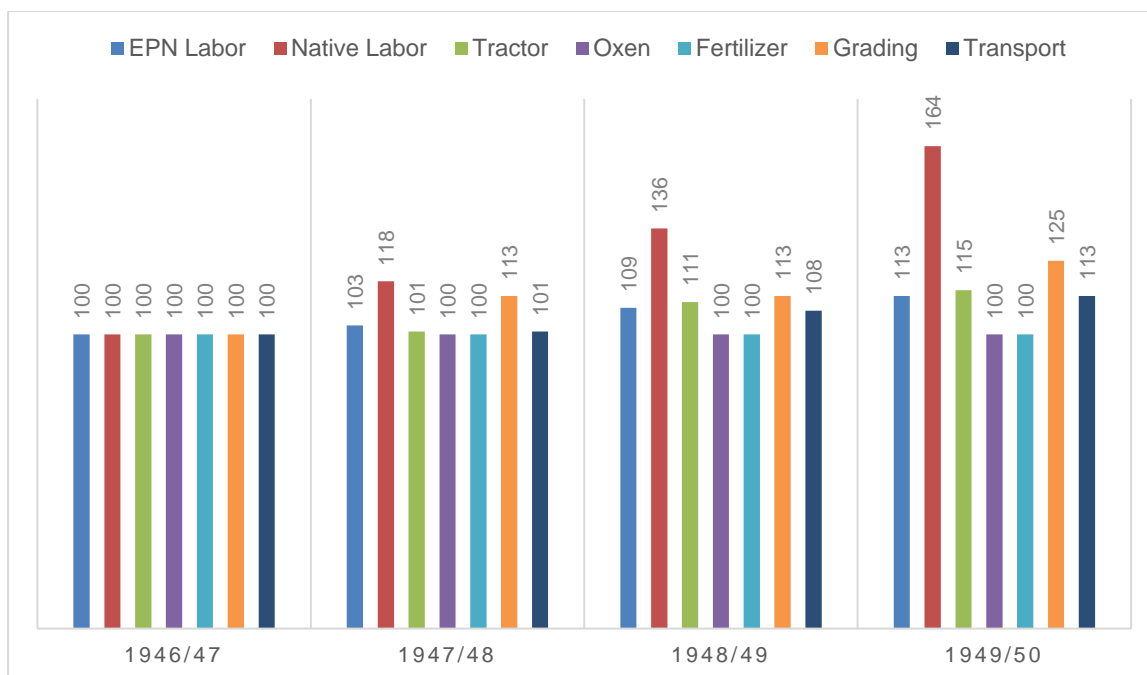


FIGURE 10 TOBACCO COST OF PRODUCTION TRENDS IN SOUTHERN RHODESIA, 1946-50.⁸⁴

The Director of the Rhodesian Tobacco Research Board noted this important trend in 1953 when he observed that increasing land prices gave an advantage to those who “could improve their farming fastest”.⁸⁵ This meant embracing crop rotations, manuring crops, improved fertilisation, disease resistant varieties and methods of pest control.⁸⁶ The rising costs of land and labour, equipment supplies exerted an influence on tobacco growing methods in Southern Rhodesia, such that it was now paying better to practise a rotation of crops than to break up new land each year. Much of the land that had been left to revert to natural shrub and forestry growth during the 1930s because farmers could not use it to advantage without undue labour and expenditure was now being appropriated.⁸⁷

The significant improvement of research and extension in tobacco during the period also greatly improved intensive agriculture. At its meeting in October 1945, the Council of the RTA appointed a special committee to coordinate research. They appointed a director of research Dr Keystone in June 1947. His report made a diagnosis of the research activities and noted that it was vital for Southern Rhodesia’s economic stability that the tobacco industry built up to its

⁸⁴ NAZ, S983/2- Changes in Tobacco Production Costs 1947-1950. The cost for 1946/47 is taken as the starting base expressed as 100 and the changes to that cost in the subsequent seasons are shown by the differential between 100 and the cost for that season. This may also be expressed as a percentage.

⁸⁵ F.A. Stinson, ‘Research and Sound Farming’, *Rhodesia Tobacco*, 1 (June 1953), 4.

⁸⁶ Stinson, ‘Research and Sound Farming’, 4.

⁸⁷ Stinson, *Research and Sound Farming*, 4

position during favourable boom conditions should be prevented from suffering a setback and slump, and research would put Rhodesian tobacco in a position to grow viably.⁸⁸ The report emphasized that tobacco culture was so dependent on soil and climatic conditions that it needed many lines of research investigations in the different soil climatic regions. These included field investigations, rotational cropping systems, pruning and topping methods, field trials of insecticides.⁸⁹ He advised that the future prosperity of the tobacco industry could not be expected to rely on the government to fund the major cost of research, but that the growers should play a key role.⁹⁰ Keystone's report thus reflected the key initiative that tobacco growers were coming to assume ahead of the state in taking responsibility for research and improvements in tobacco culture.

Keystone recommended that a director of tobacco research should be appointed with staff who were not to be civil servants and had to be recruited by the Research Council. As a follow up to the Keystone Report, in 1949, Professor Frank Engledow compiled his report on *Agricultural Teaching Research and Advisory Work in Southern Rhodesia* which pointed out the need for a research framework balancing the needs of research in tobacco culture with good husbandry methods. He illustrated the need for tobacco production to be integrated within a mixed farming model. He noted:

The great contribution tobacco makes to this country's exports and the natural suitability of large areas of its land for this crop are well known. It is also recognised, however that tobacco growing as a single enterprise and not as part of a mixed farming involves risks. These include eelworm infestations, disorderly use and waste of timber resources and the possibility of a financial embarrassment through sudden price fall...From the points of view of national agricultural economy and of good husbandry... which includes soil and water conservation, the policy desirable for tobacco growing is clear. The crop should take its place in various systems of mixed farming.⁹¹

In its evidence to Engledow, the RTA committed to fund research to the tune of £2 to every £1 provided by the government to the tune of £60 000.⁹² The list of items the RTA considered imperative in research were: the discovery of cheap methods to combat main tobacco pests, eelworm, cutworm, crickets and aphids, the discovery of economical methods to combat bacterial diseases, fungus, to find suitable rotation schedules for different soils, fertiliser

⁸⁸ G.H. Tanser, 'A History of the Tobacco Research Board: The First 25 Years', *The Zimbabwe Agricultural Journal Technical Handbook*, 7, (1991), 29.

⁸⁹ Tanser, 'A History of the Tobacco Research Board', 29.

⁹⁰ Tanser, 'A History of the Tobacco Research Board', 29.

⁹¹ Report on Agricultural Teaching, Research and Advisory Work in Rhodesia, 1949, 47.

⁹² Tanser, 'A History of the Tobacco Research Board', 33.

experiments and the study of the economy of heating with relation to tobacco flue-curing, labour saving devices such as planters.⁹³ The dissemination of this information on research and on tobacco generally was helped by the publication of a monthly magazine *Rhodesian Tobacco Journal*, the first issue of which appeared in February 1949. In April 1950, tobacco research was taken away from the hands of government and placed under the Tobacco Research Board (TRB) by an agreement in which the tobacco growers through the RTA would contribute £65 000 and the government £35 000 annually towards flue-cured tobacco research.⁹⁴ The transfer of tobacco research infrastructure from the state to the control of the farmers was a result of the growing political and lobby influence of the RTA which from the 1930s had started having significant leverage over the state on tobacco related policies. Clements and Harben observed this trend and noted that the industry was led by a determined and aggressive group of farming members, and in the Rhodesian Parliament farming in general and tobacco farming were chief vested interest that dominated politics.⁹⁵

Dr F. Stinson, previously head of the Soil Science Department of Ontario Agricultural College in Canada, was appointed the new Director of the Tobacco Research Board. Under his leadership there was a fresh impetus towards experiments focussed on improving suitable methods of tobacco fertilization for the sand veld, improving methods of field practices, cultivation, and the control of pests – particularly eelworms.⁹⁶ Investigation on the use of soil fumigants for the control of eelworm in seed beds and tobacco lands was pursued vigorously with the result that soil fumigants such as Ethylene Dibromide came into popular use.⁹⁷ Soil rotation was considered an important aspect since tobacco lands were more susceptible to eelworm infestations. The TRB recommended perennial grasses such as Katambora Rhodes grass (*Chloris gayana*), weeping love grass (*Eragrostis curvula*) and Guinea grass (*Panicum maximum*) as these grasses offered the best resistance to eel worm infestation and provided fodder for livestock.⁹⁸

In 1954, the Kutsaga research station was opened. It was a state-of-the-art tobacco research centre with such facilities as grading sheds, curing barns, laboratories, and a green house.⁹⁹ The station was meant to create an environment for intensive research and field experiments.

⁹³ Tanser, 'A History of the Tobacco Research Board', 33.

⁹⁴ Report of the Tobacco Research Board, 1950.

⁹⁵ Clements and Harben, *Leaf of Gold*, 123.

⁹⁶ NAZ, S983/2, Changes in Tobacco Production Costs 1947-1950, Tobacco Research, 30 December 1949.

⁹⁷ NAZ, S983/2, Changes in Tobacco Production Costs 1947-1950, Tobacco Research, 30 December 1949.

⁹⁸ 'Results of Experiments, 1949-51', *Tobacco Research Bulletin* 1, 1952, 4.

⁹⁹ Tanser, 'A History of the Tobacco Research Board', 36.

In 1960, a writer for the American tobacco division Albert Davis who had spent years observing tobacco production practices in Southern Rhodesia appreciated the progress done integrating biological conservation using grass rotations in tobacco fields and pointed out that grass was one of the most important crops grown on tobacco fields and grass rotations determined the amount of land that could be utilised for tobacco on most farms.¹⁰⁰ He added that:

Grass occupy the tobacco lands for 2-4 years; after this they are ploughed under with tobacco plantings following. After being ploughed the field is left fallow for some time...this aid in control of nematodes. One of the main factors controlling the amount of tobacco grown each year is the amount of land tied up in rotation grasses on a typical Rhodesian tobacco farm, at one time.¹⁰¹

The result of this enthusiastic and effective research thrust was that it transformed several practices in tobacco culture, as farmers began to embrace scientific knowledge and apply it in a manner which contributed to conservation of the sand veld. It was now possible to establish permanent tobacco rotations without clearing virgin lands every year. The idea that there is no land as good as virgin land for the tobacco crop, which was popular during the inter-war years grew less popular as farmers began to understand that “if land is protected from erosion immediately after stumping and is cropped in rotation for 3 or 4 years before being reverted to grass, that land is not exhausted but is still in good heart, and when the time comes to plough out the grass and put in tobacco again, the land is to all intents and purpose as good as virgin”.¹⁰² Efficient utilisation of land in tobacco rotations saw fallow land being used for feeding livestock by grazing, by cutting hay, or by making grass ensilage.¹⁰³ Working on this system it was possible to build up a considerable animal husbandry side to tobacco farming and integrate livestock production to tobacco farming.

Therefore, it is important to understand that biological conservation and the integration of livestock farming to field husbandry and farming if not in harmony with nature then at least in concert with nature was slowly getting more established amongst tobacco farmers in Southern Rhodesia beginning from the late 1940s. This was as a result of the dynamic of capital, high land prices and the general exorbitant production costs that made extensive farming of tobacco unprofitable. The next section closely examines how these conservation ideologies were adopted and transformed the spatial appearance of the tobacco farms.

¹⁰⁰ Albert Davis, ‘Tobacco Production and Marketing in Southern Rhodesia, Northern Rhodesia and Nyasaland’, Foreign Agricultural Service, United States Department of Agriculture, 1964, 3.

¹⁰¹ Davies, ‘Tobacco Production and Marketing in Southern Rhodesia, Northern Rhodesia and Nyasaland’, 3.

¹⁰² G.R. Hayman, ‘Conservation on a Tobacco Farm’, *Rhodesia Agricultural Journal*, (June 1953), 223-234.

¹⁰³ Hayman, ‘Conservation on a Tobacco Farm’, 223-234. Grass ensilage is fermented wet grass that is stored as fodder to feed livestock

MIXED FARMERS AND LAND DEVELOPERS: TOBACCO FARMERS AND LAND CONSERVATION, 1948-1960

Phimister focused on the initial few years of the post-war tobacco expansion and drew conclusions which were relatively valid within the context of his periodization but which ignored the medium and long-term trickle-down effects of tobacco capital investments in changing the farming systems and contributing to a series of positive changes in the farming countryside. To this extent, it is important to note that while in the immediate post-war years, tobacco had created a notable disparity in capital distribution and concerns about the colony's food situation, this scenario was just a transitional stage as tobacco farming systems were evolving from planter communities into mixed farming. The Annual Report of the Secretary of Lands and Agriculture in 1948 pointed out to one changing aspect about tobacco production in the colony when it noted that:

Tobacco is no longer regarded as an exploitative crop as it has commonly been considered in the past. Now it is financially the most important product in the colony, and it is realised the present prosperity of the colony is largely bound up with the future of the tobacco industry. Every effort must be made to expand the industry and improve the quality of the product.¹⁰⁴

During that year, the department noted that the acreage under green crops was 99 449 acres and legumes for hay 70140 acres making a total of 166 639 acres.¹⁰⁵ The report added that a further quantity of 36 069 tonnes of compost had been applied to 37 000 acres of crops, and the 203 639 acres under legumes and compost represented 38% of total acreage under maize and other summer crops.¹⁰⁶

Phimister had viewed much of conservation initiatives as “politically neutral projects” that had limited value in pushing the wider policy issues involving land conservation.¹⁰⁷ However, it is critical to point out that significant progress in conservation *was* slowly taking place in white farms and constituting a progressive change in white farmers' attitudes towards land and natural resources and to this extent Beinart's notion of environmental transformation outside degradation conservation narratives¹⁰⁸ is more relevant in framing these progressive

¹⁰⁴ Annual Report of the Secretary of Agriculture and Lands, 1948.

¹⁰⁵ Annual Report of the Secretary of Agriculture and Lands, 1948.

¹⁰⁶ Annual Report of the Secretary of Agriculture and Lands, 1948.

¹⁰⁷ Phimister, 'Discourse and the Discipline of Historical Context', 263-275.

¹⁰⁸ Beinart, *The Rise of Conservation in South Africa*, 390.

conservation changes and efforts in the tobacco farms. Much of this effort was being achieved through the Intensive Conservation Areas (ICAs) that had been established by the Natural Resources Act of 1942 but came to be operationalised in 1948 as noted in the previous chapter. Through these ICAs much work was being done in intensive conservation programs with the help of the Department of Conservation and Extension (Conex), which had been set up in 1948 to assist farmers with technical assistance in conservation works. Simeon Maravanyika, who ironically was supervised by Phimister points to the significant work which was done in white farms towards soil conservation through the ICAs which by the end of 1950 numbered 80.¹⁰⁹ He further notes that these ICAs scored several successes in the number of conservation projects. In his case study of the Bromley ICA (which was a predominantly tobacco producing area), he points out that the ICA had by 1949 built 8 dams with the capacity of 3 million gallons of water, it also did well in pasture management, and encouraged farmers to plant grass to restore the soil and at the same time turn it into “milk and beef.”¹¹⁰

Indeed, the construction of dams and the development of irrigation infrastructure was one of the most conspicuous features on the Rhodesian agricultural landscape between the late 1940s and the 1960s.¹¹¹ Joost Fontein argues that during this period marked by the optimism of the tobacco boom and growing industrialisation water planning and dam construction for irrigating lands for food production became central.¹¹² In 1952, the Report on Large Scale Irrigation in Southern Rhodesia was published.¹¹³ It prioritised water planning for extensive and intensive irrigation for food crop production. The construction of dams in the settler farms meant the restructuring of new landscapes in ways in which water conservation became linked to identity and belonging. David McDermott Hughes shows how dams served multiple purposes that transcended conservation and became fetishized symbols of white belonging, identity and claim to the land in Zimbabwe during the 1990s.¹¹⁴ The new hydrological landscapes involved the imposition of new imaginations and experiences in a process evoked by white farmers’ need to engrave belonging into physical landscapes and legitimate claims to ownership of land. Fontein sees the dam construction and the concomitant irrigation revolution in Southern

¹⁰⁹ Simeon Maravanyika, ‘Soil Conservation and the White Agrarian Environment in Colonial Zimbabwe, c.1908-1980’, PhD Thesis, University of Pretoria, 2013, 236.

¹¹⁰ Maravanyika, ‘Soil Conservation and the White Agrarian Environment in Colonial Zimbabwe’, 237.

¹¹¹ See Joost Fontein, *Remaking the Mutirikwi: Landscape, Water and Belonging in Southern Zimbabwe* (James Currey: Suffolk, 2015).

¹¹² Fontein, *Remaking the Mutirikwi*, 173.

¹¹³ Fontein, *Remaking the Mutirikwi*, 180-181.

¹¹⁴ David McDermott Hughes, ‘Farms Dams, Conservation, and Whiteness in Zimbabwe’, *American ethnologist*, 33, 2 (2006), 269-287.

Rhodesia during the 1950s and 1960s as representing a re-imagined future for Europeans during an era of rapid decolonisation – a restructuring of new futures and pasts through “engineering the fabric of topology”.¹¹⁵

The restructuring of the landscape also happened as a result of new contouring practices in tobacco farms during this period as research on soil conservation and erosion intensified. In 1953 the Department of Conservation and Extension (Conex) set up a soil erosion research unit at Henderson to investigate the dangers of sheet erosion and the mechanics of this process. The erosion survey had identified tobacco as one of the problem crops since it provided the poorest protection to the soil, and this was exacerbated by the practice of ridging up and down the slope.¹¹⁶ Field trials at Henderson revealed that while average soil losses per acre for maize and groundnuts was 8.7 tonnes per acre, the losses on tobacco amounted to 15.6 tonnes per acre.¹¹⁷ In view of the serious erosion position and the importance of tobacco as a cash crop, tobacco lands were selected as a priority in the program at Henderson research station. Members of Conex and field extension officers investigated the problem on farms and recommended that Conex should discourage the practice of ridging up and down the slope and promote ridging parallel to the contour, or in other words what was referred to as “contour farming.”¹¹⁸ The research findings of this survey were published in a technical report contained in a booklet entitled “*Conservation farming for tobacco growers*”. It recommended that conservation systems were efficient in reducing soil losses from gully and sheet erosion, and called on the need for suitable land preparation, planting and harvesting techniques so that the conservation model was an integral part of the whole farming system.¹¹⁹ This idea was becoming very popular amongst tobacco farmers such that by 1956, Umvukwesi ICA had achieved 53% adoption of contour farming by area and 54% by numbers of farmers in the tobacco sector.¹²⁰ Mr. G.V. Jacks the director of the Commonwealth Bureau of Soil Sciences during a visit in 1954 appreciated this significant progress and said that soil conservation in Southern Rhodesia was “as good as in America” adding that “in some way you seem to have

¹¹⁵ Fontein, *Remaking the Mutirikwi*, 174.

¹¹⁶ NAZ, S3920, Natural Resources Board, Intensive Conservation Areas.

¹¹⁷ N.W. Hudson, ‘Soil Erosion and Tobacco Growing’, *Rhodesia Agricultural Journal*, (November-December 1957), 547-555.

¹¹⁸ NAZ, S3920, Natural Resources Board, ICAs.

¹¹⁹ NAZ, S3920, Natural Resources Board, ICAs.

¹²⁰ Minutes of the Annual General Meeting of the Centenary West and Umvukwesi ICA, 4 September 1956.

gotten to the root of the problem of soil conservation. You have realised that soil conservation is not merely a matter of building contour ridges and dams but of complete farm planning”.¹²¹

Thus, while Phimister describes the progress of biological conservation progress simply as “lagging far behind”¹²² such dismissive cynicism and scepticism that is not fully explained in context detracts from a critical appraisal of changes taking place on the use of good farming methods, water conservation for irrigation, the integration of field husbandry and livestock farming, the development of mixed farming and natural resource conservation as well and food crop production. On the tobacco farms, this improvement and transition in landscape was becoming more conspicuous with changes in land use patterns and the general farm environment. This transition in scenery was more aptly captured by the Southern Rhodesia tobacco representative to London in 1949 who described the changes in the spatial patterns in the landscape taking place in the tobacco farms as constituting a “healthy change in appearance of the farms”, punctuated by general farming with fine herds, sheep and poultry, many new dams, and much contour ridges.¹²³ Overall, the tobacco farmer was moving from being a planter, into a mixed farmer practising intensive farming and rendering soil fertile for other agricultural enterprises and contributing to the colony’s ideals of soil and water conservation.¹²⁴ In the tobacco farms, there were now many new dams, much contour ridging, schools, clinics, good farm roads, native churches.¹²⁵ This new outlook was more intimately reflected in the *Rhodesian Tobacco Journal* by “the roving reporter” who went around the tobacco farms and documented methods of agricultural production. He noted after visiting one farm:

To those who contend that mixed farming cannot be allied to tobacco growing on the sand veld and that tobacco holdings of less than 3 000 acres are an uneconomic proposition, I recommend pay a visit to J.V. Danckwerts in the Arlington area... He stresses the danger of over cultivation of sand veld country, and... to avoid overworking the land too much he has devised a system of planting in place of tobacco maize, beans, nuts which also cuts down labour requirements... Ample supplies of water for all purposes including irrigation of fodder crops are derived from three boreholes which at a cost of £ 2 000 has been a worthwhile investment. Mr Danckwerts drove me around and showed me excellent work which is being done in contouring and building dams.¹²⁶

On another farm in Chikurubi owned by a Mr Ken Edward, he commented:

¹²¹ *The Rhodesian Herald*, 8 October 1954.

¹²² Phimister, ‘Discourse and the Discipline of Historical Context’, 263-275.

¹²³ Annual Report of the Tobacco Representative, 1949.

¹²⁴ Annual Report of the Tobacco Representative, 1949.

¹²⁵ Annual Report of the Tobacco Representative, 1949.

¹²⁶ ‘Around the farms by our roving reporter’, *Rhodesian Tobacco Journal*, April 1949.

On the estate itself, a tremendous amount of afforestation had been carried out in conifers, gums and trees of many other varieties, and the lands are all sub divided, one from the other, by fine windbreaks which also provide valuable shade to lands themselves and thus help reduce the evaporation of soil moisture...It interested me to learn that many of the lands in use have been rotation cropped for more than thirty years, yet some of the best yields in recent seasons have been obtained from the old lands. This is attributable to subsoiling, the large use of compost...huge quantities of compost are made every year with saw dust litter from the cattle pens mixed with various types of green crops and natural grasses.¹²⁷

On another farm owned by Winston Field in Marandellas, the farm owner explained how he had combined good husbandry and land management in his farm operations, doing afforestation work so much that he now had sufficient timber requirements for the next twenty years without having to have recourse to indigenous timber.¹²⁸ As a result of such efforts, the area planted alone to exotic eucalyptus trees in the main tobacco growing areas showed an increase of 10% during 1948 and 1949 bringing the total area to nearly 24 000 acres.¹²⁹ The conservation of trees featured most importantly amongst tobacco farmers as they began to use more and more fuel efficient and energy conserving furnaces, oil curing furnaces and coal fired heating and curing systems.¹³⁰ During 1949 and 1950, 14 420 tobacco furnaces were reported, 87% of which being wood fired, 12% coal burning and 1% using oil.¹³¹ Soil conservation was also becoming a key investment in most farms. As an item on normal farm production it costs an average £40 annually between 1950 and 1952.¹³² In its report of the activities for 1951, the NRB stated that some of the most advanced areas in relation to conservation were those where tobacco was grown:

It is noteworthy that some of the most advanced areas from the conservation point of view are those in which tobacco production provides the main source of revenue, and it is commonly realised that the majority of the more experienced tobacco growers are utilising this revenue for the development of their properties on sound mixed farming lines and thus making a material contribution towards solving the problem of proper utilisation of the sand veld.¹³³

The sand veld, which consisted of much of the area in which tobacco was cultivated, was an area with low fertility for the growth of other crops. After the post-war boom tobacco farmers

¹²⁷ 'Individual farming methods: Chikurubi, owned by Ken Edwards an ideal mixed farm', *Rhodesian Tobacco Journal*, November 1949.

¹²⁸ 'Individual farming methods; Accent on economical farming', *Rhodesian Tobacco Journal*, February 1952.

¹²⁹ Southern Rhodesia Legislative Assembly Debates, 26 April 1950.

¹³⁰ One such fuel-efficient furnace was the Gundry tobacco furnace which had been first publicised in 1934 and improved significantly over the years. Its important features were low fuel consumption.

¹³¹ Haviland, 'Tobacco Farm Organisation, Costs and Land use in Southern Rhodesia', 367-80.

¹³² Haviland, 'Tobacco Farm Organisation, Costs and Land Use in Southern Rhodesia', 367-80.

¹³³ Annual Report of the Natural Resources Board, 1952.

were able to create mixed farming systems in these areas. The value of the tobacco crop to these areas was great as it opened more land for settlement and spurred investments in soil and water conservation. A writer for the *Rhodesian Herald*, Nigel Phillip, pointed this out:

Our soil consists of 92% sand veld, and where rainfall allows are most suitable for the production of tobacco. As virgin soils there are not suitable for foodstuffs but are greatly increased for this purpose in rotation with tobacco. Tobacco is not only an initiation crop but supplies the necessary early cash to enable farmers to finance their operations. In fact, where food farmers have sand veld there are encouraged to plant tobacco to assist them.¹³⁴

In 1954, the Chief agricultural economist pointed out that accelerating food production in the tobacco farming areas and reducing tobacco acreages would have negative effects for the Rhodesian economy.¹³⁵ He argued that the whole development of the sand veld areas of the country had been based on the capitalisation of these areas out of the incomes on tobacco. These areas comprising approximately 80% of the total cultivable land under European occupation were largely incapable of sustaining any other form of crop production without the application of liberal quantities of fertiliser or rotation based on long periods under grass for subsequent ploughing and cultivation.¹³⁶ He noted that it was on these areas that the country was largely dependent for the development of its livestock industry and on which it has placed its only hopes of meeting the ever-increasing demand by the African labour population for large quantities of meat that they now insisted on as part of their normal diet.¹³⁷ He concluded that tobacco alone could finance the necessary development of these areas which entailed the provision of dams, widespread fencing and sinking of boreholes, and any material setback on tobacco was to result in retarding agricultural development.¹³⁸

Mr Malone of the Board of the Tobacco Trade in London, who had visited Rhodesia in 1956 and toured 36 farms during his visit, chronicled that he had been impressed by the evidence he had seen of Rhodesia's dependence on tobacco, and most farmers he had spoken to pointed out that tobacco was the only crop that could finance the opening up of the country.¹³⁹ By 1956

¹³⁴ *The Rhodesian Herald*, 3 April 1951.

¹³⁵ NAZ, 982/T/2F, Rhodesia Tobacco Association General 1 July 1954- 13 March 1955, Chief agricultural economist, Notes on the effects of a decrease in demand for flue-cured Virginia tobacco.

¹³⁶ NAZ, 982/T/2F, Rhodesia Tobacco Association General 1 July 1954- 13 March 1955, Chief agricultural economist, 'Notes on the effects of a decrease in demand for flue-cured Virginia tobacco'.

¹³⁷ NAZ, 982/T/2F, Rhodesia Tobacco Association General 1 July 1954- 13 March 1955, Chief agricultural economist, Notes on the effects of a decrease in demand for flue-cured Virginia tobacco.

¹³⁸ NAZ, 982/T/2F, Rhodesia Tobacco Association General 1 July 1954- 13 March 1955, Chief agricultural economist, Notes on the effects of a decrease in demand for flue-cured Virginia tobacco.

¹³⁹ NAZ, F114/473/E.8/8/ (473), Note on a Meeting held in the Commonwealth Relations Office on 26 October 1956 on Rhodesia Tobacco.

tobacco farmers had more fully developed their lands so that 50% of food production in Southern Rhodesia now came from tobacco growing areas.¹⁴⁰ Ultimately therefore, Phimister's argument that the expansion of tobacco growing in the post-war years curtailed food production does not foresee this extended role tobacco farmers came to play in providing food by the mid-1950s. Also, W.E. Haviland who was Southern Rhodesia's Director of Irrigation argued that the problem had not been that tobacco had taken away agricultural resources such as labour and capital from maize, but rather that tobacco expansion had provided more mouths to feed, and without a tobacco expansion, there wouldn't have been such an influx of workers and increase in the demand for maize.¹⁴¹ The total number of Africans employed on tobacco farms rose from 80 060 in 1945 to 92 640 in 1948 constituting over half of the total number of Africans employed in the agricultural industry.¹⁴² Haviland further argued that tobacco was the only agricultural commodity which Rhodesia had found that could bear the high cost of transport in a landlocked country and at the same time finance the development of the country in a pervasive spatial sense.¹⁴³

Thus, hand in hand with tobacco production went the production of other key primary products vital to the life of Southern Rhodesia's community such as maize, cattle and dairy produce and timber as tobacco farmers made the most of the opportunities to develop their mixed farming activities. Large new areas of European occupation sprung up all over the colony, and vast tracts of land were being occupied, which could have taken hundreds of years to develop without the incentive of the flourishing tobacco industry.¹⁴⁴ Accordingly, while during the inter-war years the majority of tobacco farmers practised monoculture because they had to, after the tobacco boom "every year tobacco income was used to fence the farms, to build paddocks for cattle, to build up beef and dairy herds, to provide irrigation for cultivated pastures, to experiment with new crops."¹⁴⁵ As a result of tobacco expansion, the pattern of good land settlements spread further into remote areas, and the landscape became more pronounced and appealing as the soil was no longer vandalised but "was occupied and mastered."¹⁴⁶

¹⁴⁰ NAZ, F114/473/E.8/8/ (473), Note on a Meeting held in the Commonwealth Relations Office on 26 October 1956 on Rhodesia Tobacco.

¹⁴¹ Haviland, 'Tobacco Farm Organisation, Costs and Land Use in Southern Rhodesia', 367-80.

¹⁴² Annual Report of the Chief Tobacco Officer, January 1948.

¹⁴³ Haviland, 'Tobacco Farm Organisation, Costs and Land Use in Southern Rhodesia', 367-80.

¹⁴⁴ *Industry and Commerce in Rhodesia*, December 1949.

¹⁴⁵ Clements and Harben, *Leaf of Gold*, 152.

¹⁴⁶ Clements and Harben, *Leaf of Gold*, 152.

One example of the new areas which were being opened for settlement because of the tobacco boom was the Centenary block in Umvukwesi about 100 miles from Salisbury. Before 1955, there were only 28 farmers in the block, but another 52 farms have been allocated by the government in 1955.¹⁴⁷ The area consisted of 315 000 acres and was surveyed and subdivided by the government into 82 farms varying in size from 1 600 to 13 000 acres, and these were allocated to growers between 1953 and 1959.¹⁴⁸ Farmers in the block were allocated an average 3 000 acres.¹⁴⁹ Whereas the pioneers of early years had to cut their own roads and lacked the advantages of fast transport and mechanical aids to open up their farms, the new settlers in the Centenary block had a road motor service and tractors to help them.¹⁵⁰ In the first year, only tobacco was grown as the virgin land was not suitable for mealies. Cattle were also slowly coming to the area. The average farmer in his first year could open up and stump not more than 40 to 50 acres for tobacco.¹⁵¹ In the second year, he could possibly open up another 50 to 60 acres get in his first planting of mealies and green crops on the previous year's tobacco lands and build bigger barns for a bigger tobacco crop.¹⁵² Early in the life of this new farming area it was found that boreholes were unsuccessful so conservation with dams was being concentrated on by these tobacco farmers.¹⁵³

It is also important to note that the dominance of tobacco in the Southern Rhodesian agriculture was not constant but fluctuated. It had become smaller by the mid-1950s to constitute 51.8% of all farm incomes while the importance of maize and cattle over the same period increased significantly.¹⁵⁴ Between 1949 and 1950, 77.3% of all farms were diversified with maize, and of these 54.4% had tobacco as the principal crop, 42% of all farms in Southern Rhodesia reported tobacco as the principal crop, and of these only 1.8% were completely specialised in tobacco farming.¹⁵⁵ A survey of white commercial agriculture in the colony issued by the Central Statistical Office showed that although the gross revenue of tobacco had been

¹⁴⁷ 'Where pioneering is streamlined: Farmers open virgin Umvukwesi block', *The Rhodesian Herald*, 24 February 1955.

¹⁴⁸ Trish Mbanga, *Tobacco: A Century of Gold* (Harare: ZIL Publications, 1991), 91.

¹⁴⁹ 'Where pioneering is streamlined: Farmers open virgin Umvukwesi block', *The Rhodesian Herald*, 24 February 1955.

¹⁵⁰ *The Rhodesian Herald*, 24 February 1955.

¹⁵¹ *The Rhodesian Herald*, 24 February 1955.

¹⁵² *The Rhodesian Herald*, 24 February 1955.

¹⁵³ *The Rhodesian Herald*, 24 February 1955.

¹⁵⁴ This figure is extrapolated from the data presented in table 3 which indicates gross output in monetary terms of European Agriculture in Southern Rhodesia between 1954 and 61.

¹⁵⁵ Haviland, 'Tobacco Farm Organisation, Costs and Land Use in Southern Rhodesia' 367-80.

increasing steadily since 1950, the overall percentage of tobacco to farm earnings was dwindling.¹⁵⁶ While tobacco income was 67.1% of all farm earnings during 1949/50, it had dwindled to 58.1% by 1955/56, and to 51% in 1960.¹⁵⁷ At the same time, income from maize, dairy, cattle and other crops produced an increased share of total farm income.¹⁵⁸ Almost half of the flue-cured tobacco growers of Southern Rhodesia in 1961 had more than 100 herd of cattle per farm, and over 80% grew maize.¹⁵⁹

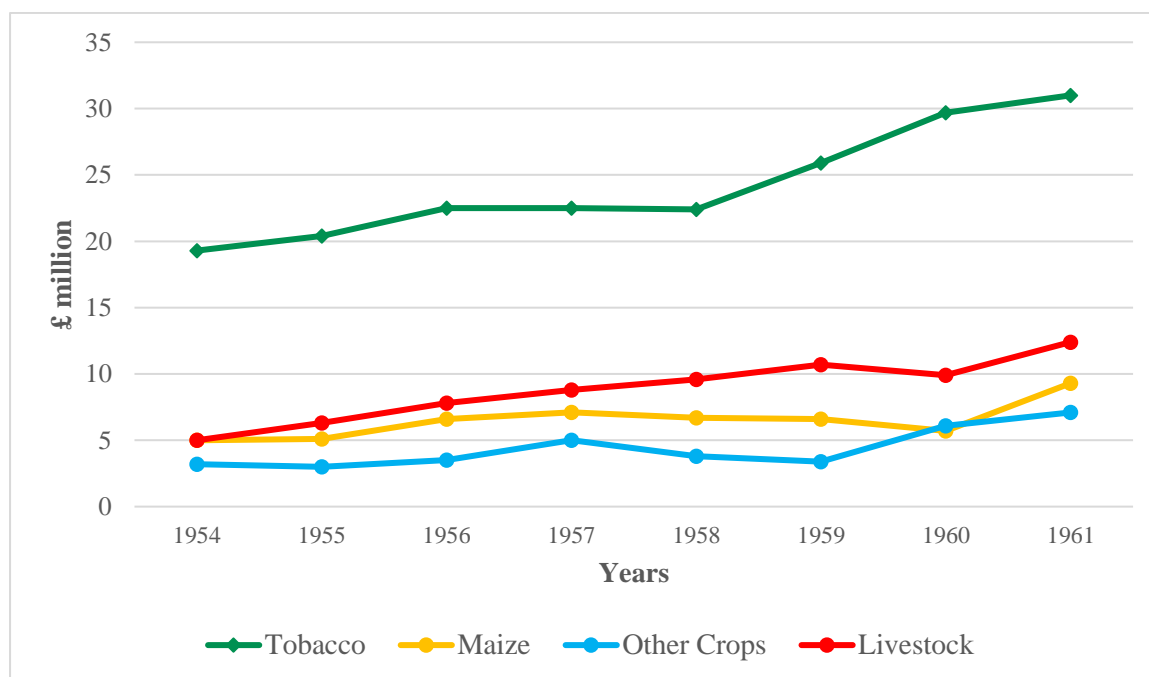


FIGURE 11 GROSS OUTPUT OF EUROPEAN AGRICULTURE IN SOUTHERN RHODESIA, 1954-61.¹⁶⁰

The graph above shows that despite the dominance of tobacco, gross agricultural output from other crops and agricultural enterprises increased significantly between 1954 and 1961. Maize gross output rose from £5 million in 1954 to £9.3 million in 1961, while livestock production more than doubled in gross output from £6.0 million in 1954 to 12.4 million in 1961. This reflects that the dynamic of capital accumulation during the tobacco boom extended itself way beyond curtailing the growth of other agricultural sectors like maize production and livestock. On the other hand, this dynamic over time witnessed tobacco farmers investing in livestock,

¹⁵⁶ Central Statistical Office of Southern Rhodesia, Agricultural Statistics, 1961.

¹⁵⁷ Central Statistical Office of Southern Rhodesia, Agricultural Statistics, 1961.

¹⁵⁸ 'How tobacco dominates the Southern Rhodesia farm scene', *Rhodesian Tobacco Journal*, March 1957.

¹⁵⁹ Central Statistical Office of Southern Rhodesia, Agricultural Statistics, 1961.

¹⁶⁰ Central Statistical Office of Southern Rhodesia, Agricultural Statistics, 1961.

dairying and food production. The tobacco farmers had become more versatile. The Rhodesian Tobacco Association noted that “the slightly better returns for tobacco has enabled these growers who are first and foremost tobacco farmers to put into practice theories about management of beef and dairy herds that they could never afford in the past”.¹⁶¹

Official statistics did show that in 1950, in 7 of the 33 agricultural districts into which the colony was divided approximately 7/8 of the flue cured crop was grown by 5/6 of the growers, and that in those areas 70% of the colony’s maize for sale was produced and 35% of the cattle was owned.¹⁶² By 1961, the overall economic contribution of tobacco to the economy was so vast that it provided a livelihood for some 1 130 000 people in Southern Rhodesia.¹⁶³ The total number of male Africans working on European farms in Southern Rhodesia was 208 484 compared with 192 403 in 1957 and 194 327 in 1954.¹⁶⁴

CONCLUSION

This chapter has examined the post-war tobacco boom in Southern Rhodesia within the context of the historiographical debates on the development of colonial conservation ideologies. In trying to understand the phenomenon of change on the Southern Rhodesian agrarian landscape during the post-war boom the chapter engaged with both Beinart and Phimister in ways that challenges and furthers the historiographic debate. It would be ungenerous to claim to see further after standing on the shoulders of these two giants, but this chapter has taken their arguments seriously and opened up an important historiographical dialogue. Beinart’s progressive conservation narrative is a helpful conceptual paradigm within which to understand the dynamic of environmental change as non-linear, fluid and kinetic. It gives scope to imagine and dramatize agrarian and environmental encounters beyond the post-war tobacco boom in vivid narratives that embrace change as a constant. Yet, Beinart’s optimistic (indeed, occasionally Panglossian) progressivism sometimes exaggerates the smooth transitions of conservation ideologies from the late 18th century into higher forms of conservation management that arose at the beginning of the 20th century. The pattern of progressive transitioning in the tobacco farms in Southern Rhodesia was not linear but a long drawn arduous journey across cyclical periods of financial depressions, overproduction, speculative

¹⁶¹ *The Rhodesian Tobacco Grower*, August 1952.

¹⁶² *The Rhodesian Herald*, 11 April 1951.

¹⁶³ NAZ, F226/121/F2, Production Control 1964-65, Memorandum by the Federal Ministry of Agriculture on Virginia Flue-cured tobacco production control policy.

¹⁶⁴ NAZ, F226/121/F2, Production Control 1964-65, Memorandum by the Federal Ministry of Agriculture on Virginia Flue-cured tobacco production control policy.

production, unbalanced agricultural growth, retarded food production and un-contoured lands. But within this rugged terrain, at each stage new agronomic practices, conservation ideologies, rotational principles were evolving. The post-war boom and tobacco capital unleashed the centripetal forces that spontaneously and simultaneously congealed all these formative biological practices into a conservation doctrine that slowly began to change the farming landscape and tobacco production systems in more positive ways than before. It was not a cataclysmic conservation revolution, but a silent wave whose dialectical impulse generated a few negative signals in the Southern Rhodesian agricultural economy, but whose self-corrective long term and medium-term dynamic led to wholesome environmental changes by 1960. This chapter has also revisited and counterbalanced Phimister's declensionist model of the tobacco boom in Southern Rhodesia by illuminating the dynamic of environmental change and how colonial agrarian encounters in the 1930s and 1950s were not always hostile interactions between white settlers and the environment. This chapter thus contributes to the historiography of conservation in Southern Rhodesia as it extends the Phimister-Beinart debate into the second half of the 20th century to show the changes in conservation ideology and physical landscapes that had taken place in Southern Rhodesian tobacco farms by 1960. The post-war tobacco boom significantly shaped agricultural development and conservation thinking in Southern Rhodesia. It provided the impetus through capital resources and exorbitant land prices for investments in intensive mixed farming systems, good land husbandry, soil and water conservation all of which altered environments and landscapes in white farms between 1947 and 1960.

CHAPTER FIVE

A SILENCED SPRING? EXPLORING AFRICA'S 'RACHEL CARSON MOMENT': A SOCIO-ENVIRONMENTAL HISTORY OF THE PESTICIDES IN TOBACCO PRODUCTION IN SOUTHERN RHODESIA, 1945–80.

Can anyone believe it is possible to lay down such a barrage of poisons on the surface of the earth without making it unfit for all life? They should not be called 'insecticides', but 'biocides'.

Rachel Carson, 1962.

INTRODUCTION

This chapter uses the lens of political ecology and environmental history, drawing mainly primary sources from the National Archives of Zimbabwe, to interrogate the use of pesticides in tobacco farming in Southern Rhodesia (now Zimbabwe) from 1945 to 1980, and their effects on the human body, the body politic and the natural environment. It traces the growth of pesticide use beginning with the end of World War II, which saw a turning point in the global pesticides' regime as crop chemicals such as DDT became widespread. It explores the problems that arose with the use of these pesticides and connects this narrative with the various global debates on 'environmentalism' that arose in the 1960s, and how this impacted on the evolution of legislation and policies to curtail pesticide use in tobacco production in Southern Rhodesia. In doing so, this chapter constructs a contextual reading of Rachel Carson's *Silent Spring* within Southern Rhodesia and argues that despite the neglect of Carson within the tradition of African environmental historiography, her ideas significantly shaped the emergence and growth of modern environmentalism within the continent

HISTORIOGRAPHY OF MODERN ENVIRONMENTALISM AND GLOBAL PESTICIDE USE.

In 1962, Rachel Carson, an American marine biologist, penned *Silent Spring*, a highly controversial book that revolutionised global perceptions of the widespread use of pesticides and chemicals in agricultural production.¹ In this book, Carson critiqued conventional views

¹ Rachel Carson, *Silent Spring* (London: Hamish Hamilton, 1963).

of organochloride persistent pesticides, particularly Dichlorodiphenyltrichloroethane (DDT) and their toxic effects on ecological systems, as well as plant and human life. She portrayed a dystopian civilisation teetering on the brink of self-imposed extinction because of the contamination of the air, rivers, forests and sea with chemical sprays that “lie in the soil, entering into living organisms, passing from one to another in a chain of poisoning and death”.² *Silent Spring* became a contentious and contested text that put pesticide use within the domain of public debate and environmental policy globally. Although initially maligned by the defenders of the pesticide and chemical establishment, the book precipitated our contemporary discourse and debates over the ecological dimensions of pesticide use.³ *Silent Spring* galvanised environmental activism and public policy in most countries⁴ as the problem of pesticides gained public notoriety and slowly became a subject of enquiry investigated by environmental scientist and, even more slowly, environmental historians.⁵ However, concerning tobacco production, *Silent Spring* was reticent, noting only as an aside the permanent poisoning of the soil by tobacco chemicals.⁶ This silence caused ‘Big Tobacco’ to receive the book less critically and even embrace it, as they had feared an overt critique might draw attention to the industry’s own massive use of pesticides.⁷

Was there an African Rachel Carson? No, but Africa had its ‘Rachel Carson moment(s)’, as this chapter will show. Despite this, however, as well as over 50 years of considerable historical analysis of pesticides in the United States and the global North, Africa has been neglected—

² Carson, *Silent Spring*, 5.

³ The book was heavily attacked by the defenders of the pesticide industry as being unscientific and an hysterical, apocalyptic fantasy. Environmental revisionists like David Ropeik also blamed her for fostering a set of accepted beliefs that actually caused much damage to the human and natural environment, <http://blogs.discovermagazine.com/collideescape/2012/06/22/the-lessons-and-echoes-of-silent-spring/#.WzvC-RaxWEC>, accessed 5 July 2018.

⁴ It is important to note that even before *Silent Spring*, environmental issues were already being made visible in public policy from the late 1950s by several other writers and practitioners in the global North. This movement, however, was not firmly entrenched, and it was Carson who gave much impetus to this wave. These early writers include the British–South African Sir Solly Zuckerman who coined the term “environmental science” in 1959 and played a huge role in the establishment of the UK Natural Environment Research Council in 1964, and the American Lynton Caldwell who authored ‘Environment: A Focus for Public Policy’, in *Eikistics*, 17, 102 (May 1964). See Paul Warde, Libby Robin and Sverker Sörlin, *The Environment: A History of the Idea* (Baltimore, MD: Johns Hopkins University Press, 2018), 18–20.

⁵ Also see Thomas R. Dunlap (eds), *DDT, The Silent Spring and the Rise of Environmentalism: Classic Texts* (Seattle, WA: University of Washington Press, 2008); Frank Graham, *Since Silent Spring* (London: Hamish Hamilton, 1972); Andrei Vinogradov and Stanislav Petriashin, ‘Chemical Industry, the Environment and Russian Provincial Society: The Case of Kokshan Chemical Works, 1850-1925’, *Ambix*, 1, 26 (April 2018), 1–26.

⁶ Rachel Carson discusses how tobacco chemicals then widely used in the United States, such as arsenic and benzene hexachloride, contaminate the soil and make it toxic for food crops such as carrots and sweet potatoes.

⁷ Standard Schaeffer, ‘The Greening of Big Tobacco’, *Counterpunch Magazine*, <https://counterpunch.org/2007/12/15/the-greening-of-big-tobacco/>, accessed 10 July 2018.

there is a strange historiographical lacuna. Perhaps this omission could be explained by the distinctive quantitative disparities in pesticide use between the global South and North. The World Health Organisation (WHO) estimates that despite rising use since the 1940s, the global South only consumes 25% of total global pesticide production, while the North consumes a disproportionately higher 75%.⁸ More worryingly, however, and ironically within the context of the historiographical lacuna, 99% of deaths due to pesticide use occur in the global South!⁹ This inevitably begs the question whether *Silent Spring* represents a form of only European and Anglo-American environmentalism, which has been simply *projected* as a global movement. Is it because *Silent Spring* pontificates from the lofty parapets of a technologically modernistic, racially privileged society and fails to appeal to similar chemical, calamitous tragedies and disasters in the developing world that largely affect marginalised racial groups such as blacks, Asians and Latinos? This profoundly racially tinged accusation is, of course, a reminder that modern environmentalism is in itself the progeny of Western post-war cultures of prosperity and consumerism that ignited concerns about quality of life and other aesthetic values to which the natural environment became a public good, and which rested on perceptions of nature as being an entity somehow separate from humans.¹⁰ This classed and raced identity of modern environmentalism has resulted in Carson's work not being fully appreciated or even investigated more robustly in the global South.¹¹ Moreover, once a new wave of iconoclastic scholarship on environmental histories emerged in the 1990s, the universalism of environmentalism was challenged and a call was issued for more contextualised and nuanced interpretations.¹² These scholars argued that Northern environmentalism is not relevant to poor countries because of different development paths taken as well as differences in economic strength, socio-political structures and cultural attitudes between North and South explained (crudely) by poverty and weak democratic systems.¹³ Under the banner of "Environmental

⁸ www.who.int/ceh/capacity/Pesticides.pdf, accessed 25 February 2019.

⁹ 'Communities in Peril: Global Report on Health Impacts of Pesticide Use in Agriculture', Pesticide Action Network (September 2010), www.pan-germany.org/download/PAN-I_CBM-Global-Report_1006-final.pdf, accessed 25 February 2019.

¹⁰ Gary Kroll, 'The Silent Spring of Rachel Carson: Mass Media and the Origins of Modern Environmentalism', *Public Understanding of Science*, 10 (2001), 403–420.

¹¹ Shawn Miller, *An Environmental History of Latin America* (Cambridge: Cambridge University Press, 2007), 206.

¹² Most outstanding in this regard is the work of Ramachandra Guha and Joan Martinez, which rejects a universal theory of modern environmentalism and contends that there are two different traditions of environmentalism for the North and South, all based on their unique historical trajectories. See Ramachandra Guha and Joan Martinez, *Varieties of Environmentalism: Essays North and South* (London: Earthscan, 1997), 12.

¹³ Miller, *An Environmental History of Latin America*, 206.

Justice” this scholarship further criticised the unfair and disproportionate impact of environmental policies along the lines of race, colour and class, even within the global North.

This critical scholarly tradition seems to have evoked the derision for Carson in Africa and in the global South, where environmentalism has struggled to connect with the historical problems of poverty, inequality and the legacy of colonialist and racist environmental violence. The ecocentrism of Carson’s *Silent Spring* has been viewed by anthropocentric environmentalists as diametrically opposed to the more human-oriented environmentalism appropriate for Africa and the global South.¹⁴ Contemporary critics of her work have even called her a ‘mass murderer’ responsible for the death of millions of Africans from malaria due to her hyperbole and apocalyptic alarmism which led the WHO to suspend the Global Malaria Eradication Program in 1969 and to stop funding anti-malaria spray programs in Africa.¹⁵ This program had started in 1955 and was discontinued directly as a result of the global outcry instigated by *Silent Spring* about the cumulative effects of DDT on the ecosystem. However, African governments still remain opposed to the global ‘ban’ on DDT.¹⁶ This background has clouded a critical understanding and historical reading of Carson in the contextualised realities of Africa, where *Silent Spring* has been approached by most critics of ecocentrism with a hostility almost amounting to hyperbolic.¹⁷ This polemicisation springs from the tension between what Ramachandra Guha and Joan Martinez have termed “full stomach and empty belly environmentalism”.¹⁸ Implicit in this dichotomisation is the racial legacy it reveals within the

¹⁴ See Paul Driessen, *Eco-Imperialism: Green Power, Black Death* (Bellevue, WA: Free Enterprise Press, 2003). Driessen attacks the ecocentric environmental lobby groups from the global North that value wildlife and ecology above human lives. He also further questions the scientific pedigree of the DDT claims in *Silent Spring*.

¹⁵ David Kinkela, *DDT and the American Century: Global Health, Environmental Politics and the Pesticide that Changed the World* (Chapel Hill, NC: University of North Carolina Press, 2011), 145. Also, US Senator Tom Coburn declared in 2007 that ‘millions of people, particularly children under five, died because governments bought into Carson’s junk science claims about DDT.’ The bestselling novelist Michael Crichton in one of his novels, titled *State of Fear*, blames Carson for the DDT ban that ‘killed more people than Hitler’, and he puts the death toll at 50 million. See <https://e360.yale.edu/features/rachel-carsons-critics-keep-on-but-she-told-truth-about-ddt>, accessed 26 February 2019.

¹⁶ In July 2013, the heads of state and government of the African Union adopted a resolution calling for the continued use of DDT for malaria eradication in the continent despite mounting concerns from some environmentalists in the global North.

¹⁷ As a result of propaganda from critics of ecocentrism and other localised experiences, most African governments continue to use DDT for the control of malaria and they have criticized the ban as being irrelevant in Africa where malaria kills millions of people every year and is a more serious threat than DDT environmental contamination. In 1996 for instance South Africa withdrew the use of DDT for malaria control and this resulted in a huge surge in malaria cases, forcing the country to revert to DDT. Data for global use of DDT between 2000 and 2014 reveal that of the 19 countries listed as still openly using DDT, 14 are in sub-Saharan Africa. See Henk van den berg et al., ‘Global Trends in the Production and Use of DDT for Control of Malaria and Other Vector-borne Diseases’, *Malaria Journal* 16, 401 (2017), 1–8.

¹⁸ Guha and Martinez, *Varieties of Environmentalism*, 12.

context of Africa's colonial history of racial domination, exploitation and subjugation. Subsequently, 'full stomach environmentalism' has been described as anti-human, elitist and driven by rich, white NGOs and wealthy nations which impose environmental agendas that are either irrelevant or actively harmful to Africa and black Africans.¹⁹

However, this chapter argues that it is imperative to go beyond strident polemics and attempt an historically contextualised understanding of Carson in Africa since the concerns she raised have continued to permeate current debates on the use of pesticides in agricultural production and the attendant human and ecological cost in the global South. In the realm of tobacco farming, for example, Patricia Díaz Romo produced a 2011 documentary film that graphically portrayed the pesticide exposure of Huichol Indians who work as labourers in Mexico, exposing fatal poisonings, attendant poverty, vulnerability and reckless exploitation of labourers in the toxic zones that are Mexican tobacco farms.²⁰ There has also been increasing concern about the neuropsychiatric effects of pesticide exposure experienced by tobacco workers, with reports of incidences of depression and suicide linked to organophosphate pesticides.²¹ More revealing in that regard is a study on Brazil's tobacco farms that found 48 % of workers suffered from pesticide-related health problems.²² In Africa, the situation is equally disastrous. During a WHO public hearing on the Framework Convention on Tobacco Control in August 2000, a Kenyan member of parliament pointed out the scourge of pesticide use in tobacco farming in Africa and the impacts on poor black peasant farmers and the natural environment.²³ These include pesticide-related ailments, unexplained miscarriages, infant mortality and poisoned rivers.²⁴

¹⁹ Andrew Ross, *Strange Weather: Culture, Science and Technology in the Age of Limits* (New York: Verso, 1991), 207–12.

²⁰ Patricia Díaz Romo, 'Huicholes y Plaguicidas' [Huichols and Pesticides], www.youtube.com/watch?v=-5k7Xg8JuMI, accessed 11 April 2018.

²¹ Thomas Arcury and Sarah Quandt, 'Health and Social Impacts of Tobacco Production', *Journal of Agromedicine*, 11, 3–4 (2008), 71–81.

²² R.M. Salvi et al., 'Neuro-psychiatric Evaluation in Subjects Chronically Exposed to Organophosphate Pesticides', *Toxicological Sciences*, 72, 2 (2003), 267–71.

²³ World Health Organisation, 'Tobacco and Poverty: A Vicious Circle' (2004), 6. Kenya has approximately 55,000 tobacco farming households. Despite the narratives of prosperity of the smallholders, research has revealed that these farmers are poor, vulnerable and exposed to dangerous chemicals. An epidemiological study revealed that 26% of tobacco workers in the country suffered from pesticide poisoning: see G.J.A. Ohayo-Mitoko et al., 'Acetylcholinesterase Inhibition as an Indicator of Organophosphate and Carbamate Poisoning in Kenyan Agricultural Workers', *International Journal of Occupational Environmental Health*, 3, 21 (1997), 195–200. Also see Qing Ling et al, 'The Economic Geography of Kenyan Tobacco Farmers' Livelihood Decisions', *Nicotine and Tobacco Research* (2019), 1–4.

²⁴ Statistics reveal that 86% of global tobacco production is concentrated in the low- and middle-income economies (i.e. the global South) where the use of agrochemicals imposes severe health and socio-environmental problems on the poor populations engaged in production. See Natacha Lecours et al, 'Environmental Health Effects of Tobacco Farming: A Review of Literature', *Tobacco Control*, 21, 2 (2012), 191–196.

While there are several historical works on pesticides and pest control in Africa, most of these examine the problem from the perspective of colonisation of land and control of nature, particularly from an epidemiological perspective.²⁵ These studies focus on colonial pest control programs for diseases such as trypanosomiasis, rinderpest, malaria and sleeping sickness that became popular in the discourses of colonial conquest and development from the 1930s. They, however, do not construct these histories within the narratives of environmentalism that were fashionable from the 1960s and put global scrutiny on some of the chemicals that were widely used for these large-scale pest and disease control projects.²⁶ There is also remarkably little research into southern Africa's historical reliance on pesticides. In particular, there has not been much research into the historical use of agricultural pesticides in Southern Rhodesia²⁷ and Zimbabwe.²⁸ In April 2018 the global human rights watchdog Human Rights Watch released a report focusing on child labour and other human rights abuses in the tobacco farms in Zimbabwe.²⁹ Even this report only glancingly alluded to the risks of nicotine poisoning and

²⁵ These authors focus more on African colonial ecology, entomology and epidemiology and neglect pest control programs in agricultural production. See John Ford, *The Role of Trypanosomiasis in African Ecology: A Study of the Tsetse Fly Problem* (Oxford: Clarendon Press, 1971); John Mackenzie, 'Empire and the Ecological Apocalypse: The Historiography of the Imperial Environment', in Tom Griffith and Libby Robin (eds) *Ecology and Empire: Environmental History of Settler Societies* (Edinburgh: Keele University Press, 1997), 215–28. Also see James Giblin, 'Trypanosomiasis Control in African History: An Evaded Issue?', *Journal of African History*, 31, 1 (1990), 59–80; K. A. Hoppe, *Lords of the Fly: Sleeping Sickness Control in British East Africa, 1900–1960* (Westport, CT: Praeger, 2003); Ian Scoones, 'The Politics of Trypanosomiasis Control in Africa', STEPS Working Paper 57 (Brighton: STEPS Centre, 2014).

²⁶ Ford, although writing around 1970, simply provides a cursory mention of the use of these insecticides in pest control and argues that their effects were less durable than social control, but he ignores the environmental and public health debates about their use which had gained momentum during this time.

²⁷ Southern Rhodesia is modern-day Zimbabwe. The country gained its independence from white minority settler rule on 18 April 1980.

²⁸ The most recent work and perhaps the only truly historical work on the subject is Peter Uledi and Godfrey Hove's 2019 study on state responses to locust outbreaks in Southern Rhodesia between 1918 to the 1940s. The study examines the use of arsenic sprays to control locust swarms during the 1930s and 1940s and the impact of these sprays on the human and natural environment. The work is a good read on the development of the colonial pest control policies in Southern Rhodesia before the post-war pest control revolution. However, it doesn't extend into the post-war period to engage with the debates on environmentalism that emerged with the more widespread use of new pesticides such as DDT. See Peter Uledi and Godfrey Hove, 'A War of Man Against Locust! Locust Invasions and Anti-locust Campaigns in Salisbury, Southern Rhodesia, 1918–1940s', *South African Historical Journal*, 70, 4 (2018), 689–707. Much of the other existing literature is largely from the agricultural and environmental sciences and focuses on the contemporary challenges of pesticide use in production from a technical perspective. See Blessing Maumbe and Scott M. Swinton, 'Hidden Costs of Pesticide Use in Zimbabwe's Smallholder Cotton' (unpublished paper), American Agricultural Economics Association Annual Meeting, California, 28–31 July 2002; Hakan Berg et al., 'DDT and Other Insecticides in Lake Kariba Ecosystem', *Ambio* 21, 7 (November 1992), 444–50; Allen Mbanda and Mark Zaranyika, 'DDT Residue in Terrestrial Environment in the Mount Darwin–Rushinga Area: Zimbabwe', *Journal of Applied Science in Southern Africa*, 7, 2 (2001), 83–96; Shepherd Ndlela, 'Phasing out Harmful/Hazardous Yet Effective Synthetic Insecticides: How Will the Tobacco Farmer Manage the Pesticide Intensive Tobacco Crop?', *TRB Technical Report* (April 2017).

²⁹ Human Rights Watch, 'A Bitter Harvest: Child Labour and Human Rights Abuses on Tobacco Farms in Zimbabwe' (April 2018), 48–57.

exposure of farm workers to tobacco chemicals.³⁰ This chapter takes this report back in time by offering an historical survey of the pesticide problem and the pest control infrastructure in tobacco production since 1945 when pesticide use started gaining its global reputation. The major challenge, however, is that until the 1960s much of the conversation on the use of pesticides in agricultural production generally reflected only utter obliviousness to the link between pesticides and the contamination of the human and natural environment. Consequently, official records and archival material afford us only scanty detail on the problem, and much that can be gleaned is from anecdotal data. This chapter hopes to open the floodgates for more surveys in future to understand the environmental costs of using chemical pesticides in agricultural production in Southern Rhodesia. In attempting this reconstruction, the chapter is informed by the dictum of Donald Worster that as environmental historians we should tell a story of the past that discourages ‘irresponsibility in the present’.³¹ Consequently in telling this story, this chapter invokes Carson’s *Silent Spring*, reading it in an African context to show how the local and the global can interact within the broad spectrum of modern environmentalism—thus ‘glocalising’ and not ‘globalising’ *Silent Spring*.³² In taking the context of the global South seriously, this chapter bridges the neglected study of Carson with the ongoing attempts to understand environmentalisms that do not fall into the typical model offered by the global North. Thus the chapter engages with the concept of ‘slow violence’: that is, ecological violence that unravels itself gradually, is subtly invisible and scattered in temporal space.³³ It also discusses the concept of the ‘environmentalism of the poor’, which looks at environmentalism through the perception of livelihoods, necessity and survival as opposed to the ‘environmentalism of the rich’, which concentrates on aesthetics and quality of

³⁰ The above report uses only oral interviews to look at the problem of nicotine and pesticide poisoning, thus relying exclusively on oral testimony not supported by documented cases of chemical poisoning. The interviews, though important as windows into the social life of tobacco farm workers, neglect the prevalence of nicotine and pesticide poisoning. Consequently, many of the conclusions reached are superficially circumstantial, and an epidemiological study might be necessary to validate the findings of the report.

³¹ Donald Worster, ‘The Two Cultures Revisited: Environmental History and the Environmental Sciences’, *Environment and History*, 2, 1 (February 1996), 3–14.

³² The term “glocalisation” is used to denote a rejection of framing linear prescriptive global narratives around *Silent Spring*. Rather the chapter favours a more contextualised and ideographic framing based on different set of social, economic and political local realities. This does not, however, delink the local from the global, but simply gives it a more comprehensible context. William Vogt’s epoch-making book in 1948 *Road to Survival* written long before *Silent Spring*, was novel in its ability to illustrate this interconnectedness of global environmental histories and how local ecologies were integral to a larger global whole.

³³ The concept of “slow violence” caused by pesticide contamination and nuclear fallout is the chief motif in *Silent Spring*. For a more comprehensive conceptualisation of “slow violence” see Rob Nixon, *Slow Violence and the Environmentalism of the Poor* (Cambridge, MA: Harvard University Press, 2011), 2.

life.³⁴ The chapter further extend the class-based concept of the ‘environmentalism of the poor’ into illuminating how racial identity also created biases that led to discrimination in environmental policies and practices and the construction of ‘environmental racism’ in colonial Africa.³⁵ In this sense, Filomina Steady has underscored that ‘environmental racism’ is based on the ‘structural expendability’ of black Africans that is traceable to Western hegemonic proclivities derived from the history of the slave trade and colonialism in which Africans were reduced to ‘no-humans’ or subhuman to justify their oppression based on race and white privilege.³⁶ She further argues that the expendability of Africans and minority agricultural populations, built for many years on the basis of racial identity, still continues to shape the agenda of the contemporary neo-liberal global economy where African and Caribbean countries have been ruined by Northern chemical processes that destroy the environment and sustainable agriculture.³⁷ Although *Silent Spring* did not allude explicitly to race, class or any power dynamics, the chapter will show that it strongly connects with the ‘environmentalism of the poor’, ‘slow violence’ and ‘environmental racism’ because of its passionate activism against the power of big chemical companies and their toxic hold on the American subalterns.³⁸ The colonial pest control programs in Africa were also much of a reflection of this intersection

³⁴ Guha and Martinez popularised the concept in the 1990s. Nixon captures the term as signifying a condition where a new official landscape is formally imposed on a vernacular one. A vernacular landscape is one which is integral to the socio-environmental dynamics of the community, and an official landscape denotes a bureaucratically rewritten landscape devoid of existing socio-environmental norms. For further readings on the concept see Joan Martinez-Alier, *The Environmentalism of the Poor: A Study of Ecological Conflicts and Valuation* (Cheltenham: Edward Elgar Publishing, 2002).

³⁵ The concept of Environmental racism emerged from the 1960s during the American civil rights movement. It was connected to how race was at the heart of social policy in the urban environment where toxic waste was dumped in African-American areas, leading to widespread protests in the late 1970s. These protests led to the publication of a seminal report by the Commission for Racial Justice entitled “Toxic Waste and Race”, which concluded that race was the most definitive variable in the location of waste facilities even more than poverty. See Robert D. Bullard, *Confronting Environmental Racism: Voices from the Grassroots* (Boston, MA: South End, 1993); Clenora Hudson-Weems, ‘Environmental Racism: Black Landowners, and the Making of a New Hilton Head—An Emmett Till Continuum’, in Filomina Steady (ed), *Environmental Justice in the New Millennium: Global Perspectives on Race, Ethnicity and Human Rights* (New York: Palgrave Macmillan, 2009); Filomina Steady, ‘Environmental Justice Cross-Culturally: Theory and Praxis in the African Diaspora and in Africa’, Steady (ed), *Environmental Justice in the New Millennium*. In Africa and the global South, environmental racism involved the deliberate pollution of the environment and settlements with toxic chemicals, leading to death and disease, and the physical dislocation from the natural environment through forced removals. See M.F. Phakane and Filomina Steady, ‘Nuclear Energy Hazardous Waste, Health, and Environmental Justice in South Africa’, in David A McDonald (ed), *Environmental Justice in South Africa* (Cape Town: University of Cape Town Press, 2002); Farieda Khan, ‘The Roots of Environmental Racism and the Rise of Environmental Justice in the 1990s’ in McDonald (ed), *Environmental Justice in South Africa*.

³⁶ Steady, ‘Environmental Justice Cross-Culturally’, 49.

³⁷ Steady, ‘Environmental Justice Cross-Culturally’, 51.

³⁸ Nixon, *Slow Violence and the Environmentalism of the Poor*, xi.

between science, power, race, ecology and politics, and this had significant leverage in shaping the intervention strategies and the impact on the human and natural environment.³⁹

In contemporary postcolonial Africa, environmentalism has continued to be defined through the perceptions of the west to the detriment of local capacities and conditions.⁴⁰ Robert Nelson identifies a tendency where, under the banner of saving the African environment, African people have been subjected to a new form of ‘environmental colonialism’, and environmental activism in Africa has come to exhibit a neo-colonial character.⁴¹ Paul Driessen categorises the ideological environmental movement from the North operating in the global South as constituting a form of ‘eco-imperialism’.⁴² Within the context of all this, therefore, this chapter hopes to contribute to the historiography of pesticide use in Africa and the framing of a more contextualised understanding of Carson’s environmentalism within the global South.⁴³

THE POST-SECOND WORLD WAR ‘PESTICIDE TREADMILL’ AND PEST CONTROL IN SOUTHERN RHODESIA, 1948–1964.

The Second World War saw a prodigious growth of the pesticide and chemical industry.⁴⁴ During the development of chemical formulas to use as agents of chemical warfare, a substantial number of chemicals were created and stockpiled which had lethal potency to both humans and insects. These chemicals were being manufactured by big chemical companies such as the Swiss-based Geigy company which had subsidiaries in various countries in the

³⁹ See Ford, *The Role of Trypanosomiasis in African Ecology* and Scoones, ‘The Politics of Trypanosomiasis Control in Africa’, 11.

⁴⁰ In most cases pest control programs for public health in Africa are run and sponsored by NGOs from the global North who set the “environmental agenda”. This agenda is usually influenced by global discourses and not vernacular experiences.

⁴¹ Robert Nelson, ‘Environmental Colonialism: Saving Africa from Africans’, *The Independent Review*, 8, 1 (Summer 2003), 65–86.

⁴² Paul Driessen, *Eco-Imperialism: Green Power, Black Death*. Also, Alfred Crosby uses the term “ecological imperialism” to denote the changing face of vernacular ecologies as a result of European colonial settlement in North and South America, which introduced new human beings, new weeds, new animals, new pathogens and new diseases. See Alfred W. Crosby, ‘Ecological Imperialism: The Overseas Migration of Western Europeans as a Biological Phenomenon’ in Donald Worster (ed), *The Ends of the Earth: Perspectives on Environmental History* (Cambridge: Cambridge University Press, 1988), 111.

⁴³ See also Hedley Twidle, ‘Rachel Carson and the Perils of Simplicity: Reading *Silent Spring* from the Global South’, *ariel: A Review of English Literature*, 44, 4 (2014), 49–88. This is, however, an eco-critical analysis and frames *Silent Spring* as more a literary text, deploying textual criticism for its analysis. Nevertheless, Twidle juxtaposes the work of Arundhati Roy and Carson in trying to understand how Carson’s ideas of ecology and toxicity carry meaning in the global South.

⁴⁴ Christopher D. Cook, ‘The Spraying of America’, *Earth Island Journal*, 20, 1 (Spring 2005), 34–8.

global North such as England, Canada and the United States.⁴⁵ It was in the United States, however, that the chemicals industry grew most substantially to meet the demands of the war effort.⁴⁶ The production of these synthetic pesticides in the United States had reached 124 259 000 lbs in 1947.⁴⁷ When the war ended these chemicals slowly found wonder uses in agriculture where they were hailed as the saviours of mankind from pests and assumed an unparalleled global reputation. The most famous of these synthetic chlorinated hydrocarbons DDT had been synthesised by a German chemist in 1864 but became well known as an insecticide in 1939. It was used extensively during the war to spray Allied soldiers against typhus in the Mediterranean and malaria in the tropics.⁴⁸ DDT catalysed an explosive revolution and expansion of the pesticide industry. This was largely a result of the lower costs and unprecedented effectiveness of the insecticide and other chlorinated hydrocarbon pesticides which led to their widespread use in the fields of agro-industry and public health.⁴⁹ The result of this monumental success was the expansion of the pesticide industry in general which was so widespread and rapid that it ‘steamrolled’ pest control technology as chemical pest control expanded in scale.⁵⁰ As development experts came to put their faith in the power of science and American capitalism to modernise backward communities in the post-war years, the large-scale use of DDT in the global North was replicated in the global South as an important technology ‘to break the cycle of poverty, malnutrition and disease’.⁵¹

In Southern Rhodesia, DDT was registered for agricultural use in 1946, and by 1947 it was being used following an army worm outbreak in maize in early January (first in Gatooma before spreading to Victoria, Salisbury and Nyamandlovu districts).⁵² See map below.

⁴⁵ O.T. Zimmerman and Irvine Lavine, *DDT: Killer of Killers* (Rochester, NY: The Record Press, 1946), 39.

⁴⁶ Between 1943 and 1944, 15 American chemical companies were producing DDT and other chemicals for the armed forces.

⁴⁷ Carson, *Silent Spring*, 14.

⁴⁸ William Cronon, ‘Silent Spring and the Birth of Modern Environmentalism’, in Dunlap (ed), *DDT, Silent Spring, and the Rise of Environmentalism*, xi.

⁴⁹ Robert Van den Bosch, *The Pesticide Conspiracy* (Berkeley, CA: University of California Press, 1978), 21.

⁵⁰ In the United States during the post-war period, public health and agricultural experts engaged in development projects to eradicate famine and disease through deployment of modern pest control technologies using DDT and other chlorinated hydrocarbons. Carson documents such several government-sponsored spray programs. In 1954, the US Department of Agriculture started a spraying program to eliminate the Japanese beetle in Illinois and applied dieldrin to 1,400 acres by air; in 1955 another 2,600 acres were treated similarly. In 1959, 27,000 acres in Michigan were dusted with pellets of aldrin.

⁵¹ Kinkela, *DDT and the American Century*, 9.

⁵² Report of the Division of Entomology, 1947.



FIGURE 12 DISTRICTS OF SOUTHERN RHODESIA, 1950.⁵³

DDT was found to be effective and was considerably cheaper than using gangs of African labour to physically pick up the worms; consequently, it formed the basis of tentative government recommendations for control in maize.⁵⁴ In 1947 the Pest Control Research Committee was set up by the Rhodesia Tobacco Association (RTA) to speed up research on tobacco pest control.⁵⁵ This followed the admission by the association in its report that year that work on the control of pests and diseases troublesome in Rhodesia had not progressed as far as could be wished. This pest and diseases control infrastructure became more important following the post-war tobacco boom that witnessed production increasing on the back of favourable market conditions and the entry of many new growers as discussed in the previous

⁵³ <http://www.freewebs.com/dudleywall/Rhodesia%20districts%20x.jpg>

⁵⁴ Report of the Division of Entomology, 1947.

⁵⁵ NAZ, S25101/1, TRB Tobacco Pest Spraying Scheme, J.C.F. Hopkins, 'Field Spraying and the Control of Leaf Diseases on Tobacco: Review Report—1948'.

chapter. The government, through a subsidised scheme, agreed to cooperate with the RTA and a private company Pest Control Africa Ltd to investigate tobacco diseases. Spraying was to be carried out on various tobacco farms over four years starting from June 1947.⁵⁶

Field spraying operations were conducted on an extensive scale on the tobacco farms, beginning in 1948.⁵⁷ In 1948 DDT was listed by Pest Control Africa as one of the new insecticides to be tested on tobacco, amongst other chlorinated hydrocarbons that included benzene hexachloride, chlorinated camphenes and Thiophos 3342.⁵⁸ By 1955, DDT and the organochlorine insecticide aldrin were being recommended by the Tobacco Research Board (TRB) and were also being widely used by many growers for the control of cutworm (*Agrotis ipsilon*) in both the nursery and field operations.⁵⁹ Not only was DDT being used in the field and nursery, it was also used in the cleaning of tobacco shades and applied as whitewash to leave a residual coating on the walls to control the tobacco beetle (*Lasioderma serricorne*) in cured leaf.⁶⁰ Nematocides and soil fumigants such as ethylene dibromide (EDB) and methyl bromide⁶¹ for the control of eelworm and root knot nematodes were also being recommended because of the dwindling supply of so-called virgin lands.⁶² Soil fumigation experiments were started at the tobacco research station in 1949.⁶³ By 1957, the TRB reported that soil fumigants were extensively used throughout the federation⁶⁴ both in seedbeds and in lands for the control of eelworms.⁶⁵ A 1961–62 survey revealed that out of the total of 224,000 acres of tobacco

⁵⁶ NAZ, S25101/1, TRB Tobacco Pest Spraying Scheme, J.C.F. Hopkins, 'Field Spraying and the Control of Leaf Diseases on Tobacco: Review Report—1948'.

⁵⁷ NAZ, S25101/1, TRB Tobacco Pest Spraying Scheme, J.C.F. Hopkins, 'Field Spraying and the Control of Leaf Diseases on Tobacco: Review Report—1948'.

⁵⁸ NAZ, S2708/1, Pest Control and Plants, 1947–52, E. Parry Jones (Managing Director Pest Control Africa), 'Research on Tobacco Pests and Diseases'.

⁵⁹ Tobacco Research Board, 'Recommendations for Flue-Cured Tobacco', 1955, 8.

⁶⁰ Tobacco Research Board, 'Recommendations for Flue-Cured Tobacco', 1961, 12.

⁶¹ EDB was first used in 1926 as an insecticide in the United States, although it was first commercially registered in 1946. In 1973, several studies showed that it was carcinogenic and caused birth defects, leading to its ban as a soil fumigant in the United States in 1983. Methyl bromide is an organic bromide compound used as an insecticide. It first came into use in 1932 and was registered for use in the United States in 1961. It contains ozone layer-depleting chemicals and is highly toxic. For this reason, it was banned for use in tobacco fumigation and has been phased out in many countries, including Zimbabwe, by the 2005 Montreal Protocol.

⁶² Nematodes had been a recurring and perennial problem on tobacco farms since the expansion of tobacco production in the 1920s. Before the advent of nematocides in the 1940s, the only form of control was cultivating virgin lands, as tobacco grown on second-year lands would be badly affected.

⁶³ H. Weinmann, *Agricultural Research and Development in Southern Rhodesia, 1924–1950* (Salisbury: University of Rhodesia, 1975), 78.

⁶⁴ Between 1953 and 1963, the three Central and Southern African British colonies of Southern Rhodesia, Nyasaland and Northern Rhodesia amalgamated into the Federation of Rhodesia and Nyasaland. The federation amalgamated most services under one authority and the TRB became a federal institution responsible for tobacco research in all the three territories.

⁶⁵ 'Chemical Control of Eelworm', *Rhodesian Tobacco Journal* (July 1957).

planted in Southern Rhodesia that season the amount of land fumigated for nematode control was approximately 104 832 acres (46.8%).⁶⁶ Carson identifies nematocides and other forms of soil treatment as being harmful as they eliminate the biological life in the soil.⁶⁷ She further posits that biological control of eelworm and nematodes through planting resistant crops such as marigolds was more helpful than chemical sprays.⁶⁸ In Southern Rhodesia during this time, although grass-ley rotations were used in tobacco to control eelworms, the use of nematocides on rotated lands was highly recommended by the TRB.⁶⁹

By the 1960s, the proliferation of pests and diseases on the tobacco farms was becoming a growing concern to the state, especially since some of the insect pests were evidently becoming resistant to chlorinated hydrocarbons.⁷⁰ Organophosphate pesticides became more popular with farmers around the mid- to late 1950s.⁷¹ The pest control infrastructure that was developing in tobacco farms and the pest complex reflected the general trend in much of Africa from the late 1940s as colonial governments sought to expand the area of land available for occupation through pest eradication programs.⁷² In Rwanda-Burundi in the Rukwa Valley from August to November 1947 an experimental aerial “hopper” campaign was launched at an estimated cost of £57 000.⁷³ A ground dusting campaign was conducted in September and October using Messinger machines, DNOC dust and gammaxene.⁷⁴ In southern Africa the spraying campaigns became imperative as the numbers of new (white) settlers on the land increased following the post-Second World War settlement schemes and at a time when tsetse fly infestations were hampering expansion of settler agriculture and large-scale ranching.⁷⁵ In Southern Rhodesia, ground spraying operations with dieldrin and DDT were conducted, beginning in 1950 on an extensive scale in both African and European areas to control tsetse

⁶⁶ A. Daulton, ‘Survey of Land Use and Plant Parasitic Nematodes Control’, *Rhodesian Agricultural Journal* 59 (July–August 1962), 216-217.

⁶⁷ Carson, *Silent Spring*, 65.

⁶⁸ Carson, *Silent Spring*, 65.

⁶⁹ NAZ, F257/110/GEN, Tobacco General: Bulletins and articles 1963, R.C. Salmon (Officer in Charge Kutsaga Research Station), ‘Some Thoughts on Second Year Tobacco’.

⁷⁰ ‘Pests cost 20 million pounds every year’, *Rhodesian Herald*, 18 February 1961.

⁷¹ Chlorinated hydrocarbon insecticides are persistent and build up in the food chain and fatty acids of mammals; they are however less toxic to humans and animals. Organophosphate pesticides can easily be broken down and have no residual effect on the environment, but they are more lethal to humans and animals.

⁷² The Anti-Locust Research Centre in London observed in 1948 that Africa’s development was threatened by locust plagues as the hoppers would develop into dangerous pests as soon as suitable soils were found, and abundant food created by the clearing of forest areas and mechanised agriculture.

⁷³ *Record of Conference of the International Red Locust Control Service held in Salisbury on the 25th, 26th and 27th of May 1948* (Lusaka: Government Printer, 1948), 11.

⁷⁴ *Record of Conference of the International Red Locust Control Service held in Salisbury on the 25th, 26th and 27th of May 1948* (Lusaka: Government Printer, 1948), 11.

⁷⁵ Scoones, ‘The Politics of Trypanosomiasis Control in Africa’, 12.

flies, with huge numbers of native labourers mobilised to work in unsafe conditions while spraying large areas.⁷⁶ In South Africa, from the 1950s large quantities of a chlorinated hydrocarbon pesticide dieldrin mixed with fuel were sprayed in areas around Kruger National Park to control rinderpest.⁷⁷

These spraying programs were touted as depicting mastery over nature and constituting the colonial vision of modernising Africa expressed in such justificatory ecological catchphrases as “taming the wilderness”, “conquering the fly” and “pushing back disease”.⁷⁸ These ecological interventions were steeped in the notion of racial and cultural superiority under which European settlers perceived themselves to be the benchmark of progress and civilisation in Africa. White power and privilege formed the basis of this ideology which further casts blacks and other non-white racial groups as ignorant of and destructive to the environment, as well as being uncivilised.⁷⁹

Environmental historians have, however, disparaged this racial bigotry as ahistorical in understanding the complex dynamics of colonial ecologies. Alfred Crosby in particular framed the colonial pest and pathogen epidemics which devastated much of the colonial Americas as “exported” ecological disasters.⁸⁰ Orthodox Africanist scholarship has also challenged the narratives informing these colonial scientific interventions in African ecologies as being limited, disruptive and based on the logic of resource exploitation for settler gain.⁸¹ Helge Kjekshus blames colonialism for the spread of diseases and epidemics such as tsetse fly and trypanosomiasis in Tanzania.⁸² John McCracken, in his study of Malawi, was also highly critical of the role of experts in understanding the pest and ecological dynamics in cotton

⁷⁶ Scoones, ‘The Politics of Trypanosomiasis Control in Africa’ 13. For a comprehensive history of tsetse fly control in Southern Rhodesia, see Rory Pilosof, ‘A Brief History of Tsetse Control Methods in Zimbabwe and Possible Effects of Climate Change on Their Distribution’, *International Journal of African Development* 4, 1 (2016), 88–101.

⁷⁷ Scoones, ‘The Politics of Trypanosomiasis Control in Africa’ 13.

⁷⁸ John Mackenzie, ‘Empire and the Ecological Apocalypse; The Historiography of the Imperial Environment’, in Griffith and Robin (eds), *Ecology and Empire: Environmental History of Settler Societies*, 215–28. Also see J. Giblin, ‘Trypanosomiasis Control in African History—An Evaded Issue’, 59–80 and Hoppe, *Lords of the Fly*. These works provide a framework for understanding how colonial pest control programs were justified in the language of modernisation such as “taming the wilderness”, “conquering the fly” and “pushing back disease”.

⁷⁹ David Anderson and Richard Grove, *Conservation in Africa: People, Politics and Practice* (Cambridge: Cambridge University Press, 1987), 4.

⁸⁰ Crosby, ‘Ecological Imperialism’, 112.

⁸¹ Crosby, ‘Ecological Imperialism’, 112.

⁸² Helge Kjekshus, *Ecology Control and Economic Development in East African History: The Case of Tanganyika, 1850–1950* (London: Heinemann, 1987).

production.⁸³ Although focusing on the period before the end of the Second World War and the advent of large-scale chemical pest control programs in Africa, these works' challenge to science and its utility in the reshaping of vernacular landscapes and ecologies share affinities with the environmentalism in *Silent Spring*, which questioned society's unflinching faith in the scientific control of nature.

Despite the prevalent scepticism of the utility of colonial knowledge systems in African ecologies, revisionist scholars in the 1990s came to view the colonial scientific and technological developments as being core to imperial development and playing a critical role towards the facilitation of effective exploitation of natural resources for agriculture and industry through environmental transformation.⁸⁴ In the case of Southern Rhodesian tobacco, the scientific knowledge of pest control, however, failed because the problem was linked to the increases in production which followed the post-war boom as tobacco overtook gold to become the principal export earner in 1947.⁸⁵ With increased acreages to meet the huge demands of the export market,⁸⁶ the pest pressure also increased as a result of the changing production patterns which altered the natural ecosystem and created a pest explosion as a result of human ecological engineering. This evokes Carson's prescient musing in *Silent Spring*; "we are told that the enormous and expanding use of pesticides is necessary to maintain farm production. Yet is our real problem not one of over production?"⁸⁷

There were several outbreaks of various tobacco diseases in most parts of the country.⁸⁸ An outbreak of tobacco rosette occurred in the Lomagundi area in December 1953, leading to total losses of seedbeds and November plantings.⁸⁹ Despite a determined effort by growers to spray with parathion, the disease was not checked, and by the end of February 1954 the disease was

⁸³ John McCracken, 'Experts and Expertise in Colonial Malawi', *African Affairs*, 81, 322 (1982), 101–116.

⁸⁴ See Helen Tilley, 'African Environments and African Social Sciences: The African Research Survey, Ecological Paradigms and British Colonial Development', in William Beinart and Joan McGregor (eds), *Social History and African Environments* (Oxford: James Currey, 2003); William Beinart, Karen Brown and Daniel Gilfoyle, 'Experts and Expertise in Colonial Africa Reconsidered: Science and the Interpenetration of Knowledge', *African Affairs*, 108, 432 (July 2009), 413–33.

⁸⁵ David M. Rowe. *Manipulating the Market: Understanding Economic Sanctions, Institutional Change and the Political Unity of Southern Rhodesia* (Ann Arbor, MI: University of Michigan Press, 2001), 69.

⁸⁶ Southern Rhodesia's tobacco exports rose from an average of 14,000 metric tons during 1940–45 to 121,000 metric tons in 1965 accounting for approximately one third of the free world's tobacco exports.

⁸⁷ Carson, *Silent Spring*, 8.

⁸⁸ Various outbreaks of tobacco anthracnose were reported in the *Rhodesian Herald* between 1953 and 1958 as having been prevalent in Marandellas, Karoi, Lomagundi and Banket Districts.

⁸⁹ NAZ, F149/TOB/360, Tobacco diseases and pests, 1956–58, Tobacco extension officer to Senior tobacco extension officer, 21 April 1954.

reported from all over the colony.⁹⁰ The failure of the spraying to contain the disease did little to dampen the firm faith in and conviction of the utility of chemical control. The TRB insect control program for seedbed and field control under a government notice in 1958 recommended aldrin, dieldrin, parathion, DDT and malathion for routine pest control.⁹¹

In 1961, the President of the Pesticides Association of Rhodesia and Nyasaland, W.L. Cosker, lamented that the damage caused by pests to tobacco in Southern Rhodesia amounted to £10 million annually.⁹² In 1960, there was a serious outbreak of “Bushy top disease”,⁹³ described as “the biggest menace to the tobacco growing industry”.⁹⁴ The ravages of the bushy top virus were so severe that there was an urgent call by tobacco farmers exhorting the government to introduce legislation to force all growers to comply with TRB recommendations for regular sprayings.⁹⁵ Because of this huge surge in bushy top, systemic pesticides⁹⁶ were now being recommended by the TRB for use on tobacco. In 1960, the first systemic insecticide used in Southern Rhodesia, Rogor 40,⁹⁷ was unveiled.⁹⁸ The TRB noted that the systemic insecticide would reduce the incidence of virus diseases in certain plants since it was more persistent than malathion and parathion.⁹⁹ In 1962, a second systemic pesticide (Menazone) for the control of bushy top and tobacco rosette was recommended by the TRB.¹⁰⁰ For the first time, the TRB recommended field spraying of Turkish tobacco as a routine measure to give protection against white mould, rosette and bushy top diseases.¹⁰¹

By November 1962, therefore, tobacco farmers in Southern Rhodesia were armed with the deadly triad of chlorinated hydrocarbons, organophosphates and systemic poisons. The pesticide revolution had been completed, yet the war on pests continued and, despite the

⁹⁰ NAZ, F149/TOB/360, Tobacco diseases and pests, 1956-58, Tobacco extension officer to Senior tobacco extension officer, 21 April 1954.

⁹¹ NAZ, F149/TOB/360, Tobacco Diseases and Pests, 1956-58, Federal Government Notice 1958: Plant Pest and Disease Regulations.

⁹² ‘Pests cost 20 million pounds every year’, *The Rhodesian Herald*, 18 February 1961.

⁹³ ‘Southern Rhodesian Growers Worried About the Spread of Tobacco Plant Diseases’, *The Rhodesian Herald*, 7 March 1961.

⁹⁴ ‘Southern Rhodesian Growers Worried About the Spread of Tobacco Plant Diseases’, *The Rhodesian Herald*, 7 March 1961.

⁹⁵ ‘Urgent call for law to force growers to curb Bushy top’, *The Rhodesian Herald*, 29 March 1961.

⁹⁶ Systemic pesticides work by being absorbed by the plant tissues and making the whole plant poisonous.

⁹⁷ Rogor, also known as dimethoate in the United States and fosfamide in Russia, was introduced and patented in the 1950s by a US chemical company, American Cynamid.

⁹⁸ ‘How to use systematics recommended for tobacco’, *The Rhodesian Herald*, 22 September 1960.

⁹⁹ ‘How to use systematics recommended for tobacco’, *The Rhodesian Herald*, 22 September 1960.

¹⁰⁰ ‘TRB releases new systemic for tobacco virus diseases’, *The Rhodesian Herald*, 15 November 1962.

¹⁰¹ ‘TRB releases new systemic for tobacco virus diseases’, *The Rhodesian Herald*, 15 November 1962.

accumulating deadliness and toxicity of the chemicals which kept on escalating at each stage of the chemical evolution, the pest problem remained. Despite a surge in the use of hitherto unknown chemicals whose toxicity to human and natural life kept on escalating, no regulations were put in place to control pesticide usage in Southern Rhodesia, just as was the case elsewhere in the world at this stage. There were several risks of contamination and poisoning, particularly on the tobacco farms where all the work was done by African labourers who were politically largely powerless.¹⁰² Rob Nixon, in discussing environmental “slow violence”, has shown how disempowered social groups are usually the casualties of environmental violence.¹⁰³ He points out that the poor suffer the challenge of invisibility and amnesia, and usually remain on the margins of official memory.¹⁰⁴ This “slow violence” transcends defined boundaries in time and space and happens over extended geographical and technological displacements, which hides its severity and, in retrospect, the human and environmental costs.¹⁰⁵ Ian Scoones has demonstrated how power dynamics during the colonial period indelibly etched themselves on pest control programs that followed a top-down technocratic approach.¹⁰⁶ This required mobilising a subservient African labour force in highly dangerous ground-spraying campaigns. Africans were the expendable race and, as one observer put it, “under colonialism, you could tell people what to do without masks, without gloves, in the sheer heat of the dry season. Who cared because you could get the people? There were armies of people with knapsacks on their backs. There were used as slaves”.¹⁰⁷ This generic reference to the conditions under which pest control programs were conducted in Africa and the plight of the disempowered African labourers is very much akin to the situation in Southern Rhodesia where chemical field spraying was done by black workers. Although in some cases pest control was conducted using aerial sprays, these were expensive, and ground spraying operations using knapsack sprayers and African labour were conducted on a more extensive scale on Southern Rhodesian farms. It is impossible to ascertain the magnitude of the slow chemical violence on the tobacco farms in Southern Rhodesia in the absence of any available evidence, but it may

¹⁰² The concept of power and class in environmentalism has received a great deal of scholarly attention since the entry of “Environmental Justice” as a critical concept in ecocriticism and environmental history in the 1990s. See Robert Bullard, *Dumping in Dixie: Race, Class, and Environmental Quality* (Boulder, CO: Westview, 1990); Andrew Hurley, *Environmental Inequalities: Class, Race and Industrial Pollution in Gary, Indiana, 1945–1980* (Chapel Hill, NC: University of North Carolina Press, 1995).

¹⁰³ Nixon, *Slow Violence and the Environmentalism of the Poor*, 2.

¹⁰⁴ Nixon, *Slow Violence and the Environmentalism of the Poor*, 6.

¹⁰⁵ Nixon, *Slow Violence and the Environmentalism of the Poor*, 7.

¹⁰⁶ Scoones, ‘The Politics of Trypanosomiasis Control in Africa’, 5.

¹⁰⁷ Scoones, ‘The Politics of Trypanosomiasis Control in Africa’, 5.

be that there were generations of silent casualties. After all, colonial authorities were notorious for their lack of concern for the health and safety of their black employees.¹⁰⁸

LOCATING SOUTHERN RHODESIA IN THE GLOBAL PESTICIDE REGIME AND THE ENVIRONMENTAL BACKLASH, 1965–70

From the 1960s, based on Carson's revolutionary ideas in *Silent Spring*, a nascent global movement had begun that interrogated the impact of pesticides on the environment. This movement, which started in the United States, focused primarily on the residual effects of chemical pesticides on the environment and the accompanying hazards to humans and wildlife. In 1962, Carson's book opened a floodgate. This trickle became a public stream that filtered into official discourses about the long-term effects of pesticides use in agricultural production. Carson's work reached policy makers, government agencies, environmental scientists and chemical manufacturers in the United States and elsewhere in the global North.¹⁰⁹ It evoked a fierce and wide-ranging debate in the United States: Carson faced visceral opposition from the chemical industry who accused her of being an agricultural propagandist and, in a predictably sexist attack, a catastrophising "spinster with an affinity for cats".¹¹⁰ Her work, however, culminated in pesticide use becoming a subject of agricultural policy intervention globally by the mid-1960s. The report of the President's Science Advisory Committee (PSAC) in the United States (1963) became the first official government critical evaluation of the hazards of pesticides.¹¹¹ Amongst other things it called for the need to monitor levels of pesticide residues in the environment and for the federal government to restrict wide-scale use of persistent insecticides.¹¹² The report went further and poignantly stated that, "until the publication of

¹⁰⁸ Scoones, 'The Politics of Trypanosomiasis Control in Africa', 14.

¹⁰⁹ There is an extensive literature which acknowledges the contributions of Carson to the environmental movement. See Mark Hamilton Lytle, *The Gentle Subversive: Rachel Carson, The Silent Spring and the Rise of the Environmental Movement* (New York: Oxford University Press, 2007); Linda J. Lear, 'Rachel Carson's Silent Spring', *Environmental History Review*, 17,2 (1993), 23–48; Ralph H. Lutt, 'Chemical Fallout: Rachel Carson's Silent Spring, Radioactive Fallout and the Environmental Movement', *Environmental History Review*, 9, 3 (1985), 210–225; Lawrence Culver, 'Reading *Silent Spring* as a Challenge for Contemporary Environmentalism', *RCC Perspectives* 7 (2012), 31–34.

¹¹⁰ Eliza Griswold, 'How "Silent Spring" Ignited the Environmental Movement', *New York Times*, 21 September 2012, www.nytimes.com/2012/09/23/magazine/how-silent-spring-ignited-the-environmental-movement.html, accessed 18 September 2018.

¹¹¹ For a full understanding of the import of the PSAC report see D.S. Greenberg, 'Pesticides: Whitehouse Advisory Body Issues Report Recommending Steps to Reduce Hazards to Public', *Science News Series* 40, 3569 (1963), 878–79.

¹¹² Linda J. Lear, 'Bombshell in Beltsville: The USDA and the Challenge of "Silent Spring"', *Agricultural History*, 66, 2 (Spring 1992), 151–170.

Silent Spring by Rachel Carson, people were generally unaware of the toxicity of pesticides”.¹¹³ The subsequent PSAC report (1965) concluded that environmental pollution by pesticides could be reduced significantly without losing efficiency.¹¹⁴

In North America, the environmental movement in the 1960s stemmed from the instigation of activists like Carson and drew much of its galvanising force from the power of the mass media and social movements that spoke to diverse national constituencies. But in the global South such prodding emerged largely from the state under pressure from globalising influences from the North, and in most cases this environmentalism was usually a mere smokescreen to comply symbolically with global norms largely for the purposes of national economic interests rather than genuine environmentalism. This must be understood in the context of the dichotomy between the environmentalism of affluent societies and the environmentalism of poor and less developed polities. North American environmentalism was deeply rooted within the liberal agenda of the mid-1950s championed by Arthur M. Schlesinger and John Kenneth Galbraith.¹¹⁵ The liberal agenda espoused during the period of post-war American affluence visualised the environment as a public good that was being defiled by overconsumption, and identified the need to expand the role of government in addressing its degradation.¹¹⁶ The preservation of public spaces for aesthetic and amenity purposes thus framed the discourse of American environmentalism. Shawn Miller points out that for rich nations environmentalism is driven by the alienation of people from nature because of modernisation, while for poor countries it is motivated by the knowledge that livelihoods depend on nature for survival.¹¹⁷ In other words: “the first is driven by dreamy myth, the second by stark reality”.¹¹⁸ While this binary generally holds true in explaining the contrast in environmentalisms between the North and the South, it is limited in its ability to unpack the various racialised nuances within the global South where racial identity is a big factor and predetermines the different sites of location for blacks and whites within the environmental movement. Thus, in much of colonial Africa, the agenda of the mainstream environmental movement (just as in the global North) appealed to the affluent white minority interests broadly centred on the preservation of nature and wildlife sanctuaries,

¹¹³ Lear, ‘Rachel Carson’s *Silent Spring*’, 151-170.

¹¹⁴ Graham, *Since Silent Spring*, 179.

¹¹⁵ See Arthur Schlesinger, ‘The Future of Liberalism: The Challenge of Abundance’, *Reporter*, (3 May 1956), 8–11 and John Kenneth Galbraith, *The Affluent Society* (Boston: Houghton Mifflin, 1958).

¹¹⁶ Adam Rome, ‘Give Earth a Chance: The Environmental Movement and the Sixties’, *Journal of American History*, 90, 2 (September 2003), 525–54.

¹¹⁷ Miller, *An Environmental History of Latin America*, 215.

¹¹⁸ Miller, *An Environmental History of Latin America*, 215.

while alienating black Africans who were often accused of degrading the environment.¹¹⁹ The influence of environmentalism from the global North thus percolated through racial lines, affecting and influencing the black Africans and Europeans in different ways, but largely in a configuration in which black Africans were the victims of the top-down technocratic interventions that were meant to protect the environmental and economic interests of settler society.

The board of the Southern Rhodesian Tobacco Advisory Committee (a body representing manufacturers and merchants in the United Kingdom) was the first in the country to react to the concerns stirred by Carson's work and lobbied the government of Southern Rhodesia on the need for pesticide control regulation of tobacco.¹²⁰ As this chapter will show, the motive behind this was largely to protect the reputation of the lucrative tobacco export leaf for being pesticide contamination free more than any genuine environmentalism. The state was compelled to act accordingly and promptly launched a Pesticide Approval Scheme to guide growers in selecting suitable pesticides. The scheme emphasised the need for a handbook to inform farmers on how to apply pesticides safely and effectively.¹²¹ The TRB noted that the Pesticide Approval Scheme was becoming more necessary as growers were getting confused by the "increasing number and complexity of pesticides", and consumers had been alerted to the "presence of pesticides in some agricultural produce by the recent publicity on the misuse of pesticides".¹²² This publicity was a result of Carson's work and the seismic waves it had stimulated in influencing governments of various states all over the world over the need for pesticide regulations, and it reflects the far-reaching influence *Silent Spring* had in propagating new narratives on pesticide use—even in Africa. These narratives were, however, scripted to meet local contexts.

In Southern Rhodesia, the TRB insisted that it had to be satisfied that the materials were safe and did not impart undesirable residues to the leaf, increasing health hazards to the consumers

¹¹⁹ Khan, 'The Roots of Environmental Racism', 16. In Southern Rhodesia, this environmentalism based on aesthetics was much more visible through the displacement of Africans from their areas to pave way for the construction of dams such as Lake Kariba and Lake Mutirikwi (formerly known as Lake Kyle) during the 1950s and 1960s which were turned into centres for white recreational pleasure and playgrounds for Europeans in Southern Rhodesia. These became Europeanised landscapes within which whites viewed wildlife and engaged in boating, while Africans could not access these conservation landscapes. See Joost Fontein, *Remaking the Mutirikwi: Landscape, Water and Belonging in Southern Zimbabwe* (James Currey: Suffolk, 2015), 215-229.

¹²⁰ 'How pesticides Gain the Stamp of Approval', *Rhodesian Tobacco Journal* (May 1965).

¹²¹ 'How Pesticides Gain the Stamp of Approval', *Rhodesian Tobacco Journal* (May 1965).

¹²² 'How Pesticides Gain the Stamp of Approval', *Rhodesian Tobacco Journal* (May 1965).

and endangering the export market.¹²³ Furthermore, for the first time all chemicals used in tobacco were supposed to carry triangle emblems signifying the level of their toxicity, colour-coded from green to purple.¹²⁴ Instructions for use and safe disposal, and procedures for treatment in the event of accidental poisoning were also supposed to be required in the labelling. The interests of these initiatives were of course disconnected from the concern about the environment, and more intensely attached to securing a global market for Rhodesian tobacco, hence this was more an imposed environmentalism emanating from concerns of British tobacco buyers and merchants. The TRB argued that “the scheme protects the industry and assures potential buyers of Rhodesian leaf that the use of pesticides on Rhodesian leaf is controlled and responsible”.¹²⁵ These provisions were gazetted under the Fertilisers, Farm Seeds and Remedies Regulations of 1965. During the same year the use of the herbicide maleic hydrazide on tobacco was banned in Southern Rhodesia following a report that had been published by the Department of Agriculture in the United States in May 1960 revealing that it changed the chemical composition and physical properties of the leaf in a way that would endanger cigarette smokers.¹²⁶

Just as in the United States, the 1965 legislation marked only a superficial turning point in perceptions of the use of pesticides on tobacco farms as sporadic official voices began a conversation around the responsible use of these products. C.H. Cronin, the technical manager of a Salisbury pest control firm, issued a warning on the dangers to operators on tobacco farms of being exposed to methyl bromide when fumigating seedbeds.¹²⁷ He pointed out that methyl bromide was an extremely toxic substance. He warned:

The effects of a single massive exposure are well known, but it has also been discovered that exposure to low concentrations over a long period of time may have severe prolonged effects on the human body. A number of such cases has been reported in the British medical literature ... these cases underline the view that Methyl Bromide is highly toxic and that recommended safety precautions must be observed. It is disastrous for a labourer using Methyl Bromide whose clothing has become contaminated to either sleep in the garments in a poorly ventilated room or to take them off and leave them beside the bed.¹²⁸

¹²³ ‘How Pesticides Gain the Stamp of Approval’, *Rhodesian Tobacco Journal* (May 1965).

¹²⁴ ‘How Pesticides Gain the Stamp of Approval’, *Rhodesian Tobacco Journal* (May 1965).

¹²⁵ ‘How Pesticides Gain the Stamp of Approval’, *Rhodesian Tobacco Journal* (May 1965).

¹²⁶ NAZ, F256/TOB/260, Tobacco Soil and Leaf Analysis Reports.

¹²⁷ ‘Tobacco farmers warned of poisoning danger’, *The Rhodesian Herald*, 22 April 1965.

¹²⁸ ‘Tobacco farmers warned of poisoning danger’, *The Rhodesian Herald*, 22 April 1965.

The TRB also advised growers that the modern chemicals used for the control of insects were highly toxic, and special precautions had to be taken by farmers and their labour force using them.¹²⁹ It advised against the drinking of alcoholic beverages before or during work as alcohol promotes the rapid absorption of organophosphates.¹³⁰ These conversations between officials and tobacco farmers were, however, largely limited to technical concerns, with little attempt to ensure limiting the exposure of the African workers who did all of the work on the tobacco farms, by making it compulsory through legislation for farmers to equip labourers with the requisite protective clothing, creating exposure-free work environments and providing information to labourers on safe use. In the absence of consumer pressure from Britain targeting pesticide exposure of black workers, white farmers showed less regard and concern for that aspect.

Nevertheless, by the beginning of the 1970s, a range of diverse attitudes—from both state and farmers—to the need for responsible chemical use in tobacco farms in Southern Rhodesia were congealing into something resembling a coherent policy. This was reflected in the legislative manoeuvres and initiatives by the TRB. Just as in the United States, these initiatives underwent severe public and state scrutiny. This was particularly true in key turning points between 1968 and 1970 as global perceptions on chemical use gained remarkable consensus on the need for not only controlled use of some of the products, but also their total ban in several spheres of agricultural production. In 1968, for example, the US Government under pressure from the environmental lobby issued notices cancelling four uses for DDT: on shade trees, tobacco plants, around homes and on marshes except for control of disease carriers, before banning it eventually in 1972.¹³¹ In West Germany, for example, the use of chlorinated hydrocarbon pesticides on foodstuffs had been banned, and there were considerations to extend the ban to its use on tobacco in 1973.¹³² Meanwhile a German tobacco-buying company had announced in 1970 that it would no longer purchase tobacco that had been directly or indirectly treated with aldrin, dieldrin or heptachlor.¹³³ As these developments were happening elsewhere, they took centre stage in Southern Rhodesia where an impassioned debate between various government agencies took place. This debate pitted the state Health Department against the

¹²⁹ Tobacco Research Board, 'Bulletin on Burley Tobacco Culture in Southern Rhodesia' (1970), 3.

¹³⁰ Tobacco Research Board, 'Bulletin on Burley Tobacco Culture in Southern Rhodesia' (1970), 3.

¹³¹ Kinkela, *DDT and the American Century*, 145.

¹³² NAZ, (unprocessed) 42-12-5F, Box number 126962, Pesticide control legislation, Minutes of the Meeting on Pesticides on Tobacco held 4 September 1970.

¹³³ NAZ, (unprocessed) 42-12-5F, Box number 126962, Pesticide control legislation, Minutes of the Meeting on Pesticides on Tobacco held 4 September 1970.

Ministry of Agriculture and reflected the unique and stark realities that had to be confronted in domesticating the American template of environmentalism in Southern Rhodesia.

The debate was the result of a report by the Acting Medical Officer of Salisbury in 1969 which had pointed out that toxic agricultural residues existed in food and called for the need for some form of legislation that could ban DDT and other persistent pesticides and replace them with less persistent sevin and malathion.¹³⁴ D.H. Saunders, the Director of Research and Specialist Services, opposed the ban of synthetic chlorinated hydrocarbons as “the total replacement of DDT, Lindane, Aldrin and Dieldrin by marathion and sevin would result in increased expenditure by the farmer”.¹³⁵ He argued that sevin and marathion were not replacements for these chemicals and such a substitution would cause “a most catastrophic breakdown in pest control with consequences on the economy, not only to the farmer, but the nation as a whole”.¹³⁶ As an alternative, he proposed a strict control on usage of these pesticides by a registration scheme which criminalised their sale and unlicensed distribution.¹³⁷

Dr Timothy Stamps of the city of Salisbury health department noted on 14 April 1969 that pesticides such as dieldrin remain in the soil for many years after use and contaminate underground water supplies.¹³⁸ He added that research was being directed into the effects of residual chemicals on fish and plants in the dams, and the ecology of the country could be affected if nothing was done.¹³⁹ He also observed that vegetable growers had crops that were found with unacceptably high traces of dieldrin.¹⁴⁰ In response, the Director of Research and Specialist Services countered with: “we do not propose to ban DDT, or other more persistent chlorinated hydrocarbons such as Dieldrin, but we shall seek to limit their use”.¹⁴¹

¹³⁴ NAZ, (Unprocessed) 42-12-5F, Box number 126962, Pesticide Control Legislation, D.H. Saunders cites the Report in his correspondence with the Secretary of Agriculture on 3 June 1969.

¹³⁵ NAZ, (Unprocessed) 42-12-5F, Box number 126962, Pesticide Control Legislation, D.H. Saunders to the Secretary of Agriculture, 3 June 1969.

¹³⁶ NAZ, (Unprocessed) 42-12-5F, Box number 126962, Pesticide Control Legislation, D.H. Saunders to the Secretary of Agriculture, 3 June 1969.

¹³⁷ NAZ, (Unprocessed) 42-12-5F, Box number 126962, Pesticide Control Legislation, D.H. Saunders to the Secretary of Agriculture, 3 June 1969.

¹³⁸ NAZ, (Unprocessed) 42-12-5F, Box number 126962, Pesticide Control Legislation Minutes of a Meeting to Consider Action on Control and Distribution of Pesticides Held on 14 April 1969 at 15 Cheshire Road Salisbury.

¹³⁹ NAZ, (Unprocessed) 42-12-5F, Box number 126962, Pesticide Control Legislation Minutes of a Meeting to Consider Action on Control and Distribution of Pesticides Held on 14 April 1969 at 15 Cheshire Road Salisbury.

¹⁴⁰ NAZ, (Unprocessed) 42-12-5F, Box number 126962, Pesticide Control Legislation Minutes of a Meeting to Consider Action on Control and Distribution of Pesticides Held on 14 April 1969 at 15 Cheshire Road Salisbury.

¹⁴¹ NAZ, (Unprocessed) 42-12-5F, Box number 126962, Pesticide Control Legislation, D.H. Saunders to Secretary of Agriculture, 20 August 1969.

The Research Services department continued with their denial, pointing out that in Southern Rhodesia (where pest pressure was more intense than in the United States and other temperate countries) it was very difficult to see how a complete ban on the persistent hydrocarbons would even be possible.¹⁴² In his correspondence with the Secretary of Agriculture, Saunders staunchly stated:

Aldrin, Dieldrin and DDT all have a part to play in controlling the pest complex which prevails in this country, and although research work is proceeding in an endeavour to replace these chemicals with less persistent and toxic ones, it is doubtful if a complete ban will be realised in the near future. Nevertheless, the ministry of agriculture has under consideration new regulations for more effective control of the sale, possession of DDT and other substances will be subject to control which will prove adequate.¹⁴³

The Minister of Agriculture shared similar views to the Department of Research and Specialist Services on the need for more regulation and control, as opposed to a complete ban on these chemicals. During a debate in the Legislative Assembly on 29 August 1969, the minister observed that the most convenient policy initiative would be to amend the Farm Seeds, Pests and Remedies Act in conjunction with and simultaneous to the introduction of a Hazardous Substance Act, arguing, “I believe that between these two pieces of legislation when they become law, the manufacture, distribution, packaging, sale, possession of DDT and other substances will be subject to control which will prove adequate”.¹⁴⁴

The denialism of the Ministry of Agriculture on the need to ban the use of highly persistent pesticides such as DDT persisted even in the face of growing and terrifying evidence. On 17 December 1969, the Doma Intensive Conservation Area (ICA)¹⁴⁵ wrote a letter to the secretary of the Natural Resources Board (NRB), Mashonaland North, reporting that because of DDT spraying in the catchment area of a dam, subsequent rainfall had washed much of the spray down into the dam.¹⁴⁶ In this dam a white farmer had stocked black bass which died after the subsequent spraying and rains. The bream in the same dam were also dead. The letter went further:

¹⁴² NAZ, (Unprocessed) 42-12-5F, Box number 126962, Pesticide Control Legislation, D.H. Saunders to Secretary of Agriculture, 20 August 1969.

¹⁴³ NAZ, (Unprocessed) 42-12-5F, Box number 126962, Pesticide Control Legislation, D.H. Saunders to Secretary Agriculture, 2 September 1969.

¹⁴⁴ Legislative Assembly Debates, 29 August 1969.

¹⁴⁵ Intensive Conservation Areas had been set up in white settler farming communities in 1948 for the conservation of natural resources. The ICAs were geographically demarcated units comprising several European farms which would pull resources together with state assistance towards such activities in the area as building contour ridges, afforestation, building dams and monitoring environmental degradation.

¹⁴⁶ NAZ, (Unprocessed) 42-12-5F, Box number 126962, Pesticide Control Legislation, Doma ICA District Secretary (R.N. Gallico) to Secretary Natural Resources Board, 17 December 1969.

The question arises on whether the water will be safe for humans and livestock and also what the effect will be if humans eat any of the dead fish or meat which has obviously been killed ... But it raises the question previously raised in other countries i.e. whether the use of DDT for field scale pest control is not altogether too risky, or whether it should be banned or severely curtailed.¹⁴⁷

The Natural Resources Board noted that the situation was potentially serious and had in fact posed serious problems.¹⁴⁸ Unsurprisingly, however, Saunders denied that the poisoning in the dam was a result of DDT spraying. In his letter to the Secretary of Agriculture he insisted that conventional application of DDT could never cause the death of large numbers of fish in a distant dam.¹⁴⁹ To him, current information was that once DDT is washed into the soil, it was very quickly absorbed by the soil particles and was not leached out, even in heavy rain. Even if washed into the dams, he argued, the DDT will only be slowly released from the soil particles and it was highly unlikely that that it would produce the observed massive kill of fish.¹⁵⁰ He concluded rather ambiguously:

It is more likely that pollution of this type is due to the misuse of DDT for example: drift from the ground (mist blowers and aerial spraying), washing of spray equipment or tipping of excess DDT on the tributaries of the dam for the purposes of catching fish. Properly used on the crops there should be no health hazard and I would emphasize that most poisonings have arisen from misuse.¹⁵¹

Despite these denials, however, a vast amount of evidence was building up in different quarters. The Rhodesian Veterinary Association was raising its voice on the accumulation of pesticide residues in animal tissues used for human consumption,¹⁵² the National Council of Women of Southern Rhodesia was also lobbying extensively about pesticide contamination of vegetables and instituted its own investigation.¹⁵³ These pressures, however, failed to elicit a robust state pesticide policy and only resulted in the token withdrawal of DDT for domestic and garden

¹⁴⁷ NAZ, (Unprocessed) 42-12-5F, Box number 126962, Pesticide Control Legislation, Doma ICA District Secretary (R. N. Gallico) to Secretary Natural Resources Board, 17 December 1969.

¹⁴⁸ NAZ, (Unprocessed) 42-12-5F, Box number 126962, Pesticide Control Legislation Natural Resources Board Secretary (D. J. S. Wilson) to Director of Water Development, cc Secretary of Agriculture and Secretary of Health, 23 December 1969.

¹⁴⁹ NAZ, (Unprocessed) 42-12-5F, Box number 126962, Pesticide Control Legislation, D.H. Saunders to Secretary of Agriculture, 6 January 1970.

¹⁵⁰ NAZ, (Unprocessed) 42-12-5F, Box number 126962, Pesticide Control Legislation, D.H. Saunders to Secretary of Agriculture, 6 January 1970.

¹⁵¹ NAZ, (Unprocessed) 42-12-5F, Box number 126962, Pesticide Control Legislation, D.H. Saunders to Secretary of Agriculture, 6 January 1970.

¹⁵² The Rhodesian Veterinary Association had written to the Secretary of Health on 13 January 1970 voicing their concerns about the accumulation of pesticide residues in animal tissues used for human consumption. They noted that they had a collection of results from samples already analysed which showed high levels of such residues.

¹⁵³ NAZ (Unprocessed), 42-12-5F, Box number 126962, Pesticide Control Legislation, National Council of Rhodesian Women to Minister of Health, 10 May 1970.

uses in 1973,¹⁵⁴ while it continued to play a bigger part in pest control in most crops (particularly maize, where it was used for the control of stalk borers). During the 1970s, Southern Rhodesia is estimated to have used 1 000 tonnes of DDT per year, with 300 tonnes used on maize.¹⁵⁵ The story was, however, quite different in tobacco where a modicum of control was established, largely because the sector relied on the export market which was insisting on the need to regulate pesticide contamination and could little afford to ignore the economic ramifications of non-compliance to the global pest control template.¹⁵⁶

“A SMOKESCREEN OF ENVIRONMENTALISM”? THE TOBACCO PESTICIDE CONTROL SCHEME, 1970–80.

Unlike other practitioners of agriculture in Southern Rhodesia, tobacco farmers relied more extensively on an export market for their crop. This export market had declined precipitously following the Unilateral Declaration of Independence (UDI) in 1965, as the white minority government severed political connection with Britain and illegally declared independence. Consequently, in 1966 the United Kingdom Government as a punitive measure started encouraging its manufacturers to boycott Rhodesian tobacco. This witnessed the country's tobacco exports falling drastically by 76 % from 120 898 tonnes in 1965 to 28 959 tonnes in 1966 with a corresponding fall of 82 % in export receipts from R\$93.9 million to a paltry R\$16.7 million.¹⁵⁷ Thus, when news reached Rhodesia that most European countries (particularly West Germany, which had become an important export market for Rhodesian leaf after UDI) were planning to ban the import of tobacco treated directly or indirectly with DDT or other hydrocarbon insecticides, it was imperative that they act promptly. From 1965, the TRB had operated an ill-defined and inchoate pesticide evaluation system. The scheme was largely voluntary and pesticide evaluation was done sporadically only for those growers who opted to be part of the pesticide monitoring program.¹⁵⁸ There was also no technical and legal infrastructure for a comprehensive mandatory pesticide control scheme. The scheme, however,

¹⁵⁴ This was legislated for under the Hazardous Substances Act of Southern Rhodesia, (1973).

¹⁵⁵ Ron Thomson, 'DDT: The Resurrection of an Old Threat to Africa's Wildlife', www.africahunting.com/threads/ddt-the-resurrection-of-an-old-threat-to-africa%E2%80%99s-wildlife.14737/, accessed 12 July 2018.

¹⁵⁶ The situation was different for other crops. For instance, the maize export consumer market was not making the same demands as the tobacco consumer market regarding pesticide contamination regulation, and also maize was largely grown for domestic consumption and was not a major export crop in Rhodesia.

¹⁵⁷ Rowe, *Manipulating the Market*, 74.

¹⁵⁸ Tobacco Research Board, 'Pesticides Use on Tobacco: A Review of International Trends and their Impact on Rhodesian Production', 31 August 1970.

made some minor headway in eliminating some chemicals with unwanted residues that were on the list of recommended pesticides. At the end of July 1970, heptachlor and dieldrin, which were recommended applications for the soil, had been dropped in favour of aldrin, which was less persistent and resulted in lower levels of residue.¹⁵⁹ In addition, any recommendations for the application of DDT to the leaf in the field was eliminated and replaced by monocrotophos—a systemic poison (now banned for use in the country).¹⁶⁰ The international trends and opinions on DDT use and the need to give assurances to overseas buyers, however, played a bigger part in the setting up of the tobacco pesticide control infrastructure, more than any local concerns about curbing contamination of the environment or human poisoning. The scheme certainly eliminated unacceptable levels of residues from the export leaf but did little to control or even monitor the use of these chemicals on tobacco farms, and the accompanying human and natural hazards. It was a scheme based on the commercial interests of the Rhodesian tobacco industry. The environmental aspect of the program was merely a smokescreen.

By September 1970 the key tobacco stakeholders in Southern Rhodesia considered that the best way to monitor the use of pesticides and create a deterrent in time for the 1970–71 crop would be by means of a random sampling on the tobacco sales floors before selling took place.¹⁶¹ They agreed on the need to set up legislation to enable this and ensure the confidence of the importing countries. They also agreed that the Tobacco Marketing Board (TMB) would invoke the powers of the Tobacco Marketing and Levy Act to prohibit the sale of tobacco that had been treated with aldrin, dieldrin or heptachlor.¹⁶² Where the levels of pesticide residues were above the permitted tolerances, or banned pesticides were detected, a full-scale investigation of the remainder of the crop on the farm would ensue.¹⁶³ An analytical unit worth R\$7 000 and running costs of R\$400 monthly was proposed as a preliminary budget.¹⁶⁴ The TMB noted with concern that although DDT was still recommended, it was highly suspect and there was a need to monitor its continued use to ensure that the West German standard of one part per million

¹⁵⁹ Tobacco Research Board, 'Pesticides Use on Tobacco: A Review of International Trends and their Impact on Rhodesian Production', 31 August 1970.

¹⁶⁰ Tobacco Research Board, 'Pesticides Use on Tobacco: A Review of International Trends and their Impact on Rhodesian Production', 31 August 1970.

¹⁶¹ NAZ, (Unprocessed) 42-12-5F, Box number 126962, Pesticide Control Legislation, Minutes of the Meeting on Pesticides on Tobacco held on 4 September 1970.

¹⁶² NAZ, (Unprocessed) 42-12-5F, Box number 126962, Pesticide Control Legislation, Minutes of the Meeting on Pesticides on Tobacco held on 4 September 1970.

¹⁶³ NAZ, (Unprocessed) 42-12-5F, Box number 126962, Pesticide Control Legislation, Minutes of the Meeting on Pesticides on Tobacco held on 4 September 1970.

¹⁶⁴ NAZ, (Unprocessed) 42-12-5F, Box number 126962, Pesticide Control Legislation, Minutes of the Meeting on Pesticides on Tobacco held on 4 September 1970.

(ppm) was not exceeded.¹⁶⁵ The TRB also admitted that it had evidence of the presence of DDT in quantities in excess of this standard as a result of drift from cotton spraying.¹⁶⁶ By August 1970, the TRB had begun raising red flags over the use of DDT within tobacco grading and storage buildings, calling for a suitable replacement for pest control in stored tobacco.¹⁶⁷ Its director, Ian McDonald, agonised that ‘there is a real danger of contamination of exposed leaf following contact with treated walls and floors.’¹⁶⁸

Consequently, the Tobacco Pesticide Contamination Investigation Committee came into being in 1970 under the chairmanship of Mike Butler, President of the Rhodesian National Farmers Union, to consider all aspects of chemical contamination arising from crop spraying and to regulate the use of DDT and other banned substances.¹⁶⁹ Representatives on the committee included RTA, The Department of Conservation and Extension, TRB and the cotton and grain commodity associations. The RTA noted that the purpose of the committee was to ensure that tolerance of toxic residues in tobacco remained lower than defined by legislation in other countries.¹⁷⁰ The Tobacco Marketing and Levy General Amendments Regulations Notice No. 3 of 1970 banned the use DDT and other pesticides¹⁷¹ for field applications, but as a result of lack of satisfactory alternatives its use was retained in seedbeds and as a soil treatment following transplanting.¹⁷² These control measures were adjudged to have been effective in containing the contamination of the tobacco leaf destined for export, so much so that in 1972, the Report of the TIMB gloated glowingly that growers were using pesticides responsibly and every case of contamination was now proved to have arisen from accidental causes, either from applications in farm buildings before the introduction of the regulations in 1970, or from drift during aerial spraying.¹⁷³ The report further noted that as a result of investigations only four flue cured and 10 burley crops were partially or entirely embargoed, resulting in the loss of

¹⁶⁵ NAZ, (Unprocessed) 42-12-5F, Box number 126962, Pesticide Control Legislation, Minutes of the Meeting on Pesticides on Tobacco held on 4 September 1970.

¹⁶⁶ NAZ, (Unprocessed) 42-12-5F, Box number 126962, Pesticide Control Legislation, Minutes of the Meeting on Pesticides on Tobacco held on 4 September 1970.

¹⁶⁷ NAZ, (Unprocessed) 42-12-5F, Box number 126962, Pesticide Control Legislation, Minutes of the Meeting on Pesticides on Tobacco held on 4 September 1970.

¹⁶⁸ NAZ, (Unprocessed) 42-12-5F, Box number 126962, Pesticide Control Legislation, Ian McDonald to Head Branch of plant protection, 13 August 1970.

¹⁶⁹ ‘Committee to investigate pesticide contamination’, *The Rhodesian Herald*, 13 November 1970.

¹⁷⁰ ‘Committee to investigate pesticide contamination’, *The Rhodesian Herald*, 13 November 1970.

¹⁷¹ The other banned pesticides under the Government Notice included TDE (tetrachlorodiphenylethane), benzene hexachloride, CIC, dieldrin, arsenic, Mendrin, endosulfan and aldrin. The ban was to come into use as soon as existing stocks in the shops were finished and these were expected to last until the end of the season.

¹⁷² Southern Rhodesia Government Notice No. 3 (1970).

¹⁷³ Annual Report of the Tobacco Marketing Board, 1972.

70,000 kg of tobacco.¹⁷⁴ By 1974, DDT had been ‘eliminated’ (although there were actually still sporadic incidences of its use despite the comprehensive ban) from tobacco production in Rhodesia and replaced by a new insecticide Neotox, which the TRB said could be used “more safely and effectively than DDT”.¹⁷⁵ It was also less persistent and less dangerous to wildlife, with a low dermal and inhalation toxicity.¹⁷⁶

While the TRB pest control scheme played a greater part in limiting contamination of the tobacco export leaf on the white farms, the utility of this program was a little weaker amongst black African Burley tobacco growers in the Tribal Trust Lands (TTLs). Amongst most African growers, DDT was being used indiscriminately, despite the “ban” on its use on tobacco. In September 1975, the Acting Agricultural Director of the TTLs, A.M. Coleman, wrote to the Provincial Agricultural Officer, Mashonaland West and Central, complaining about undesirably high levels of DDT found in leaf samples taken from African farmers in Mount Darwin, Karoi and Glendale.¹⁷⁷ During a meeting of the pesticide committee, the TRB director echoed this concern and observed that, as far as the TTL growers were concerned, there had not been much improvement, and in fact there had been some slight deterioration.¹⁷⁸ He pointed out that as long as DDT was still available to the black African grower he would continue to use it as *muti* (meaning “magical medicine”, referring here to a disinfectant chemical), and a great deal of African tobacco was stored in *kias* (African huts) which would have been dosed with DDT as a means of killing various household pests, including mosquitoes.¹⁷⁹ In addition the use of the product by African farmers to spray their cotton caused problems of drift. The worst offenders in this regard were mentioned as the black farmers in the TTLs of Chiweshe and Chesa. To control the problem, the Secretary of Internal Affairs proposed the prohibition of purchases of 85 g packets of DDT in African areas.¹⁸⁰ This he viewed as effective since white farmers could buy this insecticide only in bigger packages of 1 kg or 50 kg.¹⁸¹ Although

¹⁷⁴ Annual Report of the Tobacco Marketing Board, 1972.

¹⁷⁵ ‘New tobacco pest control’, *The Rhodesian Herald*, 14 June 1974.

¹⁷⁶ ‘New tobacco pest control’, *The Rhodesian Herald*, 14 June 1974.

¹⁷⁷ NAZ, S3700/44, Crop Pests Control, Use of Pesticides and Herbicides, October 1973-March 1977, Coleman to Provincial Agricultural Officer, Mashonaland West and Central, 15 September 1975.

¹⁷⁸ NAZ, S3700/44, Crop Pests Control, Use of Pesticides and Herbicides, October 1973-March 1977, Minutes of the Pesticide Control Committee held at the RTA (Salisbury), 13 October 1975.

¹⁷⁹ NAZ, S3700/44, Crop Pests Control, Use of Pesticides and Herbicides, October 1973-March 1977, Minutes of the Pesticide Control Committee held at the RTA (Salisbury), 13 October 1975.

¹⁸⁰ NAZ, S3700/44, Crop Pests Control, Use of Pesticides and Herbicides, October 1973-March 1977, Secretary of Internal Affairs to Secretary Agricultural Pesticides Association, 8 March 1976.

¹⁸¹ NAZ, S3700/44, Crop Pests Control, Use of Pesticides and Herbicides, October 1973-March 1977, Secretary of Internal Affairs to Secretary Agricultural Pesticides Association, 8 March 1976.

DDT was still being used by both white and black cotton farmers for the control of bollworms, the concern was that burley tobacco was being accidentally contaminated by drift from cotton spraying in black African areas. The secretary of the Agricultural Pesticides Association pointed out that DDT was a cheaper alternative for the spraying of cotton, and to keep the spraying costs of African cotton within bounds, DDT still had to be used.¹⁸² The problem, he noted, could only be solved by better extension advice and the right educational approach to the cotton grower rather the removal of the pesticide from the market.¹⁸³

DDT AMOUNT	NUMBER OF GROWERS	GROWERS AS %
Less than 0.5 ppm	94	51.4%
0.5-0.9 ppm	15	8.4%
1-1.5 ppm	37	20.2%
1.6-2.0 ppm	16	8.0%

FIGURE 12 PESTICIDE CONTAMINATION OF BURLEY TOBACCO IN AFRICAN AREAS 1974.¹⁸⁴

DDT AMOUNT	NUMBER OF GROWERS	GROWERS AS %
Less than 0.5 ppm	66	50.5%
0.5-0.9 ppm	25	19.0%
1-1.5 ppm	11	8.5%
1.6-2.0 ppm	9	7.0%
Over 2.1 ppm	20	15.0%

FIGURE 13 PESTICIDE CONTAMINATION OF BURLEY TOBACCO IN AFRICAN AREAS 1975.¹⁸⁵

¹⁸² NAZ, S3700/44, Crop Pests Control, Use of Pesticides and Herbicides, October 1973-March 1977, Secretary Agricultural Chemicals Industry (Mrs. P. A. Morgan) to Ministry of Internal Affairs, 4 May 1976.

¹⁸³ NAZ, S3700/44, Crop Pests Control, Use of Pesticides and Herbicides, October 1973-March 1977, Secretary Agricultural Chemicals Industry (Mrs. P. A. Morgan) to Ministry of Internal Affairs, 4 May 1976.

¹⁸⁴ NAZ, (unprocessed) Records Centre collections C.32.15.11R, Box number 126959, Tobacco Burley Association. Rhodesia Tobacco Marketing Board, Monitoring Service for Pesticide Residue in Tobacco: Report of Burley Sample, Tribal Trust Lands, 1974.

¹⁸⁵ NAZ, (unprocessed) Records Centre collections C.32.15.11R, Box number 126959, Tobacco Burley Association, Rhodesia Tobacco Marketing Board, Monitoring Service for Pesticide Residue in Tobacco: Report of Burley Sample, Tribal Trust Lands, 1975.

In 1974, 28% of African-grown burley which was sampled by the Pesticide Control Committee revealed higher DDT residues as shown above. In 1975, the figure went up to 31%, but what was more worrying was the presence of much higher residues of over 2 ppm, constituting 15% of the sample. In the white areas, the levels of contamination were remarkably lower. In 1974 for instance out of a sample of 77 growers only two, 6.5%, had crops with high levels of DDT, and in 1975 while 345 kg of black African tobacco was destroyed for containing higher levels of DDT, amongst the European growers no tobacco was destroyed.¹⁸⁶ All in all, these comparative results reflect that there was heavier contamination by DDT in the TTLs which were black African areas. This contamination certainly left residues in the environment and food crops grown on the adjacent pieces of land as black African plots in the TTLs were smaller and crowded.¹⁸⁷ Unfortunately, this racialised dimension was never considered by the Tobacco Pesticide Scheme and the level of contamination of food crops, land and water in the TTLs by DDT can only be inferred from scientific evidence made available by later studies. A 1999 scientific study on samples from soil, rivers and dams found DDT residues in the terrestrial environment of the former TTLs of Mount Darwin and Rushinga, which was attributed to cumulative contamination over 20 years.¹⁸⁸ What this does reveal is how Carson's environmentalism operated unevenly along the lines of race and class in Southern Rhodesia, impacting black Africans and whites in distinctly different ways.

In the final analysis, the major lesson that can be drawn from the Tobacco Pesticide Control Scheme is that it was rarely about the safe use of chemicals to avoid environmental contamination and human poisoning. Instead, the scheme was about avoiding the contamination of the tobacco crop for the export market. Even then, by 1970, most farmers were unwilling to spend money on extending pesticide protection to include the safety of their labourers because of the costs involved. Increasing agricultural safety was estimated to cost farmers as much as R\$2.1 million in 1971.¹⁸⁹ In 1972, the "Kutsaga suit" was developed by the TRB for the safe and efficient application of pesticides to Burley tobacco.¹⁹⁰ This was a more effective suit than the protective suits available at the time of the jacket-and-trousers type that

¹⁸⁶ NAZ, (unprocessed) Records Centre collections C.32.15.11R, Box number 126959, Tobacco Burley Association, TMB, Monitoring Service for Pesticide Residue in Tobacco, Pesticide Inspectors Report to the General Manager (TMB)', 10 October 1975.

¹⁸⁷ The Tribal Trust Lands were largely overcrowded and a result of colonial racialised land policy that began with the 1930 Land Apportionment Act, which set up prescribed areas for African settlement.

¹⁸⁸ Mbamba and Zaranyika, 'DDT Residue in Terrestrial Environment', 83–96.

¹⁸⁹ 'New safety rules may give farmers a shock', *Rhodesian Financial Gazette*, 15 January 1971.

¹⁹⁰ 'Applying insecticides with a knapsack mist blower', *Tobacco Forum of Rhodesia*, August 1972.

were not adequately protective against small particle penetration.¹⁹¹ Despite this, most farmers were still not actually adopting safety practices for agricultural labourers using sprayers. The Ministry of Health in 1978 fretted that some Rhodesian farmers were far too casual with the use of highly toxic pesticides.¹⁹² They noted that labourers using knapsack sprays were not protected against the chemicals used. Tanks were often refilled while still on the operator's back, and unless he was wearing protective clothing spillage would take place which would mean the chemical would be in contact with his skin.¹⁹³ As a result, several incidences of poisoning were reported.

A spokesperson for the government's Occupational Safety and Compensation Department said that from April 1977 to March 1978 more than 100 cases of poisoning were reported. Of these, 24 involved pesticides, with 22 occurring in agriculture.¹⁹⁴ The spokesperson added that many more cases amongst black African agricultural labourers went unreported.¹⁹⁵ In one horrifying case, an African labourer was spraying pesticide on a tobacco crop in the Salisbury area when the hose became clogged. He tried to clear it by sucking with his mouth, swallowing the solution and dying.¹⁹⁶ In another case, African labourers were spraying chemicals on a tobacco crop at Kutsaga Research Station. The wind suddenly changed direction, blowing the toxic droplets into their unprotected faces, causing severe burns.¹⁹⁷ In yet another case, an African family was working on a tobacco farm where pesticide and water were stored in similar drums. A small daughter of the family drank from the wrong barrel and died.¹⁹⁸ In most instances, tobacco farm labourers exercised very little caution when using harmful chemicals as a result of ignorance. According to the testimony of one former farm worker, water containing DDT would be drunk by thirsty labourers, and some would even consume their food with unwashed hands after handling highly toxic organophosphate chemicals in tobacco nurseries, and there was very little concern on the part of the white farmers.¹⁹⁹ A survey by the Hazardous

¹⁹¹ 'Applying insecticides with a knapsack mist blower', *Tobacco Forum of Rhodesia*, August 1972.

¹⁹² 'New control on pesticides', *Rhodesian Financial Gazette*, 3 March 1978.

¹⁹³ 'New control on pesticides', *Rhodesian Financial Gazette*, 3 March 1978.

¹⁹⁴ 'Poisonings caused by careless handling', *Rhodesian Sunday Mail*, 18 December 1979.

¹⁹⁵ 'Poisonings caused by careless handling', *Rhodesian Sunday Mail*, 18 December 1979.

¹⁹⁶ 'Poisonings caused by careless handling', *Rhodesian Sunday Mail*, 18 December 1979.

¹⁹⁷ 'Poisonings caused by careless handling', *Rhodesian Sunday Mail*, 18 December 1979.

¹⁹⁸ 'Poisonings caused by careless handling', *Rhodesian Sunday Mail*, 18 December 1979.

¹⁹⁹ Interview with Mrs Saizi (former farm worker, 74 years old), Westbury Farm, Centenary, Zimbabwe, 13 February 2019. Other former farm workers interviewed (Mr Ganizani, 68 years old, Westbury Farm, Centenary, 13 February 2019; Mr Kavhimbo, 71 years old, Mutwa Estate, Mount Darwin, 24 February 2019; and Mr Jimu, 63 years old, Avalon farm, Centenary, 15 February 2019) narrated horrendous tales of how chemical poisonings were common on the tobacco farms and resulted in the death of several workers, particularly those who worked

Substances Inspectorate group of 378 farms revealed shockingly that less than half of the farmers throughout the country did not provide protective gear for their workers and on 72 % of the farms none of the workers interviewed knew the meaning of the purple and red triangle emblems on pesticide containers!²⁰⁰ Thus while the use of poisonous chemicals in agriculture was increasing there were no training facilities to teach black farm workers how to protect themselves, resulting in a high incidence of poisoning. Between January 1980 and July 1981 more than 120 cases of organophosphate poisoning were recorded on the white farms around Harare only, and the victims were all black Africans!²⁰¹ On 10 July 1984, 12 tobacco farm workers from a farm in Centenary were admitted at Mvurwi district hospital and later transferred to a Harare hospital with organophosphate poisoning.²⁰² Upon inspection of the premises where the workers had been poisoned, the health assistant found:

Five dangerous chemicals lying about on the shelf in a workshop where they should have been locked away. On the same shelf as the poisons they found cups and a teapot as well as two mealie cobs. On the veranda of the workshop were a lot of other chemicals, new stock and old stock which were open.²⁰³

These sporadically reported instances of human poisoning on the tobacco farms are just a few of the many instances of the liminal losses and unseen sufferers that Nixon has argued are under-represented in both strategic planning as well as historical memory.²⁰⁴ This marginalisation of the casualties of chemical poisoning is largely a result of what Mike Davis calls “the dialectic of ordinary disaster”, where a calamity is appropriated into history and made ordinary and forgettable because the burden of risk falls on the unsheltered poor.²⁰⁵ Consequently, most such disasters are expunged from historical memory and policy planning by their framing as “accidental and random”.²⁰⁶ To this extent, therefore, the official figures on chemical poisoning of African labourers in Southern Rhodesia must be treated with scepticism.

Also, while the pesticide control scheme focused on the contamination of tobacco by these chemicals, many of them were still being used indiscriminately for other agricultural purposes,

in the tobacco nurseries, who often developed chronic conditions like tuberculosis, and eventually died after long illnesses. They also testified that protective clothing was not always provided, and in most cases farm workers sprayed these chemicals while exposed to drift spray.

²⁰⁰ ‘Farm workers exposed to killer sprays, says survey’, *Sunday Mail*, 15 April 1983.

²⁰¹ ‘Farm workers exposed to killer sprays, says survey’, *Sunday Mail*, 15 April 1983.

²⁰² ‘Poisonous chemicals threaten farm workers’, *The Herald*, 12 November 1984.

²⁰³ ‘Poisonous chemicals threaten farm workers’, *The Herald*, 12 November 1984.

²⁰⁴ Nixon, *Slow Violence and the Environmentalism of the Poor*, 2.

²⁰⁵ Mike Davis, ‘Los Angeles After the Storm: The Dialectics of Ordinary Disaster’, *Antipode* 27 (1995), 221–224.

²⁰⁶ Nixon, *Slow Violence and the Environmentalism of the Poor*, 65.

mostly within white farming areas. A scientific study carried out in 1972 covering most parts of the country revealed a massive build-up of DDT in lakes.²⁰⁷ Many cases of fish poisoning by DDT, dieldrin, empty methyl bromide tins and tobacco scrap were also reported in most ICAs.²⁰⁸ Reports were also published in the *Rhodesian Herald* (17 and 19 December 1975) on the use in the tobacco-producing districts of Karoi and Sinoia of non-selective poisons during a rodent plague, resulting in deaths all along the food chain, including natural predators such as owls and snakes.²⁰⁹ The Director of National Parks expressed concern over the use of highly toxic and long-lasting poisons as warfarin and Nuvacron (also known as monocrotophos, a systemic tobacco pesticide) for the field control of rodents in the white farms.²¹⁰ In March 1975, J. J. Buitendag, the MP for Mhangula (another tobacco-producing district), wrote to the Minister of Lands and Agriculture complaining that farmers were using various poisons to combat rats and mice that were digging up and eating their maize seeds, and many predators were killed as a result.²¹¹

While forms of control had been established for the use of pesticides on tobacco and other crops, there were inadequate environmental control and policing mechanisms. Dr Hamilton Ritchie (a member of the Rhodesian Legislative Assembly) had posed the very “Carson-esque” question to the Minister of Health in 1978 of whether he was satisfied with the policing systems stopping farmers from using too much pesticide which could then wash off into rivers and be detrimental to animal welfare and the biological chain.²¹² The minister responded that it was difficult to control the amount of pesticides farmers put onto their crops.²¹³ Cognisant of these problems, the NRB had created the Environmental Conservation Committee in November 1977 under the chairmanship of Professor Geoffrey Bond. The committee considered pesticide and herbicide usage in the country in detail, in particular that of DDT, by taking evidence from local ‘experts’ and informed by the global trends.²¹⁴ During the same period a number of local

²⁰⁷ R.J. Phelps and T. Billings, ‘Pesticide Levels from Animals in Southern Rhodesia’, *Transactions of Rhodesia Science Association* 55 (1972), 6–9.

²⁰⁸ ‘Wildlife must be conserved’, *Tobacco Today*, December 1974.

²⁰⁹ *The Rhodesian Herald*, 19 December 1975.

²¹⁰ *The Rhodesian Herald*, 19 December 1975.

²¹¹ NAZ, S3700/44, Crop Pests Control, Use of Pesticides and Herbicides, October 1973–March 1977, J.J. Buitendag to Minister of Lands and Agriculture, 5 March 1975.

²¹² ‘Control over pesticides difficult’, *The Rhodesian Herald*, 29 November 1978.

²¹³ ‘Control over pesticides difficult’, *The Rhodesian Herald*, 29 November 1978.

²¹⁴ Under the supervision of the Ministry of Agriculture, a nationwide pesticide monitoring program was started in 1979 to determine whether residues of chlorinated hydrocarbon poisons were present in dangerous quantities in the country. This came after repeated calls by conservationists for the banning of pesticides which had been recognised as dangerous to humans and wildlife. The monitoring program was being carried out by the Ministries of Health, Agriculture and National Parks and Wildlife through sampling of water bodies, water life and soil.

studies had begun to confirm through scientific data that DDT contaminated the environment.²¹⁵ The interim report of the Environmental Conservation Committee was the first comprehensive official study on the effects of pesticide poisoning on the environment in Southern Rhodesia.²¹⁶ The report was presented to the new government of independent Zimbabwe in late 1980. The new political context had little influence on the report as its findings were compiled over a long period of time. The report concurred with the global data that pesticide residues could accumulate in the environment, creating an insidious effect on the ecosystem.²¹⁷ It pointed out that although the threat to human life within the country had been negligible, there had been human fatalities through accidental overdose and suicide. In addition, certain bird species had been endangered.²¹⁸ The report further exhorted the NRB to consider the matter dispassionately from the point of view of what was best for the country.²¹⁹ The report by the Environmental Conservation Committee thus confirmed what had already been articulated by sporadic official voices in Southern Rhodesia, including the Ministry of Health, since 1969 about the effects of pesticide residue on humans and the environment. A parallel can be made between the significance of the report and that of the American PSAC 1965 report, as it goaded the pesticide control agenda into the official policy corridors and called for relevant monitoring instruments, particularly through the NRB. For its part, the NRB noted that it was deeply concerned about the continued use of DDT in light of the adverse reports emanating from other parts of the world, mostly the developed world, in which several countries had banned this pesticide. It was concerned about the general misuse of pesticides and herbicides in the country, particularly the spraying of monocrotophos at two or more times the rate recommended for aphid control in tobacco for which it was registered.²²⁰ The board noted that the pesticide was lethal to game birds such as guinea fowls, and a host of other birds, and as a result there had been a serious depletion of birdlife in some tobacco farming areas.²²¹ This perhaps evokes the eerie silence captured poetically by John Keats in “La Belle Dame sans Merci”, from which *Silent Spring* takes its title, two lines of which read:

The sedge is wither’d from the lake,

²¹⁵ Y.A. Greichus et al., ‘Insecticides, Polychlorinated Biphenyls and Metals in African Lake Ecosystems II: Lake Chivero, Zimbabwe’, *Bulletin of Environmental Contamination and Toxicology*, 19 (1978), 444–453.

²¹⁶ Natural Resource Board, ‘The Pesticide Dilemma’, *Newsletter* no. 8 (September 1981).

²¹⁷ Natural Resource Board, ‘The Pesticide Dilemma’, *Newsletter* no. 8 (September 1981).

²¹⁸ Natural Resource Board, ‘The Pesticide Dilemma’, *Newsletter* no. 8 (September 1981).

²¹⁹ Natural Resource Board, ‘The Pesticide Dilemma’, *Newsletter* no. 8 (September 1981).

²²⁰ Natural Resource Board, ‘The Pesticide Dilemma’, *Newsletter* no. 8 (September 1981).

²²¹ Natural Resource Board, ‘The Pesticide Dilemma’, *Newsletter* no. 8 (September 1981).

And no birds sing.²²²

From the 1980s, following the end of white colonial rule, the use of DDT fell under severe scrutiny in Zimbabwe, largely because of the build-up of evidence on its residual effects on wildlife and the environment. In 1982, the widespread use of DDT as an agricultural insecticide was banned by the newly independent government.²²³ In 1985, DDT was declared a Group 1 hazardous substance, and its use was restricted to research purposes for malaria and tsetse fly control.²²⁴ By 1991, it had been banned for outdoor control of malaria because of concerns over the contamination of tobacco.²²⁵ Currently, DDT is being used only for indoor malaria control in the country.²²⁶ However, concerns over the contamination of tobacco as a result of indoor DDT spraying have resurfaced in recent years, particularly with the entry of many black farmers into production after the chaotic Fast Track Land Reform Programme in 2000.²²⁷ In 2018 there were concerns that the country's tobacco would face a ban over DDT residue contamination. Research findings by global tobacco merchants presented at the Cooperation Centre for Scientific Research Relative to Tobacco (CORESTA) showed that, of all producing countries, Zimbabwean tobacco was the only one contaminated by DDT.²²⁸ Other highly toxic insecticides such as monocrotophos (warfarin and Nuvacron) and methamidophos (Tamaron) were banned for use in tobacco, but they have continued to be used by most black smallholder producers as they are easily available on the black market and cheaper than the recommended alternatives.²²⁹

²²² John Keats in M. H. Abrams, *The Norton Anthology of English Literature*, vol. 2 (New York: W. W. Norton and Co., 1970).

²²³ S.M. Mpofu, 'DDT and its Uses in Zimbabwe', *Zimbabwe Science News*, 21 (1987), 31–36.

²²⁴ M.E.S. Flint and M.J.S. Harrison, 'DDT Impact Assessment Project: Zimbabwe', *Department of International Aid, Evaluation Report*, 621 (December 1998), 9.

²²⁵ Flint and Harrison, 'DDT Impact Assessment Project', 9.

²²⁶ The current national spraying program is largely funded by USAID under the President's Malaria Initiative Indoor Residual Spraying Project.

²²⁷ There are over 165,000 smallholder tobacco producers registered for the 2018–2019 season. Some of these producers are in areas which have high incidences of malaria and they use DDT for indoor control. Consequently, their tobacco is contaminated from storage in the sprayed houses.

²²⁸ See 'Zim tobacco faces ban over DDT residue contamination', *AgriNews*, 14 December 2018, <https://agrinews.co.zw/crops/2018/14/2153zim-tobacco-faces-ban-over-ddt-residue-contamination/>, accessed 25 February 2019.

²²⁹ See Doreen Badze, 'Farmers still using banned pesticide', *The Standard*, 11 December 2016, <https://thestandard.co.zw/2016/12/11/farmers-still-using-banned-pesticide/>, accessed 25 February 2019. Other tobacco chemicals banned in the country include the soil fumigant methyl bromide, because of its negative effects on the ozone layer, and EDB, which was banned in the United States on 19 September 1983 because it was shown to cause cancer and birth defects.

CONCLUSION

The history of pesticide use in Southern Rhodesia is a story of environmental pollution and contamination that has never been studied before by historians. Yet it is evident that the use of these chemicals posed serious hazards. Irresponsible and casual use of pesticides, because of lack of proper pest management and safety facilities, claimed a significant number of silent and silenced casualties—in both the human and natural environment. The story of this “slow violence” and invisible deaths in tobacco farming does indeed conjure up Carson’s *Silent Spring*. In fact, the local narrative connects with the global movement that Carson stirred, which brings us back to the question asked at the start: was there an African Rachel Carson? An engaged understanding of Carson in Africa needs to be understood in tandem with the triple concepts of ‘slow violence’, the ‘environmentalism of the poor’ and ‘environmental racism’, as this chapter has argued. But this should not be an historiographical ending, rather a beginning of the quest for the African Carson moment. This chapter has not intended to write an environmental history epitaph or to rehabilitate Carson in Africa, but rather awaken an historiographical debate on *Silent Spring* as it relates to Africa. Already it is clear that Southern Rhodesia had its own ‘*Silent Spring*’ moment(s), but these moments were idiographic and vernacular encounters within a global environmental movement. While Carson sparked modern environmentalism and brought pesticide use into critical focus, her meaning within Africa must be critically understood within a strongly diachronic context. Firstly, as argued in this chapter, *Silent Spring* did not invent environmental consciousness, but rather channelled it into a global environmental zeitgeist. It provided the impetus and vocabulary for a new kind of challenge post-1960. Secondly, this movement assumed new meanings and forms in Africa, where unique problems of technical innovation in agriculture, costs of harnessing new pest control management systems, economic and political inequalities, and the more hostile pest-prone climatic conditions required pragmatic approaches to pesticide control. To this end, the ‘African Rachel Carson moment’ must be seen as a vernacular experience drawing inspiration from its own local and global realities. Even in the United States, there never was a monolithic and homogenous “*Silent Spring*”. Rather there were several silent springs. Finally, we must guard against the dangers of reading Carson in Africa in teleological terms; as historians, just as much as we need to reconstruct knowledge, we need to painstakingly reconstruct ignorance.

CHAPTER SIX

‘YOU CAN EITHER GROW THE TYPES OF TOBACCO WE DO NOT WISH TO GROW OR WORK ON OUR TOBACCO FARMS AND SMOKE OUR TOBACCO’: AFRICAN TOBACCO PRODUCERS AND THE STATE IN SOUTHERN RHODESIA, 1900-1980.

Is nothing to be left for natives to raise revenue on. Are they to be turned into criminals whenever they endeavour to raise taxes by disposing of a few pounds of tobacco grown on their old kraal sites...

Native Commissioner Murehwa to Chief Native Commissioner, (1936).

INTRODUCTION

Africans have been cultivating tobacco since at least the 15th century when it was introduced by the Portuguese in the area that became Southern Rhodesia.¹ This is well documented in several historical accounts of the precolonial period.² For example, Thomas Morgan Thomas of the London Missionary Society, in memoirs of his adventures in southern Africa between 1864 and 1873, records that Amandebele grew large quantities of tobacco, adding that “indeed I cannot remember seeing a single village around which there were no tobacco gardens.” He described how tobacco was integral to the cultural rituals of the Ndebele people who took it as snuff and smoked it in *ingiti* (clay pipes) and *igudu* (smoking horns).³ An early traveller, G.W. Knight-Bruce observed that the Ndebele king Lobengula habitually carried around a big pipe of tobacco of which he was most fond.⁴ Other historical accounts also point out that in most parts of Mashonaland, Africans cultivated patches of tobacco in their gardens for their own consumption, with a yearly tribute sent to the king.⁵ The type grown by Africans was the coarse “native tobacco” of the species *Nicotiana rustica* L., believed to have been originally

¹ H. Weinmann, *Agricultural Research and Development in Southern Rhodesia, 1890-1923* (Salisbury: University of Rhodesia, 1972), 12.

² See Joseph Garbett Wood, *Through Matabeleland: The Record of a Ten Months Trip in an Ox Waggon Through Mashonaland and Matebeleland*, Reprint of 1893 edition (Bulawayo: Books of Rhodesia, 1974), 42; H.N. Hemans, *The Logs of a Native Commissioner*, Reprint of the 1935 Edition (Bulawayo: Books of Rhodesia, 1971), 30., and T.M. Thomas, *Eleven Years in Central South Africa* (Cardiff: John Snow and Co., 1873), 180-181.

³ Thomas, *Eleven Years in Central South Africa*, 179-80.

⁴ G.H.W. Knight-Bruce, *Memories of Mashonaland* (London: Edward Arnold, 1895), 100.

⁵ NAZ, AOH/59, Interview with Mudzongani Maodzwa, 8 August 1979.

introduced by the Portuguese.⁶ Africans built dams specifically to irrigate this tobacco, and it was sometimes grown in the backyards and anthills in the fields and used in exchange for maize and other items.⁷

These African tobaccos were sampled by the British South African Company (BSAC) in 1902 to ascertain their potential commercial value.⁸ The Company concluded that this so-called “indigenous” tobacco had no great commercial value since its flavour was alien to British consumers and so it would not find a ready overseas market.⁹ However, the cultivation of “indigenous” tobacco continued amongst Africans who found a ready local market in the emerging mining settlements earning enough money to pay their taxes and accumulate European goods.¹⁰ The persistent demand for African labour and the desire to penetrate the local market with European-flavoured tobacco witnessed the decline of the “indigenous” tobacco economy from the early 1930s, until it became extinct from around 1938 on the cusp of World War II. Tobacco farming by Africans was later resuscitated by the colonial state in 1952 as one of the key pillars of transforming African rural communities under the colonial post-war II modernisation mantra. But even then, Africans were only growing those “European” tobaccos white farmers were least interested in such as Burley and Turkish tobacco and their “indigenous” tobacco industry remained snuffed out. This chapter examines the nature of state intervention into African peasant tobacco production from 1900 to 1980, from the cusp of colonialism to its end. It analyses shifting state policy towards African tobacco producers, and the concomitant impact on peasant economies, accumulation patterns, and the rural physical landscape. It thus opens the existing historiographical discussion on African peasantry by showing how colonial policy on peasant producers differed from context to context.

⁶ Weinmann, *Agricultural Research and Development in Southern Rhodesia*, 12.

⁷ NAZ, AOH/51, Interview with Musonzi Paurosi, 18 April 1979.

⁸ NAZ, A11/2/2/13, Tobacco 1904-November 1909, Professor Wyndham R. Dunstan, Report on tobacco from Rhodesia received through the BSAC, June 1902.

⁹ NAZ, A11/2/2/13, Tobacco 1904-November 1909, Professor Wyndham R. Dunstan, Report on tobacco from Rhodesia received through the BSAC, June 1902.

¹⁰ For a detailed discussion of this precolonial tobacco production industry see Barry Kosmin, ‘The Inyoka Tobacco Industry of the Shangwe People: The Displacement of a Pre-colonial Economy in Southern Rhodesia; 1898-1938’, in Robin Palmer and Neil Parsons (eds), *The Roots of Rural Poverty in Africa in Central and Southern Africa* (London: Heinemann, 1977), 268-287.

HISTORIOGRAPHY OF AFRICAN PEASANT PRODUCTION IN SOUTHERN RHODESIA.

While much has been written about the peasant agrarian economy and agricultural development in Southern Rhodesia, there is only a limited and fragmentary corpus of historical writing on tobacco production by Africans.¹¹ Barry Kosmin's 1977 work is the only piece of historical literature that focuses on tobacco production by African peasants.¹² Kosmin analysed the development of the marginal peasant tobacco economy in early colonial Southern Rhodesia using the conceptual analysis of the 'Arrighi thesis'.¹³ This refers to colonial peasant studies pioneered by Giovanni Arrighi that posits that there was intentional, state-directed and systematic proletarianization of African peasants that in turn created an ever-widening gap between the African peasants and white capitalist sectors of the economy during the colonial period.¹⁴ Arrighi's 1970 argument was buttressed by other scholars such as Ian Phimister in 1974 and Robin Palmer in 1977 who concurred that indeed colonial policy towards peasant producers had led to the intentional underdevelopment of African areas and the transitioning

¹¹ Most of the works focus on African agricultural producers in general without paying special attention to tobacco, which was only a fringe crop in African areas. See Ian Phimister, 'Peasant Production and Underdevelopment in Southern Rhodesia, 1890-1914', *African Affairs*, 73, 291 (April 1974), 217-228; A.K.H. Weinrich, *African Farmers in Rhodesia: Old and New Peasant Communities in Karangaland* (London: Oxford University Press, 1975); Montague Yudelman, *Africans on the Land: Economic Problems of African Agricultural Development in Southern, Central and East Africa with Special Reference to Southern Rhodesia* (Cambridge: Harvard University Press, 1964); Allison Shutt, "'We are the Best Poor Farmers": Purchase Area Farmers and Economic Differentiation in Southern Rhodesia, c.1925-1980', PhD Thesis, University of California, 1995; Jocelyn Alexander, *The Unsettled Land: State Making and the Politics of Land in Zimbabwe, 1893-2003* (Oxford: James Currey, 2006).

¹² The other historical work is by Nedson Pophiwa. This work is a good factual compilation on the state and Turkish tobacco although it lacks an incisive analysis of the changing roles of state intervention amongst African producers and the motives of such intervention and how it changed rural livelihoods and landscapes. See Nedson Pophiwa, 'Settler Planter Interests and Encouragement of African Turkish Tobacco Production in Southern Rhodesia, 1954-1962', B.A Hons Thesis, University of Zimbabwe, 2004.

¹³ Giovanni Arrighi, in his 1970 work, criticised traditional scholarship that explained the underdevelopment of indigenous African populations as natural and original. He was responding to W. J. Barber who had argued that supplies of African labour in Central Africa were a result of spontaneous responses to the market drawing Africans to move away from their rural homes to the urban areas to increase real incomes by earning cash in a modern economy. See W.J. Barber, *The Political Economy of British Central Africa* (London: Oxford University Press, 1963), 93. Arrighi pointed out how political forces created surplus labour and created a disparity between the peasant and capitalist sectors of the economy through land pressure, declining producer prices, taxation. This in the end had created proletariats out of peasantries in Southern Rhodesia. See G. Arrighi, 'Labour Supplies in Historical Perspective: A Study of the Proletarianization of the African Peasantry in Rhodesia', *Journal of Development Studies*, 6 (1970), 197-234.

¹⁴ This approach was used by other scholars and historians to discuss the marginalisation of peasants in colonial contexts to serve the purposes of settler capital. See C. Bundy, *The Rise and Fall of The South African Peasantry* (London: James Currey, 1979); C. Bundy, 'The Emergence and Decline of the African Peasantry', *African Affairs*, 71, 285 (1972); M.L. Chanock, 'The Political Economy of Independent Agriculture in Colonial Malawi: The Great War to the Great Depression', *Journal of Social Science*, 1 (1972), 121-25; Ian Phimister, 'Peasant Production and Underdevelopment in Southern Rhodesia, 1890-1914', *African Affairs*, 73, 291 (1974), 217-228; Robin Palmer, 'The Agricultural History of Rhodesia,' in R. Palmer and N. Parsons (eds), *The Roots of Rural Poverty in Central and Southern Africa* (London: Heinemann, 1977), 221-245.

of native reserves into labour reservoirs for white settler agriculture.¹⁵ In 1982, Paul Mosley criticized the 1970s' era peasant theories for having an “aggregative” view on the historical evolution of African peasants.¹⁶ Mosley argued that these theories that had served as conventional wisdom in colonial peasant studies lacked statistical and empirical foundation. His study of African producers in Southern Rhodesia and Kenya led him to the conclusion that harsh colonial laws that enforced centralisation in African agricultural areas had actually led to innovation and higher agricultural productivity and increased grain output by the 1950s.¹⁷ However, as this chapter will argue statistics of higher agricultural production in African areas need to be juxtaposed with other productive dynamics such as land holdings, access to financial and economic infrastructure of the colonial state, the environmental impact and a comparative assessment with conditions of white settler agriculture if a more objective picture of what constitutes peasants productivity is to emerge.

In 1985 Terence Ranger joined the debate by subtly concurring with Mosley's critique of the 1970s' theories and contending that the proletarianization route for African peasants was not as ubiquitous as suggested by Phimister and Palmer as there was always the “peasant option” and some “reserve entrepreneurs” who managed to survive the colonial onslaught.¹⁸ In particular, Ranger digressed from the mainstream scholarship which viewed the 1930s as constituting the nadir of colonial African peasant agricultural economies – indeed, Ranger argued that the period actually witnessed a modest boom for colonial peasantries.¹⁹ Strangely, although Ranger's new narrative on Southern Rhodesian peasant historiography came after the publication of Kosmin's work on peasant tobacco producers, he did not engage with Kosmin's anomalous case study of peasant extirpation²⁰ – perhaps because it did not fit the historical model he constructed. This chapter thus engages with Ranger and argues – in essence – that his contention that there was *always* a ‘peasant option’ falls apart in the case of African tobacco producers in Southern Rhodesia.

¹⁵ Phimister, ‘Peasant Production and Underdevelopment in Southern Rhodesia’, 217-228 and Palmer, ‘The Agricultural History of Rhodesia’, 221-245.

¹⁶ See Paul Mosley, ‘Agricultural Development and Government Policy in Settler Economies: The Case of Kenya and Southern Rhodesia, 1900-60’, *The Economic History Review*, 35, 3 (August 1982), 390-408.

¹⁷ Mosley, ‘Agricultural Development and Government Policy in Settler Economies’, 390-408.

¹⁸ Terence Ranger, *Peasant Consciousness and the Guerrilla War in Zimbabwe* (London: James Currey, 1985), 54-96.

¹⁹ Ranger, *Peasant Consciousness and the Guerrilla War*, 54-96.

²⁰ “Extirpation” here is taken to mean the destruction of commercial “indigenous tobacco” production by African peasants into local extinction in areas where once it had thrived.

In 2014, Gary Blank unpacked these theoretical contestations in Southern Rhodesian peasant historiography and concluded that the contradictory assessments from both historiographical schools stemmed from a pervasive ambiguity over the identity of what constituted “a peasant”.²¹ Blank argued that each school approached the peasant question with its own unique set of ideological precepts resulting in conclusions which although different were both correct – as peasants in colonial Zimbabwe experienced both penury and prosperity.²² Blank cursorily engages Kosmin’s narrative of the disappearance of the African “indigenous” *Inyoka* tobacco economy by pointing out that its disappearance did not happen until the 1960s and despite the harsh colonial proletarianization measures the *Inyoka* producers maintained a degree of “independence and prosperity”.²³ However, as this chapter shows Blank mischaracterized the historical narrative that Kosmin presents of the death of commercial production of the crop that happened from around 1938, and the disappearance of any form of production that Kosmin surmises happened in the 1960s – these two must not be conflated. Even his claim of the continuity of independence and prosperity of the Shangwe producers is not substantiated by evidence, as this chapter will argue.

Despite the existence of this huge historiography on peasantries in Southern Rhodesia not much is known about colonial peasant tobacco production unlike in other colonies such as Nyasaland, Northern Rhodesia and Tanganyika where peasant tobacco histories and narratives of small holder tobacco growers are well documented.²⁴ These histories emphasize the ironies of the Janus-faced role of the state in both the development and curtailment of African production and how state policy towards African producers changed over time. So this chapter examines colonial state policy in Southern Rhodesia that had centred (particularly from around the 1930s) on stifling peasant production with a series of legislations targeting marketing, production and

²¹ Blake argues that the definition of peasants is relevant since who is considered to be a peasant or not a peasant significantly affects assessments on colonialism’s impact. He argues that there are fundamental differences amongst precolonial African producers, the reserve based African agriculturalist in a cash economy who is discouraged to produce for the market and the land owning African who is even employing black labour. All these had diverse colonial experiences straddling success and failure. See Gary Blank, ‘Prosperity, Penury and Polarisation: Disaggregating the Peasantry in the Historiography of Colonial Zimbabwe’, *African Journal of History and Culture*, 7, 1 (January 2015), 1-7.

²² Blake, ‘Prosperity, Penury and Polarisation’, 1-7.

²³ Blake, ‘Prosperity, Penury and Polarisation’, 1-7.

²⁴ There is a plethora of histories on so-called ‘native production’ of tobacco from colonial Malawi, Zambia and Tanzania. See John McCracken, ‘Planters, Peasants and the Colonial State: The Impact of the Native Tobacco Board in the Central Province of Malawi’, *Journal of Southern African Studies*, 9, 2 (1983), 172-192; Martin Prowse, ‘A History of Tobacco Production and Marketing in Malawi, 1890-2010’, *Journal of East African Studies*, 7, 4 (2013), 681-712; Ackson Kanduzwa, ‘The Tobacco Industry in Northern Rhodesia’, *The International Journal of African Historical Studies*, 16, 2 (1983), 201-229; Herbert Ndomba, ‘A History of Peasant Tobacco Production in Ruvuma Region, Southern Tanzania, c.1930-2016’, PhD Thesis, Stellenbosch University, 2018.

land tenure.²⁵ The repressive repercussions of this on African agriculture were most damaging towards African tobacco production which, as this chapter will argue, became extirpated from around 1938.²⁶ Yet, even after the commercial production of their “indigenous” tobacco had become extinct, African tobacco farmers still failed to break into production of “European” tobaccos until 1952. Ironically then, it was the colonial state that encouraged Africans to start growing Turkish and Burley tobacco in 1952. This chapter develops a historical conceptual tool of analysis called “crop power hegemonies”²⁷ to explain the anomaly of the extirpation of African peasant tobacco production in the 1930s and its guided resuscitation by the colonial state between 1952 and 1980. The chapter also bridges the gap in the ideographic history of tobacco production by Africans between where Kosmin’s work ends in 1938 and the beginning of the colonial state-aided African production of “European” tobaccos in 1952 that lasted until 1980, that is scantily covered in existing literature.

The chapter also both challenges and extends the existing historiography in three fundamental ways. Firstly, this chapter challenges Blank’s narratives of “independence and prosperity” of the *Inyoka* beyond 1938, it also critiques Mosley’s peasant productivity theory and Rangers’

²⁵ Examples of these include the 1930 Land Apportionment Act which racialised land ownership and the Maize Control Act (1931) that discriminated the marketing of maize against African producers. See C.F. Keyter, ‘Maize Control in Southern Rhodesia, 1931-1941: The African Contribution to White Survival’, 34, *Central Historical Association*, (1978). Arrighi argues that while the value of African agricultural commodities had accounted for 70% of cash earnings amongst Africans at the beginning of the century, in 1932 the value had dropped to 20%. See Arrighi, *Labour Supplies in Historical Perspective*, 197-234.

²⁶ The case of tobacco production by Africans is unique in that tobacco suffered a much more disastrous breakdown during the 1930s than any other African agricultural commodity. While other commodities like beef and maize suffered the harsh effects of state policy during the 1930s enclaves of peasant production survived well into the 1940s and 1950s. Samasuwo shows that despite state curtailment of African beef production between 1931 and 1935, the numbers of African cattle actually grew so significantly that the state had to implement destocking sales in African areas. In 1942, 27,000 African owned cattle were bought by the Cold Storage Commission (CSC) in 1942, and the number went up to 148,00 in 1947. See N. Samasuwo, “‘There is Something About Cattle’: Towards an Economic History of the Beef Industry in Colonial Zimbabwe, with Special Reference to the Role of the State, 1939-1980”, PhD Thesis, University of Cape Town, 2000, 68.

Peasant cotton production for instance was also much actively encouraged by the colonial state during the 1930s who aided with inputs and research stations. See Pius S. Nyambara, ‘Colonial Policy and Peasant Cotton Agriculture in Southern Rhodesia, 1904-1953’, *The International Journal of African Historical Studies*, 33, 1 (2000), 81-111.

²⁷ I invented this phrase to describe how crops must be seen as possessing and carrying meanings of power and powerlessness, domination and subservience, knowledge and ignorance which is subtly deployed by how their cultivation is controlled or regulated. Thus, this concept encourages historians to interrogate the role of crops in propping colonial ideologies, racial identities, gender stereotypes, class consciousness and ethnic affinities. This is different from crop agency in that these meanings are politically and socially constructed. In the case of tobacco farming the concept looks at the hegemonic value of the tobacco crop to colonial white power in Southern Rhodesia where it ideologically and economically solidified the precincts of white dominance and thus was a strategically symbolic agricultural commodity that carried meanings of white power and privilege. It was for this reason that African production of tobacco was more controlled and curtailed than maize, cotton, or any other commodity.

“peasant options” narrative. Secondly, it extends Kosmin’s analysis of state discrimination and systematic marginalisation of peasant tobacco producers by examining the use of specific legislative tools in production and marketing which killed peasant initiative and innovation between 1930 and 1938. Thirdly, the chapter compares early colonial policies on African tobacco producers in Southern Rhodesia with those in Nyasaland and Northern Rhodesia to understand motivations, and production contexts behind state attitudes to African tobacco producers. This chapter therefore extends the historiography of the African peasantry during the colonial era in Southern Rhodesia by critiquing existing theories and offering an alternative new historical analytical concept – “crop power hegemonies” – to explain colonial responses to peasant production.

FROM INCENTIVES TO CURTAILMENT? THE RISE AND FALL OF AN AFRICAN TOBACCO ECONOMY, 1904-1938.

There is a (rare) unanimous consensus within the agrarian historiography of Southern Rhodesia that the early development of the colonial economy offered lucrative opportunities for African peasant producers through the creation of markets for agricultural produce in the booming mining settlements and emerging urban centres.²⁸ Indeed, the period from 1890 to 1908 has been dubbed “the era of peasant prosperity” as African peasants took advantage of the burgeoning markets offered by the small mining centres and the absence of an established European agricultural infrastructure to start producing surplus for the market.²⁹ This period catalysed the prosperity of the “indigenous” Shangwe Sebungwe *Inyoka* tobacco industry which grew steadily from 1899 as European traders came in to buy small stocks of tobacco to resell in mines.³⁰ Between 1903 and 1914 production increased significantly resulting in a large growth of capital in the district and improved standard of African living marked by the purchase of luxury commodities such as clothing, blankets and enamel ware.³¹ But the resultant pecuniary gains to the peasant economy restricted the flow of Africans into wage employment

²⁸ Eira Punt, ‘The Development of African Agriculture in Southern Rhodesia with particular Reference to the Inter-war Years’, M.A. Thesis, University of Natal, 1979; Palmer, ‘The Agricultural History of Rhodesia’, 227-30; Phimister, ‘Peasant Production and Underdevelopment in Southern Rhodesia’, 255-264; Ian Phimister, ‘Commodity Relations and Class Formation in the Zimbabwean Countryside, 1898-1920,’ *Journal of Peasant Studies* 13, 4 (1986), 239-57.

²⁹ Palmer, ‘The Agricultural History of Rhodesia’, 227.

³⁰ Kosmin, ‘The Inyoka Tobacco Industry of the Shangwe People: The Displacement of a Pre-colonial Economy in Southern Rhodesia; 1898-1938’, 274.

³¹ Kosmin, ‘The Inyoka Tobacco Industry of the Shangwe People: The Displacement of a Pre-colonial Economy in Southern Rhodesia; 1898-1938’, 274.

– which outraged some key colonial officials at a time when African labour was most desired for white settler tobacco production.³² By 1933, the district Native Commissioner reported that “tobacco is the main source of revenue of those natives who do not work for wages”.³³ Between 1922 and 1938, this lucrative African tobacco economy was in decline as a result of the penetration of the African market by European cigarettes and lack of state support.³⁴

The decline of African peasant production in the 1930s was conspicuous in most parts of Southern Rhodesia, as noted in the existing historiography.³⁵ This decline followed a similar path to those in other African colonies where “the further development of settler capitalism could no longer contain the very peasantries it had created”.³⁶ However, the curtailment of peasant modes of production in Africa during the 1930s was not universal. David Anderson shows that in Kenya (Unlike in Southern Rhodesia) Africans were less directly hit by the economic crisis than the white settler farmers as the imperative to meet home consumption needs and the local barter economy saw an increase of production in the Reserves during the Depression.³⁷ In fact, the colonial state in Kenya came to look upon African peasantries as the bulwark against economic subsidence and intervened to prevent the collapse of the “peasant

³² The settler tobacco industry in Southern Rhodesia experienced cyclical labour crises from as early as 1899 and had to rely on migrant labour recruitment from Mozambique, Northern Rhodesia and Nyasaland. See Steven Rubert, *A Most Promising Weed: A History of Tobacco Farming and Labour in Colonial Zimbabwe, 1890-1945* (Athens: Ohio Centre for International Studies, 1998), 30-32.

³³ NAZ, S235/511/4, Native Commissioner Annual Report, Sebungwe District, 1933.

³⁴ Kosmin, ‘The Inyoka Tobacco Industry of the Shangwe People: The Displacement of a Pre-colonial Economy in Southern Rhodesia; 1898-1938’, 279-284. Kosmin points out that the Native Commissioner presiding over the Shangwe people had approached the state asking for the provision of assistance with seed, training but this was rejected by the colonial government.

³⁵ See Palmer, ‘The Agricultural History of Rhodesia’, 239-45. Palmer points out that by the end of the 1930s the Africans’ agricultural economies in Southern Rhodesia had been eviscerated by financial discrimination, repressive land legislation particularly the Land Apportionment of 1930 and the Maize Control Act of 1934. Terence Ranger, however, contends against this narrative and argues that the 1930s did not signal the decline of peasant production in many parts of colonial Africa including Southern Rhodesia. He states that in Mozambique and Kenya for instance colonial officials looked upon peasant producers resulting in improved conditions for African agriculture. Ranger argues that contrary to Palmer’s argument, Southern Rhodesia saw neither destruction nor expansion of the peasant sector during the 1930s. See Ranger, *Peasant Consciousness and the Guerrilla War*, 54-98.

³⁶ J. S. Saul and R. Woods, ‘African Peasantries’, in T. Shanin (eds), *Peasants and Peasant Societies* (University of Michigan: Penguin, 1971), 106. Other regional studies that show this trend include J. Iliffe, ‘Agricultural Change in Modern Tanganyika’, Historical Association of Tanzania (Nairobi: East African Publishing House, 1971); B.S. Krishnamurthy, ‘Economic Policy, Land and Labour in Nyasaland, 1890-1914’, in B. Pachai (ed), *Early History of Malawi* (London: Longman, 1972); and J.M. Mackenzie, ‘African Labour in South Central Africa, 1890-1914, and Nineteenth Century Colonial Labour Theory’, PhD Thesis, University of British Columbia, 1969.

³⁷ David Anderson and David Throup, ‘Africans and Agricultural Production in Colonial Kenya: The Myth of the War as a Watershed’, *The Journal of African History*, 26, 4, World War II and Africa (1985), 327-345.

option” by encouraging increased African cultivation.³⁸ On the other hand, in Southern Rhodesia, the competitiveness of African producers was purposefully stymied chiefly through land dispossession, which in turn led to an intended decline in agricultural productivity.³⁹ This decline was tied to the increased heavy-handedness of state intervention in the native reserves, which began around 1926 when officials began to look upon traditional methods of cultivation as intolerable atavism in the face of black population increases.⁴⁰ The Land Apportionment Act of 1930 racialised land ownership and forced Africans into agriculturally marginal areas.⁴¹ In these “reserves”, the state came up with agricultural centralisation models to control African settlements and agricultural production.⁴² The new top-down centralisation mantra saw the introduction of a panoply of conservation-oriented initiatives meant to combat the wasteful practices of “kaffir farming” which according to colonial officials exhausted soils and destroyed grazing land for cattle.⁴³ The Report of the Agriculturalist Native Development Department noted in 1929 that the purpose of centralisation was to teach the “natives” to conserve soil fertility through practical crop rotation on permanent lands.⁴⁴ However, these conservation programs under state enforced centralisation were designed to systematically squeeze peasants into the reserves.⁴⁵ Indeed, Eira Kramer and others have argued that the colonial racially-biased land policies were more responsible for environmental degradation in the reserves than African farming methods.⁴⁶

³⁸ Anderson and Throup argue that the Great Depression imperilled the survival of the colonial state as white settler farmers were severely hit and bankrupt. The state therefore had to revive African production to maintain revenue and save the colony.

³⁹ Giovanni Arrighi, *The Political Economy of Rhodesia* (Berkeley: University of California Press and Mouton, 1967), 41.

⁴⁰ Robin Palmer, *Land and Racial Domination in Southern Rhodesia* (London: Heineman Educational Books, 1977), 20.

⁴¹ Barry. N. Floyd, ‘Land Apportionment in Southern Rhodesia’, *Geographical Review*, 52, 4 (1962), 566-582.

⁴² Palmer, *Land and Racial Domination in Southern Rhodesia*, 203.

⁴³ ‘Native Agriculture in Southern Rhodesia’, *Rhodesian Agricultural Journal*, 27, 5 (May 1930), 466.

⁴⁴ Report of the Agriculturalist, Native Development Department, 1929.

⁴⁵ See JoAn McGregor, ‘Conservation Control and Ecological Change: The Politics and Ecology of Colonial Conservation in Shurugwi, Zimbabwe’, *Environment and History*, 1, 3 (1995), 257-279; J.A. Elliot, ‘Soil Erosion and Conservation in Zimbabwe’, PhD Thesis, Loughborough University of Technology, August 1989; V.E.M. Machingaidze, ‘Agrarian Change From Above: The Southern Rhodesia Native Land Husbandry Act and African Response’, *The International Journal of African Historical Studies*, 24, 3 (1991), 557- 588.

⁴⁶ Eira Kramer, ‘The Early Years: Extension Services in Peasant Agriculture in Colonial Zimbabwe, 1925-1929’, *Zambezia*, XXIV, ii (1997), 159-179; JoAn McGregor, ‘Woodland Resources: Ecology, Policy and Ideology: An Historical Case Study of Woodlands Use in Shurugwi Communal Area, Zimbabwe’, PhD Thesis, Loughborough University of Technology, 1991. David Anderson also makes the same point in Kenya that colonial soil conservation doctrines in the 1930s wrongly faulted Africans for environmental degradation when this was largely a result of limited land in the Reserves than was in the white highlands. See David Anderson, ‘Depression, Dust Bowl, Demography, and Drought: The Colonial State and Soil Conservation in East Africa during the 1930s’, *African Affairs*, 83, 332 (1984), 321-343.

However, the early Shangwe *Inyoka* tobacco industry is a curious anomaly. Kosmin shows that it remained outside much of this state centralisation and conservation injunction of the 1930s. The industry was a feature of the pre-colonial system and its cultivation methods were very adapted to its environment.⁴⁷ Sebungwe country was dry, tsetse fly infested and there was hardly any “modernization” involved in the production of their tobacco.⁴⁸ In 1933, the district Native Commissioner of Sebungwe district noted that production methods were still ‘primitive’, with no water schemes, agricultural demonstrators, or afforestation schemes.⁴⁹ He noted of the inability of the Sebungwe tobacco cultivators to effectively exploit the waters of the Zambezi river:

It is a good example of the innate conservatism of the Bantu in agricultural matters to observe unlimited water flowing past their kraals on the banks of the Zambezi, and yet for lack of simple mechanical devices such as are used by primitive people in other parts of the world, the neighbouring gardens are unproductive unless there is rainfall.⁵⁰

In other parts of the country tobacco was also grown. The Native Commissioner for Darwin district reported in 1927 that tobacco was grown extensively along the banks of the Mazowe river and the large streams tributary to it.⁵¹ The Native Commissioner of Mrehwa complained that very few “natives” were using kraal manure to fertilise their lands except in the small patches near their kraals where they grew tobacco and sweet potatoes.⁵² This tobacco was often harvested and used for own consumption.

So, from as early as 1911, the chief aim of the colonial government became to find a ready local market for the poor grades of tobacco particularly after the growth of production in European farms which produced a glut which could not be disposed in the South African market.⁵³ To this end, Africans came to be viewed as a potential buying market for the inferior grade tobaccos. In May 1911, after the Union government imposed a cigarette tax, the Southern Rhodesian Legislative Assembly moved to impose a similar tax on Rhodesian cigarettes sold on the local market. During the course of debate on the tax, Colonel Grey argued that this tax

⁴⁷ Kosmin, ‘The Inyoka Tobacco Industry of the Shangwe People: The Displacement of a Pre-colonial Economy in Southern Rhodesia; 1898-1938’, 282.

⁴⁸ Kosmin, ‘The Inyoka Tobacco Industry of the Shangwe People: The Displacement of a Pre-colonial Economy in Southern Rhodesia; 1898-1938’, 282.

⁴⁹ NAZ, S235/508, Annual Reports District Native Commissioners, Report of the Sebungwe district, December 1933.

⁵⁰ Annual Report of the Native Commissioner, Sebungwe district, December 1933.

⁵¹ Report for the Native Commissioner Darwin district, December 1927.

⁵² Report of the Native Commissioner Mrewa, December 1927.

⁵³ During 1913-14 selling season overproduction caused a collapse of prices and financial ruin of many settler farmers as the South African market failed to absorb the Rhodesian tobaccos because of over production.

would be paid by the consumers and not the grower, and it would be favourable and hardly felt by the white community as it was a tax upon which a substantial amount of revenue would be derived from the “native population”.⁵⁴ He pointed out that the habit of smoking cigarettes was growing amongst “natives” as a result of the availability of cheap, locally-manufactured cigarettes in “penny packets” and if such a tax was imposed, “in time, the bulk of that tax would be paid by the native consumer.”⁵⁵

But by the 1930s as a result of competition from European cigarettes (which Africans now preferred)⁵⁶the existing *Inyoka* industry was collapsing.⁵⁷ In 1934 the Native Commissioner Victoria district had written to the Chief Native Commissioner pointing out that there was little trading of tobacco by “natives”, and that local “natives” only grew small quantities for their own consumption.⁵⁸ The Native Commissioner for Mvuma also pointed out in his correspondence that the sale of tobacco by the natives had ceased, and tobacco was grown nearly always for home consumption, as the practice of smoking “native” tobacco was decreasing in the mines.⁵⁹ By 1938, the sale of the *Inyoka* tobacco had ceased in the towns and mines, and in 1939 the Native Commissioners’ reports did not even mention *Inyoka* production.⁶⁰ In fact, the crop disappears from the official colonial sources thereafter, and Kosmin could only surmise that all the vestiges of its production had been virtually wiped out by the 1960s.⁶¹ This apparent lack of any shred of archival or oral evidence vouching for the continued “independence and prosperity” of the *Inyoka* tobacco industry in any degree beyond 1939 dismantles Blank’s claims that the Shangwe peasants obviated the pernicious effects of systematic state curtailment during the 1930s and became prosperous. Indeed, as other sources

⁵⁴ Southern Rhodesia Legislative Assembly Debates, 15 May 1911.

⁵⁵ Southern Rhodesia Legislative Assembly Debates, 15 May 1911.

⁵⁶ *Inyoka* tobacco was mostly consumed as snuff and pipe tobacco.

⁵⁷ NAZ, S235/511/4, District Native Commissioner Sebungwe district Annual Report, 1933.

⁵⁸ NAZ, S1542/A4/3, Annual Reports for Developments in the Native Areas and Reserves, Native Commissioner, Victoria district to Chief Native Commissioner, 4 April 1934.

⁵⁹ NAZ, S1542/A4/3, NC Mvuma to CNC, 28 March 1934.

⁶⁰ Kosmin, ‘The *Inyoka* Tobacco Industry of the Shangwe People: The Displacement of a Pre-colonial Economy in Southern Rhodesia; 1898-1938’, 283.

⁶¹ Kosmin surmises this based on a personal conversation he had with one Reverend R. Peaden and the District Commissioner of the area who had no knowledge or records of any tobacco industry. Such ignorance of this industry from sources living in the area during the mid-1970s further substantiates that it had collapsed so spectacularly into extinction from the late 1930s leaving behind no vestiges of its existence. It further questions the credibility of sources that Blank used to conclude that the industry was prosperous well into the 1960s.

have shown, the area became famous for cotton production (and not tobacco) during the rest of the colonial period and, indeed, even up until today.⁶²

The decline in the smoking of traditional tobacco products in Southern Rhodesia follows a trend that happened in most parts of Asia and Africa as a result of the introduction of the modern cigarette industry in the colonies during the 20th century.⁶³ For example, in Papua New Guinea, the introduction of cigarettes saw a decline in the consumption of local tobacco products called *bruhs*.⁶⁴ Jordan Goodman emphasises that a pattern of increasing consumption of manufactured cigarettes and a decrease in the use of local tobacco became evident in Africa and as the demand for cigarettes rose, traditional methods of growing as well as smoking these tobaccos collapsed.⁶⁵ The only exception to this trend was Indonesia where British American Tobacco (BAT) produced a cigarette composed of locally grown tobacco mixed with cloves called *kretek*.⁶⁶ *Kretek* production was first introduced in the 1880s, and by 1939 production had risen to 16 billion units.⁶⁷

Thus the declining practice of smoking “native” tobacco in the mines and urban areas in Southern Rhodesia in the 1930s was caused by an influx of and African preference for European cigarettes in these areas – as Kosmin argues.⁶⁸ But there was a subtle systematic marketing infrastructure behind the penetration of the European cigarette in replacing “indigenous tobacco”. In 1946, a writer in a white farmers’ journal *Vuka* pointed out the many ways in which the government was supposed to be creating a demand for cigarettes amongst the “native” population and getting the “native” into “the habit of smoking”.⁶⁹ These included the handing out of cigarette packets as presents to African “boys” and encouraging the smoking

⁶² In the post-World War II years, parts of the Shangwe area was resettled with over 1000 new settlers who had been evicted from crown lands to make way for European post-war settlement scheme. From the 1950s cotton production in the area grew significantly such that from the 1960s to the mid-1980s the area contributed 15% of national African cotton output and 60% of total national output by 1996. See P. Nyambara, ‘A History of Land Acquisition, Commercialisation of Agriculture and Socio-economic Differentiation among Peasant Farmers in a Frontier Region: The Gokwe district of North western Zimbabwe: c. 1945-1990s’, Seminar paper presented in the Richard Ward Building, University of the Witwatersrand, 26 May 1997.

⁶³ The cigarette caused a significant revolution to smoking and tobacco. The cigarette gained popularity in the USA such that by 1869 production stood at 2 million individual units. The cigarette made smoking more convenient and was more appealing and refined than the more tedious ways of smoking such as piped and rolling. See Jordan Goodman, *Tobacco in History: The Cultures of Dependence* (New York: Routledge, 1993), 97-99.

⁶⁴ Goodman, *Tobacco in History*, 96.

⁶⁵ Goodman, *Tobacco in History*, 96.

⁶⁶ Goodman, *Tobacco in History*, 95.

⁶⁷ Goodman, *Tobacco in History*, 96.

⁶⁸ Kosmin, ‘The Inyoka Tobacco Industry of the Shangwe People: The Displacement of a Pre-colonial Economy in Southern Rhodesia; 1898-1938’, 283.

⁶⁹ *Vuka*, September 1946.

habit amongst their labourers. Charles van Onselen points out that from even as early as 1899, tobacco was used as a form of social control to induce Africans to work.⁷⁰ Mine owners often used tobacco to encourage Africans to work and bonus payments in tobacco were made to the workers as a weekly ration to reduce labour turnover.⁷¹

Advertising had also become one of the most essential components of expanding the tobacco consumer market globally from the 1920s. Modern tobacco advertising focussed on the creation of both need and desire.⁷² The tobacco industry shaped cultural changes in the interests of its product. Beginning in the 1920s the advertisements of cigarette manufacturers had begun targeting white women as a new and growing group of consumers.⁷³ These advertisements were usually attuned to the gender politics of the 1920s, access to power for women and the emergence of the so-called 'new woman'.⁷⁴ In an analogous context, the commodification of the African American in 19th century tobacco advertising was replete with racial stereotypes of inferiority and savagery, as shown by Dolores Mitchell.⁷⁵ Images of black slaves were often put on cigars and cigarettes juxtaposed with links to slavery which depicted both the black Africans and tobacco as raw materials.⁷⁶ This commodification was essential to appeal to white consumers as these images reverberated with psychological overtones of superiority and sensual pleasure.⁷⁷

The cigarette was a microcosm of the norms and values of modernity, cultural refinement and an escape from the pre-modern messy and disagreeable habits of tobacco consumption such as chewing, snuffing and the use of the pipe.⁷⁸ Within this context, the African demand for cigarettes was stimulated through the portrayal of the cigarette as a symbol of class, urbanism and urbanity, and an escape from the countrified antediluvian living represented by coarse indigenous hand rolled tobaccos. Timothy Burke has argued that the colonial state in Southern Rhodesia altered and manipulated the material needs of Africans leading to the

⁷⁰ Charles van Onselen, *Chibaro: African Mine Labour in Southern Rhodesia, 1900-1933* (London: Pluto Press, 1976), 172

⁷¹ Van Onselen, *Chibaro: African Mine Labour in Southern Rhodesia*, 172-173.

⁷² Allan M. Brandt, 'Engineering Consumer Confidence in the Twentieth Century', in Sander L. Gilman and Zhou Xun (eds), *Smoke: A Global History of Smoking* (London: Reaktion Books, 2004), 333.

⁷³ Dolores Mitchell, 'Women and 19th Century Images of Smoking', in Sander L. Gilman and Zhou Xun (eds), *Smoke: A Global History of Smoking* (London: Reaktion Books, 2004), 294-303.

⁷⁴ Goodman, *Tobacco in History*, 108.

⁷⁵ Mitchell, 'The Commodified African American', 286-293.

⁷⁶ Mitchell, 'The Commodified African American', 286.

⁷⁷ Mitchell, 'The Commodified African American', 286.

⁷⁸ Brandt, 'Engineering Consumer Confidence in the Twentieth Century', 332.

commodification of European goods and stimulating a new market amongst Africans.⁷⁹ Retail stores opened in farms, reserves, mines and townships during the 1930s dealing in soaps, foodstuffs, bicycles, matches and cigarettes.⁸⁰ These shops whet the appetite for western goods such as cigarettes through the handing out of small tokens of appreciation to buyers called *bonsella* – such practices went a long way in expanding the market for European cigarettes.⁸¹ Thus the market for “indigenous” tobacco was ostensibly stifled – Kosmin argues – by a shift in taste rather than a shift in legislation resulting in decline of production and total extinction from around 1938. He was right, but he over emphasized the importance of changing tobacco consumption tastes and lack of state support on the decline of African production. There were also other factors.

Kosmin misses the point that there were other systematic policy tools that subtly but deliberately targeted African tobacco production. The state used legislation obliquely to force Africans out of production by pre-empting and restricting African participation through regulations. There is a lot of literature that deals with this and how it was implemented in the realms of other African agricultural commodities.⁸² For example, Godfrey Hove shows how the state in Southern Rhodesia used the Dairy Act (1937) to purposefully stifle African dairy farmers through protocols requiring compulsory registration and licensing of all dairy producing facilities.⁸³ Samasuwo also showed how the state used the Beef Control Act between 1931 and 35 to impose levies on African cattle and cushion the European export sector from the effects of the Great Depression.⁸⁴

In the case of tobacco, the state adopted a similar approach. One such statute was the Tobacco Pest Suppression Act of 1933 that compelled all tobacco farmers to “clean their lands” by

⁷⁹ See Timothy Burke, *Lifebuoy Men, Lux Women: Commodification, Consumption and Cleanliness in Morden Zimbabwe* (London: Duke University Press, 1996).

⁸⁰ Burke, *Lifebuoy Men, Lux Women*, 72.

⁸¹ Burke, *Lifebuoy Men, Lux Women*, 72.

⁸² See Keyter, ‘Maize Control in Southern Rhodesia, 1931-1941’ ; N. Samasuwo, “‘There is Something About Cattle’: Towards an Economic History of the Beef Industry in Colonial Zimbabwe, with Special Reference to the Role of the State, 1939-1980’, PhD Thesis, University of Cape Town, 2000; V.E.M. Machingaidze, ‘The Development of Settler Capitalist Agriculture with particular Reference to the Role of the State, 1908-1980,’ PhD Thesis, University of London, 1980.

⁸³ Godfrey Hove, ‘The State, Farmers and Dairy Farming in Colonial Zimbabwe (Southern Rhodesia), C.1890-1951’, PhD Thesis, Stellenbosch University, 2015, 145-166; and an article afterwards, See Godfrey Hove, ‘Creating Order and Stability? The Dairy Marketing Board, Milk (over)production and the Politics of Marketing in Colonial Zimbabwe, 1952-1970s’, *Historia*, 58, 2 (November 2013), 119-156.

⁸⁴ Samasuwo, “‘There is Something About Cattle’”, 35-45.

uprooting stalks by 1 August (in winter) of each year to control the spread of *Leaf curl* disease.⁸⁵ Although this Act had universal application, it was more often used discriminatively to systematically target Africans tobacco gardens. In several instances white farmers complained about the risk posed by “native” tobacco gardens to their crops because of the prevalence of diseases and pests in African grown “indigenous” tobacco. Thus, “native” tobacco gardens came to be the object of greater attack by this new law as they were mostly blamed for spreading diseases and contaminating the purity of the superior “European” grown leaf. This was despite that most European tobacco farmers during this period were itinerant cultivators and left tobacco stalks standing in abandoned fields leading to the prevalence of *Leaf curl* disease in most farms as chapter three has already discussed. In 1935, Mr. Birch of Maybrook farm and Mr Eddington of Cavan farm Mashaba reported to the Superintendent of Police, Victoria Province that “natives” growing tobacco on the banks of Tokwe river were not complying with the provisions of the Pest Suppression Act, and thereby endangering their own crops about three miles away.⁸⁶ The Chief entomologist advised that the “natives” were obliged to uproot and destroy their crops by 1 August and see that any regrowth would be hoed out.⁸⁷ The police were subsequently advised to patrol the area for any delinquencies and urged to destroy all such “native” crops.⁸⁸ Although the extent of the destruction of African tobacco crops by this practice cannot be ascertained, it can be inferred that it was most disastrous to African tobacco growers as some tobacco gardens were planted during winter season and would not have been harvested by 1 August.⁸⁹ The destruction of stalks to conform to the cultural practices and seasons of “European grown” tobacco meant that “African tobacco” gardens and planting seasons were disrupted.

Another piece of intentionally restrictive legislation was the Tobacco Market Stabilisation Act of 1936, which was discussed in Chapter Three. Although the Act was touted as a significant milestone in bringing order to the production and marketing chaos that had dominated the tobacco industry since its inception, it also forestalled the entry of Africans into production of

⁸⁵ Frank Clements and Edward Harben, *Leaf of Gold: The Story of Rhodesian Tobacco* (London: Methuen and Co, 1962), 118.

⁸⁶ NAZ, S1542/A4, Office of the Superintendent Fort Victoria to Staff Police Office: Native tobacco crops Chibi and Tobacco Pest Suppression Act (1933), 3 September 1935.

⁸⁷ NAZ, S1542/A4, Office of the Superintendent Fort Victoria to Staff Police Office: Native tobacco crops Chibi and Tobacco Pest Suppression Act (1933), 3 September 1935.

⁸⁸ NAZ, S1542/A4, Chief entomologist to Acting Chief Native Commissioner, 18 September 1935.

⁸⁹ Kosmin confirms that in 1928 a winter crop of tobacco was grown on riverbanks in Sebungwe which effectively means that winter cropping was a common practice to African tobacco culture and this conflicted with the 1 August stalks destruction regulation. See Kosmin, ‘The Inyoka Tobacco Industry of the Shangwe People: The Displacement of a Pre-colonial Economy in Southern Rhodesia; 1898-1938’, 282.

European tobacco through a rigorous, complex regulative regime framework.⁹⁰ In fact, one of the biggest questions in the tobacco history of Southern Rhodesia is why Africans failed at all to engage in production of European tobacco until 1952 when there did not exist any explicit law or regulation that banned them from growing such tobacco? The answer to this is that the existing regulative framework as established by the Tobacco Marketing and Stabilisation Act, although not expressly disallowing Africans from cultivating tobacco, did in fact discourage Africans from doing so by making it hard for them to get growers' licences. The Act regulated the marketing of tobacco and gave power to the Tobacco Marketing Board (TMB) to licence tobacco farmers, auction floors, buyers and controlled sales.⁹¹ It also centralised tobacco marketing at these auction floors and restricted sales within the local market and made it subject to regulations. Its provisions were so antithetical to the interests of "native" producers that even the white Native Commissioner for Mreghwa felt that it was solely crafted to deprive the African "indigenous" tobacco producers from accessing the local tobacco market. He remonstrated bitterly:

Is nothing to be left for natives to raise revenue on? Are they to be turned into criminals whenever they endeavour to raise taxes by disposing of a few pounds of tobacco grown on their old kraal sites? What must they think of such class legislation? It seems to me that some protection should be given in the Bill which should not apply to natives disposing of their tobacco within the boundaries of any native reserve.⁹²

Although sometimes a few colonial officials abhorred the heavy handedness of state policies on African as the above example shows, this should not be used to construct the narrative that the colonial state's attitude towards African peasants was flexible and benevolent as other liberal historians have espoused.⁹³ William Munro argues that the colonial state was not monolithic and different agencies within the state espoused different strategies. This conclusion, although superficially fulfilling, misses that the colonial state had one overarching native African policy that overrode all those so-called "heterogeneous" factions within the colonial state – and that was to conquer and control Africans.

⁹¹ Clements and Harben, *Leaf of Gold*, 20.

⁹² NAZ, S1542/A4, NC Mureghwa to CNC, 9 January 1936.

⁹³ See William Munro, *The Moral Economy of the State: Conservation, Community Development and State Making in Zimbabwe* (Athens, Ohio, 1998), 49.

In response to the concern by the Native Commissioner for Mrehwa the Secretary for Lands, however, pointed out that the Act would not interfere with “natives” as long as “they did not enter commercial production of European tobaccos”.⁹⁴ He added that the “native” with his standards of cultivation was not a serious competitor to the European, but his tobacco could be a source of trouble in the spread of disease.⁹⁵ Although it was conceived improbable that African growers would extend their tobacco production sufficiently to come into serious competition with European growers within any significant time, that legislation was a dormant deterrent to the existential threat of African competition.⁹⁶ The legislation was thus framed to exclude Africans from cultivating the crop and preserve the white production hegemony. For much of the 1930s, the aim of the state was simply to preserve the small European growers on the land by curtailing native competition. Thus, much of the marketing and production legislation that was put in place then consisted of covert tools to exclude Africans from entering production of “European” tobaccos. The authorities calculated that Company controlled production of tobacco involving huge estates had driven a great number of small European growers out of the field in Nyasaland and handed over production to African growers, and what happened in Nyasaland would happen to Southern Rhodesia unless the small white farmer was encouraged and protected.⁹⁷ Consequently, the state was always wary of the detrimental effects of “native” production on the labour demands of settler tobacco producers.

Indeed, these fears were well founded. Production of tobacco by Africans in Nyasaland *had* in fact jeopardised the smooth flow of migrant labour to Southern Rhodesia in the 1920s. In 1926, the annual report of the Supervisor of Facilities for the Passage of Northern Natives announced worriedly that there had been a dramatic drop in the numbers of African migrant labourers crossing into Southern Rhodesia.⁹⁸ This was attributed directly to Europeans of Nyasaland who had started buying “native” tobacco, and “doing everything to encourage the natives to grow it”.⁹⁹ The report pointed out that in Lilongwe district, one buyer had paid out £42 000 to “native producers”.¹⁰⁰ In 1927, the Supervisor wrote to the Colonial Secretary and noted, with gleeful *schadenfreude*, that the bulk of native-produced tobacco had been of low quality, and the white Nyasaland buyers were only purchasing better graded “native” tobacco resulting in a glut of

⁹⁴ NAZ, S1542/A4, Secretary Department of Agriculture and Lands to CNC, 13 February 1936.

⁹⁵ NAZ, S1542/A4, Secretary Department of Agriculture and Lands to CNC, 13 February 1936.

⁹⁶ NAZ, S1542/A4, CNC to NC Murehwa, 24 February 1936.

⁹⁷ *The New Rhodesian*, 10 September 1932.

⁹⁸ Annual Report of the Supervisor of Facilities for Passage of Northern Natives, 1926.

⁹⁹ Annual Report of the Supervisor of Facilities for Passage of Northern Natives, 1926.

¹⁰⁰ Annual Report of the Supervisor of Facilities for Passage of Northern Natives, 1926.

many tonnes of unsold and unsaleable tobacco.¹⁰¹ He hoped that this catastrophe would prompt an increase in African labourers from Nyasaland seeking employment in Southern Rhodesia.¹⁰² Thus tobacco production by “natives” was perceived a nuisance that could also disrupt the steady supply of black labour to white tobacco farms.

Similar concerns also preoccupied the colonial state in Nyasaland where, between 1914 and 1919, flue-cured production by huge white-owned estates in the Southern region increased creating a huge demand for labour.¹⁰³ This was assuaged by an annual hut tax of two months’ wages and a notorious labour exploitation regime known as *thangata*.¹⁰⁴ This system was used on labourers whose residence rights on tobacco estates were based on the provision of labour for rent and hut tax. Beginning from the 1920s, however, tobacco production in customary lands by African peasants (with assistance from expatriate farmers who had an interest in buying the crop) increased from 25 tonnes in 1924 to 880 tonnes in 1926.¹⁰⁵ At the same time, while the share of production of big estates had stood at 96% in 1917, by 1929 African peasants produced 63% of tobacco.¹⁰⁶ This dramatic rise in African production led to serious labour shortages in the estates’ sector culminating in estate owners lobbying the state to regulate and limit tobacco production by Africans. Subsequently, the state created the Native Tobacco Board in 1926 to regulate various aspects of African production.¹⁰⁷ The Native Tobacco Board, just like the Southern Rhodesian Tobacco Marketing and Stabilisation Act (1936), imposed limits on tobacco production by African small holders through requirements of registration and the establishment of auctions’ marketing that controlled the number of selling sites in order to restrict Africans’ access to tobacco markets.¹⁰⁸ To further limit production, Africans were banned from growing the more profitable flue-cured Virginia tobacco and were relegated to the lower-profit dark-fired tobacco which white farmers were less keen to cultivate because it was less lucrative.¹⁰⁹ Historians of tobacco production in Malawi agree that one central feature

¹⁰¹ NAZ, S238/49, Forced Recruitment of Women and Juveniles, Supervisor of facilities for Passage of Northern Natives to Colonial Secretary, 6 April 1927.

¹⁰² NAZ, S238/49, Forced Recruitment of Women and Juveniles, Supervisor of facilities for Passage of Northern Natives to Colonial Secretary, 6 April 1927.

¹⁰³ Prowse, ‘A History of Tobacco Production and Marketing in Malawi’, 681-712.

¹⁰⁴ Prowse, ‘A History of Tobacco Production and Marketing in Malawi’, 681-712.

¹⁰⁵ Prowse, ‘A History of Tobacco Production and Marketing in Malawi’, 681-712.

¹⁰⁶ Prowse, ‘A History of Tobacco Production and Marketing in Malawi’, 681-712.

¹⁰⁷ John McCracken, ‘Planters, Peasants and the Colonial State: The Impact of the Native Tobacco Board in the Central Province of Malawi’, *Journal of Southern African Studies*, 9, 2 (1983), 172-192.

¹⁰⁸ Julia Smith and Kelley Lee, ‘From Colonisation to Globalisation: A History of State Capture by the Tobacco Industry in Malawi’, *Review of African Political Economy*, 45, 156 (May 2018), 186-202.

¹⁰⁹ Smith and Lee, ‘From Colonisation to Globalisation’, 186-202.

of tobacco production during the colonial era was that it was based on supply of cheap labour and using African producers to subsidise estate owners through the Native Tobacco Board.¹¹⁰

Meanwhile in Northern Rhodesia the concept of the “crop hegemony” can also be applied: from 1900 to 1937 Africans were actively banned from growing tobacco although they were allowed to grow maize and keep cattle.¹¹¹ The state gave succour to settler tobacco capital and constrained indigenous production, relegating Africans to the position of mere labourers on white-owned tobacco farms.¹¹² Just as in Southern Rhodesia, the production of “indigenous” *Inyoka* tobacco was also purposefully undermined as the state sought to protect the African market for European growers. In 1924, the state imposed an exercise duty on the “indigenous” *Inyoka* tobacco to thwart the growth of the African independent producers.¹¹³ In 1937 production was eventually extended to African peasants when the Department of Agriculture introduced Burley tobacco in African areas because Europeans were no longer interested in the crop and more keen to grow the profitable flue-cured Virginia.¹¹⁴ The decision to allow Africans to grow tobacco reflected the underlying stereotypes about Africans’ constructed around the notion of “crop power hegemony”. The colonial state in Northern Rhodesia reckoned that Africans were too simple-minded and primitive to acquire the technical know-how to cultivate flue-cured tobacco and could fare better growing the cheaper air-cured Burley. The Macdonell Reserves Commission of 1924 in Northern Rhodesia pointed out the prevailing thinking amongst settlers that flue-cured tobacco which produced the bright leaf was “beyond the scope of the native” as he had neither the capital for it nor the training.¹¹⁵ Ironically, it was the same untrained African who worked on the white farms to produce flue-cured tobacco and his lack of capital was actually a result of systematic policies favouring white settler tobacco farmers!

In the final analysis, therefore, state policies in Southern Rhodesia, Northern Rhodesia and Nyasaland on African tobacco production – although differing in magnitude and scale – were

¹¹⁰ See Smith and Lee, ‘From Colonisation to Globalisation’, 186-202; Tobin Richard and Walter Knausenberger, ‘Dilemmas of Development: Burley Tobacco, the Environment and Economic Growth in Malawi’, *Journal of Southern African Studies*, 24, 2 (1998), 405–424; Tony Woods, ‘Why Not Persuade Them to Grow Tobacco?: Planters, Tenants, and the Political Economy of Central Malawi, 1920–1940’, *African Economic History*, 21 (1993), 131–150; Laura Graen, ‘Opening Malawi’s Tobacco Black Box’, DPhil Thesis, Martin Luther University of Halle-Wittenberg, 2012; Prowse, ‘A History of Tobacco Production and Marketing in Malawi, 1890-2010’, 681-712.

¹¹¹ Kanduzi, ‘The Tobacco Industry in Northern Rhodesia’, 201-229.

¹¹² Kanduzi, ‘The Tobacco Industry in Northern Rhodesia’, 201-229.

¹¹³ Kanduzi, ‘The Tobacco Industry in Northern Rhodesia’, 201-229.

¹¹⁴ Kanduzi, ‘The Tobacco Industry in Northern Rhodesia’, 201-229.

¹¹⁵ Kanduzi, ‘The Tobacco Industry in Northern Rhodesia’, 201-229.

all framed around creating a relationship of white planters as producers and Africans as labourers and consumers of European tobacco to establish a small thriving white planter community and a viable capitalist sector, at the expense of the African peasantry.

However, in Southern Rhodesia, the difference was that the curtailment and suppression resulted in the complete extinction of African commercial production of “indigenous” tobacco or any tobacco from around 1938. The anomaly is more striking because, while cash cropping by African producers was suppressed by colonial officials from the 1930s, the magnitude of curtailment still left peripheral producers relatively viable but too weak to compete with the established white capitalist sector. The collapse of the whole African tobacco economy in Southern Rhodesia from the 1930s into extinction and the inability of Africans to engage in production of “European” tobaccos thereafter reflects a more systematic policy of suppression of production. Significantly, this scenario challenges Ranger’s argument that black peasant production survived (indeed thrived) in the 1930s in Southern Rhodesia.¹¹⁶ There was no “peasant option” for peasant tobacco producers or any African tobacco “reserve entrepreneurs” between 1938 and 1952. As this chapter now shows, it seemed as though African peasant production survived but this was a historiographical teleological error: in fact, this apparent survival was the result of a state-directed revival from the 1950s that masked a complete rupture by the late 1930s when it was destroyed. African production of tobacco was only resurrected in 1952 at the behest of the colonial state during a time when British imperial government was emphasizing high modernism and state planning as the next sections will show. But even then, Africans could only produce only those types of tobacco in which European farmers were least interested.

FROM CURTAILMENT TO ASSISTANCE? AFRICAN TURKISH PRODUCTION, AND THE DEVELOPMENT STATE IN SOUTHERN RHODESIA, 1952-1978.

As noted above, from the 1940s to the 1950s British colonial Africa initiated a series of programs emphasising the merits of high modernism, state planning and increasing productivity through technical innovation.¹¹⁷ For the state, progress hinged upon the

¹¹⁶ Ranger, *Peasant Consciousness and the Guerrilla War*, 68.

¹¹⁷ See James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Has Failed* (New Haven: Yale University Press, 1998).

implantation of top-down centralised scientific practices and technical expertise.¹¹⁸ Western science and technical intervention became the fulcrum of state intervention in the agrarian landscape in most parts of British Colonial Africa, tied to the desire to increase production for post-war reconstruction.¹¹⁹ This intervention included conservation programs to modernise production in African areas. In 1944, the Native Trade and Production Commission, popularly known as the Godlonton Commission, recommended the need for coercive enforcement of good husbandry methods in the native reserves to prevent land degradation as a result of overstocking and ruinous farming practices.¹²⁰ The recommendations of this Commission were then more expressly codified by the Land Husbandry Act (NLHA) in 1951. The Act reconfigured land tenure in African areas both spatially and politically.¹²¹ The NLHA had as its chief objective the control of the utilisation and allocation of land occupied by “natives”, to ensure its efficient use for purposes of agriculture, to slow down erosion, and to provide greater security of tenure.¹²² The Act brought with it a coterie of conservation minded reforms such as destocking, limiting the number of farmers on the land, tenurial adjustments towards promoting individual responsibility and investment. Land was to be re-evaluated and classified through aerial surveys and rural planning became central. Mechanical conservation measures were prescribed by the state agricultural planners.¹²³

This modernisation thrust was premised on the belief that soil conservation would be achieved, livestock management rationalised, and ultimately the whole organisation of African agriculture completely changed.¹²⁴ The implementation of high modernism also meant that the state had to find suitable cash crops that could be grown in the African areas and with the potential to generate capital investments and raise the standard of living. Within this context,

¹¹⁸ Alexander, *The Unsettled Land*, 63.

¹¹⁹ See Helen Tilly, *Empire, Development and the Problem of Scientific Knowledge, 1870-1950: Africa as a Living Laboratory* (Chicago: University of Chicago Press, 2011), 115-168.

¹²⁰ Report of the Native Production and Trade Commission, 1944, 36.

¹²¹ There is a lot of literature on the Native and Husbandry Act and the politics of conservation in the African areas in Southern Rhodesia which examines how modernisation was used as a tool of exclusion, discrimination and alienation against black Africans, see V.E.M. Machingaidze, ‘Agrarian Change From Above: The Southern Rhodesia Native Land Husbandry Act and African Response’, *The International Journal of Historical Studies*, 24, 3 (1991), 557-588; William R. Duggan, ‘The Native Land Husbandry Act of 1951 and the Rural African Middle Class of Southern Rhodesia’, *African Affairs*, 79, 315 (April 1980), 227-239; J.A. Elliot, ‘Soil Erosion and Conservation in Zimbabwe’, PhD Thesis, Loughborough University of Technology, August 1989; McGregor, ‘Conservation Control and Ecological Change’, 257-279; Guy Desmond S. Thompson, ‘Cultivating Conflict: Improved Agriculture and Modernisation in Colonial Zimbabwe’, PhD Thesis, University of Minnesota, 2000; Ian Phimister, ‘Rethinking the Reserves: Southern Rhodesia’s Land Husbandry Act Reviewed’, *Journal of Southern African Studies*, 19, 2 (June 1993), 225-239.

¹²² Yudelman, *Africans on the Land*, 117.

¹²³ Yudelman, *Africans on the Land*, 122.

¹²⁴ Yudelman, *Africans on the Land*, 122.

the state altered its attitude about African production of tobacco and suddenly tobacco became the “right crop” to encourage new patterns of rural accumulations, land development and soil conservation. This new initiative and policy thrust was also spurred by developments on the international tobacco market front – particularly the rising popularity of the blended cigarettes such as Camels, Lucky strikes and Chesterfield, which created a huge demand for Turkish tobacco¹²⁵ in the United States.¹²⁶

While the rhetoric that underlay the states modernisation efforts in African areas was cloaked in the language of development and improvement, the real issue for much of these efforts was the need to control Africans in light of new kinds of political unrest triggered by the rise of nationalism from the 1950s.¹²⁷ Thus, the context of the NLHA in Southern Rhodesian historiography has shifted from the view of it as a conservationist measure to interpretations that cast it as a compromise between the interests of industrial capital on one hand and white tobacco planters on the other hand.¹²⁸ Mtisi, Nyakudya and Barnes point out that the development projects of the state in African areas were safety valves to forestall implosion caused by social unrest catalysed by the state’s neglect of the African rural areas that would in turn generate increased racial competition between blacks and whites for the limited urban job market.¹²⁹ Thus for these reasons, as this section will show the pace of tobacco production in African areas remained hamstrung by many factors that the state could not resolve such as limited state financial support to African agriculture, land scarcity in the TTLs and poor infrastructure.

¹²⁵ Turkish tobacco also referred to as “oriental tobacco” is sun-cured tobacco commonly produced in the Mediterranean areas particularly in Greece and Turkey. Oriental tobacco was the first to be used in cigarettes until World War I when flue-cured tobacco ousted Turkish popularity in cigarette brands.

¹²⁶ ‘Burley and Turkish-They extend the traditional areas’, *The Rhodesian Herald*, 10 March 1963.

¹²⁷ Phimister points out that the implementation of the Act was inversely much more responsible for the rise of African nationalism during the 1950s and became a rallying point for recruiting rural Africans to political activism. See Phimister, ‘Rethinking the Reserves’, 225-239.

¹²⁸ Mary Elizabeth Bulman had argued in 1975 that conservation was a key priority and motivation behind the NLHA. See M. E. Bulman, *The Native Land Husbandry Act of Southern Rhodesia. A Failure in Land Reform* (Salisbury: Tribal Areas of Rhodesia Research Foundation, 1975), 7. On the other hand, in 1980, William Duggan pointed out that manufacturing interests in Rhodesia favoured a truly urban proletariat and a rural bourgeoisie but, because an effective scheme to develop African areas would destroy the existential edifice of white settler society, the NLHA consequently became a compromise between settler farmers and industrialists to end migrant labour but not foster an African middle class within the African reserves. See Duggan, ‘The Native Land Husbandry Act of 1951’, 227-239.

¹²⁹ Joseph Mtisi, Munyaradzi Nyakudya and Theresa Barnes, ‘Social and Economic Developments during the UDI Period’, in Brian Raftopoplous and Alois Mlambo (eds), *Becoming Zimbabwe: A History from the Pre-Colonial Period to 2008* (Harare: Weaver Press, 2009), 131.

The state's new policy thrust was also much less a result of modernisation or benevolence, but rather the direct outcome of "new crop power hegemonies" caused by a decline in Turkish production amongst white farmers. This created a huge vacuum in the export market that had to be filled by coerced African enterprise. Turkish tobacco had been very sparsely grown in the European farms and the earliest significant production of the crop in Southern Rhodesia was during the 1935/36 season when a total of 1 953 acres were grown producing a yield of 683 809 lbs.¹³⁰ The crop had been grown prior to that but not on any significant scale. Production in the white farms had risen fairly until reaching a peak of 11 811 acres planted and 4 796 132 lbs harvested during the 1946/47 season.¹³¹ Prices had fallen sharply from the 1947/48 season creating an immediate recession in production and a fall in acreages planted.¹³² In 1948 the acreage fell to 4 650 and production to 1 686 737 lbs.¹³³ Despite the passing of the Turkish Tobacco Marketing Act in 1948 to remedy the situation by reorganising the marketing of the crop production further declined such that on the eve of the beginning of state sanctioned African production during the 1950/51 season, only 326 acres were planted, and a paltry crop of 99 160 lbs harvested!¹³⁴ Thus facing an uncertain future, the Turkish tobacco industry had to be rescued by encouraging African production chiefly because European growers of Virginia tobacco had shown little interest in the crop. Thus, it must be emphasized that Africans' production of tobacco was relegated to the less profitable tobacco types that were unwanted by the European growers because they had a very small return.

Even then, the Rhodesia Tobacco Association (RTA) was perturbed by the initiative to encourage Turkish production in African areas and noted with concern that "the great inflow of cash to the reserves would stimulate production of other crops, and would be an advantage to the African people, but it would deplete the already scanty labour supply".¹³⁵ The RTA also made it clear that, in the event of a fall in the prices of Virginia leaf, there would be a revival of interests in Turkish tobacco from white farmers, and once again conflicting interests would come into play, and there was need for contingency planning from the state to regulate that

¹³⁰ NAZ, F226/1215/F3, Turkish tobacco marketing and production 1960-61, Report of the Committee set up by the Minister of Agriculture to Investigate the Need for Change in the Methods of Turkish Tobacco, 1960.

¹³¹ Report of the Committee set up by the Minister of Agriculture to Investigate the Need for Change in the Methods of Turkish tobacco, 1960.

¹³² Report of the Committee set up by the Minister of Agriculture to Investigate the Need for Change in the Methods of Turkish tobacco, 1960.

¹³³ Report of the Committee set up by the Minister of Agriculture to Investigate the Need for Change in the Methods of Turkish Tobacco, 1960.

¹³⁴ Report of the Committee set up by the Minister of Agriculture to Investigate the Need for Change in the Methods of Turkish Tobacco, 1960.

¹³⁵ 'Turkish for Africans', *Rhodesian Tobacco Grower and Food Producer*, September 1952.

eventuality.¹³⁶ Essentially, what this reveals is how the interest of white growers were paramount in state policy articulation in the tobacco farming sector.

In 1952, the state launched a pilot scheme for Turkish tobacco production in the Musengezi Native Purchase Area (NPA)¹³⁷ with 20 pioneer African farmers growing the crop on half acre plots.¹³⁸ In 1954, the scheme was further extended to cover 70 African farmers in other four NPAs.¹³⁹ No attempt was made to encourage African production of Virginia flue-cured tobacco, ostensibly because “the capital costs involved would be a big deterrent to the farmer”.¹⁴⁰ In 1955, experiments on growing Turkish tobacco on worked out and poor soils in the Native Reserves (later called Tribal Trust Lands TTLs, from 1962¹⁴¹) were started by the Department of Native Agriculture¹⁴² in the Chinamhora Reserves, 20 miles from Salisbury.¹⁴³ Twenty five African farmers took part and each farmer had an acre, which was quartered into tobacco, maize, sun hemp and rapoko planted in rotation to enhance the fertility of the exhausted soils in the native reserves.¹⁴⁴ To avoid over-working the soils, some of the tobacco was planted on so-called “virgin lands” for one season before reverting to grass and planting tobacco again.¹⁴⁵ Government provided all the costs of production except transport in the first year and half the costs in the second year, while in the third year the farmer would be let on his own.¹⁴⁶ In 1956, production extended to other native reserves as a result of the relative “success” of this pilot project. During the 1959/60 season Southern Rhodesia produced a total Turkish crop of 1 878 000 lbs, with 618 000 lbs having been produced by 4 444 African

¹³⁶ ‘Turkish for Africans’, *Rhodesia Tobacco Grower and Food Producer*, September 1952.

¹³⁷ The Native Purchase Areas had been set up in 1931 under the Land Apportionment Act consisting of 7,460,000 acres which was 7.7% of the country. Holdings in these areas were owned or leased by “progressive” Africans for profitable farming. Applicants for Purchase Area farms had to provide evidence of their ability to practice modern methods of farming and good land husbandry. By 1935, 250 farms had been taken up in these areas by Africans. In 1961, the number of holdings in those areas rose to 1,969. By 1962, the areas accommodated 106,000 persons or 2,9% of the African population. See George Kay, *Rhodesia: A Human Geography* (London: University of London Press, 1970), 93.

¹³⁸ ‘Growing of tobacco by natives’, *The Rhodesian Herald*, 11 November 1954.

¹³⁹ ‘Growing of tobacco by natives’, *The Rhodesian Herald*, 11 November 1954.

¹⁴⁰ ‘Growing of tobacco by the natives’, *The Rhodesian Herald*, 11 November 1954.

¹⁴¹ Areas demarcated as The Tribal Trust Lands of Southern Rhodesia constituted of 16 150 908 hectares (39 909 863 acres) containing 166 separate tribal areas ruled by 244 chiefs and 407 headmen. The areas had a total population of 2 897 000 or five persons per family, and a total of 579,000 families in 1971.

¹⁴² The Department of Native Agriculture had been set up in 1926 under agriculturalist E.D Alvord to oversee the implementation of good husbandry methods in African areas. In 1969 it was changed to the Department of Agricultural Development set up to provide extension advice to communal farmers. The new department now had specialist in various branches such as livestock, crop production, irrigation, farm management and conservation.

¹⁴³ ‘Government helps natives to grow tobacco’, *The Rhodesian Herald*, 19 October 1955.

¹⁴⁴ ‘Government helps natives to grow tobacco’, *The Rhodesian Herald*, 19 October 1955.

¹⁴⁵ ‘Government helps natives to grow tobacco’, *The Rhodesian Herald*, 19 October 1955.

¹⁴⁶ ‘Government helps natives to grow tobacco’, *The Rhodesian Herald*, 19 October 1955.

growers.¹⁴⁷ Turkish tobacco was hailed as a suitable crop for the black farmer, with much of its processes such as reaping, curing, cultivation much suited for women and children, hence a suitable ‘African crop’.¹⁴⁸ A large number of Africans were very enthusiastic about participating in the tobacco economy after so many years of marginalisation and were thus keen to grow the crop.¹⁴⁹

The Turkish crop also could be grown in the drier parts of the country with poor sandy soils into which Africans had been forced by the racist land segregation policies.¹⁵⁰ The encouragement was consistent with the NLHA native agricultural policy template of imposing mixed farming system combining cash crop production and cattle keeping.¹⁵¹ The crop was also deemed to be attractive to Africans on account of its ability to provide a yield even though small under drought conditions when all other crops would have failed.¹⁵² The Turkish crop was also thought ideal as it did not denude natural resources like woodlands and did not require firewood for curing.¹⁵³ Turkish tobacco also improved the fertility of the grazing land, and had long term effects in land conservation and management.¹⁵⁴ The development of Turkish tobacco into the reserves and NPAs brought with it a technical infrastructure and network of extension services under the Department of Native Agriculture. In 1958 production in the African areas amounted to 150 acres, in 1960 it grew to 1000 acres.¹⁵⁵ Production increased significantly such that by 1960, there were 4417 Turkish tobacco producers in African areas, with production doubling from 673 lbs/acre to 1 015 lbs/acre, plus an increased income from £17 million to £31 million in just under 10 years.¹⁵⁶ Between 1957 and 1960, the average gross output per acre from Turkish tobacco ranged from £38. 12s an acre to £58. 12s.11d. per acre, and this was between five and six times the yield of low unit value crops in the African areas.¹⁵⁷

¹⁴⁷ ‘Oriental Tobacco: A Crop with a Promising Future’, *Tobacco Forum of Rhodesia*, May 1965.

¹⁴⁸ ‘Turkish Tobacco is a Good Crop for African Farmers’, *The Rhodesian Herald*, 15 November 1956.

¹⁴⁹ ‘Turkish Tobacco is a Good Crop for African Farmers’, *The Rhodesian Herald*, 15 November 1956.

¹⁵⁰ Yudelman, *Africans on the Land*, 29.

¹⁵¹ See Phimister, ‘Rethinking the Reserves’, 225-239.

¹⁵² ‘A crop of potential in purchase lands’, *Tobacco Forum of Rhodesia*, November 1973.

¹⁵³ The Tobacco Export Promotion Council of Rhodesia and Nyasaland, *The Tobacco Industry of Rhodesia and Nyasaland* (Salisbury: Mardon Printers, 1963), 58.

¹⁵⁴ Weinrich, *African Farmers in Rhodesia*, 70.

¹⁵⁵ NAZ, (Unprocessed), 42-13-3R, Box number 126958, Tobacco Oriental Marketing and Production, Record of a meeting on the marketing of Turkish tobacco held in the boardroom of the Ministry of Agriculture on Friday 27 January 1961.

¹⁵⁶ ‘4417 Turkish tobacco producers in native areas’, *The Rhodesian Herald*, 12 August 1960.

¹⁵⁷ Yudelman, *Africans on the Land*, 173.

Allison Shutt, however, argues that the penetration of Turkish tobacco was slow amongst most Purchase Area farmers because of the high transportation costs, high labour costs and limited capital investments for farm expansion which made the crop too costly to grow.¹⁵⁸ Indeed, it is true that tobacco did not become as popular as other crops such as maize, groundnuts and small grains grown in the African areas. A 1959/60 survey revealed that the maize acreage in African areas was 50% of the total cultivated acreage, millet and sorghums 41%, groundnuts accounting for 7% and other crops 2%.¹⁵⁹ In particular the survey noted that the most significant trend in native production was the movement towards a single cash crop industry mainly based on maize production as African farmers produced twice as much maize as European farmers.¹⁶⁰ Despite this in the areas within which it was grown tobacco cultivation brought with it the flow of capital into the NPAs that altered agricultural production methods. In the Musengezi NPA's which had been allocated in 1933, and where the pilot project to grow Turkish tobacco commenced, the landscape and picture began to change as the area became one of the "most progressive farming areas in the country".¹⁶¹

¹⁵⁸ Allison Shutt, 'Squatters, Land Sales and Intensification in Marirangwe Purchase Area', *The Journal of African History*, 43, 3 (2002), 473-498.

¹⁵⁹ A.A. Le Roux, 'African Agriculture in Rhodesia', *The Rhodesia Agricultural Journal*, 66, 2525 (July-August 1969), 84.

¹⁶⁰ Le Roux, 'African Agriculture in Rhodesia', 85.

¹⁶¹ 'African Farmers turn to modern methods', *The Rhodesian Herald*, 18 January 1965.

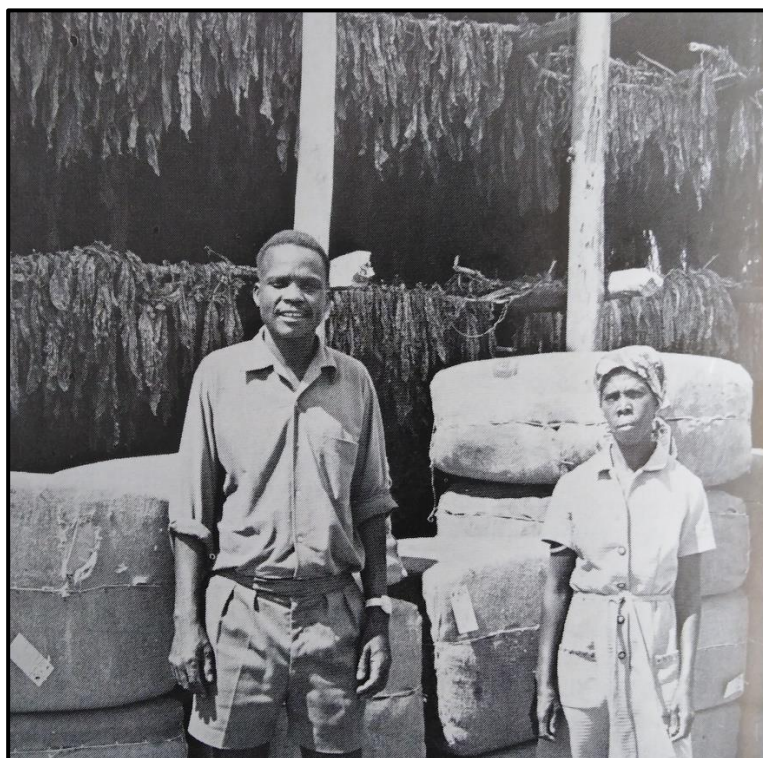


FIGURE 13 A NATIVE PURCHASE AREA FARMER AND HIS WIFE STANDING IN FRONT OF THEIR TOBACCO BALES READY FOR THE MARKET IN 1974.¹⁶²

A report in the *Rhodesian Herald* pointed out that “scarcely 7 years ago, only three farms were ring fenced, today there are 53 fully fenced farms, with a further 116 partially fenced. Most of the fenced farms are subdivided into paddocks, and it is estimated that 18 000 acres in that area are grazed rotationally”.¹⁶³ The report further noted that during the same period the number of dams on private farms had increased from 3 to 42. These developments on farms were much possible as the average income of each farmer from tobacco was estimated to be around £ 300-400 gross with a few individuals earning £1 000 or more.¹⁶⁴ One of the model farmers Mr Griston Mungofa of Tichaendepi Farm had begun to practice intensive farming, putting under 20 acres of tobacco and 20 acres of maize a year for domestic and commercial purposes while practising a crop rotation of tobacco following maize, and then grazing for a number of years.¹⁶⁵ Another African farmer, Mr Beremauro from the Vuti NPA in Sinoia was so successful that he was even profiled in the *Rhodesian Tobacco Journal* (a white tobacco farmers’ mouthpiece) – as a reflection of how well he was doing to attract curiosity and admiration. With a farm of 1432 acres, he had grown 30 acres of tobacco, and 40 acres maize in addition to owning 56

¹⁶² *Tobacco Forum of Rhodesia*, 3, 1974.

¹⁶³ ‘African Farmers turn to modern methods’, *The Rhodesian Herald*, 18 January 1965.

¹⁶⁴ ‘African Farmers turn to modern methods’, *The Rhodesian Herald*, 18 January 1965.

¹⁶⁵ ‘African Farmers turn to modern methods’, *The Rhodesian Herald*, 18 January 1965.

herd of cattle.¹⁶⁶ His ploughing was praised as being in adherence with strict state-sponsored conservation principles. Additionally, he was able to build 8 well-constructed tobacco barns and buy two tractors, a Bedford truck and three trailers reflecting the patterns of capital accumulation amongst tobacco NPA farmers and the significant developments and changes this was effecting on the land.¹⁶⁷

These few success story narratives of the Turkish tobacco initiative in the NPAs witnessed the state expanding the endeavour to most poor and dry TTLs in Fort Victoria (Gutu, Zimuto, and Bikita Tribal Trust Lands), the Midlands and Manicaland provinces in the 1960s. The expansion of the Turkish production thrust into the TTLs of Victoria and Midlands provinces coincided with the state's abandonment of high modernisation and its interventionistic technical scientific model in African areas in 1960 in favour of community development as a result of a failure of state-enforced top-down agricultural programs and African opposition to them.¹⁶⁸ After the failure of the Native Land Husbandry Act and vigorous African opposition to coercive state conservation programs the colonial state overhauled its native policy and began to embrace the human factor in native administration.¹⁶⁹ Outbreaks of violence in the rural countryside in 1961 in expression of rabid antagonism to the Act forced the state's hand to review it and come to critique the efficacy of coercive technical interventions in African agriculture.¹⁷⁰ Ian Phimister notes that one of the major weaknesses of the 1950s modernistic frame was that it had tried to impose a system of mixed farming unsuitable to the arid parts of the country resulting in lower productivity.¹⁷¹

Community development was diametrically opposed to the technical development bias of high modernism and focussed on social integration of African systems into colonial administration. The Native Land Husbandry Act was dismantled in 1962, the Reserves were renamed Tribal Trust Lands and chiefs were for the first time allowed to allocate land to their followers.¹⁷² After the abandonment of the Act, a three-point plan was implemented giving the priorities in the TTLs as the mechanical conservation of all arable land, conservation of grazing land

¹⁶⁶ 'Around the farms', *Rhodesian Tobacco Journal*, October 1965.

¹⁶⁷ 'Around the farms', *Rhodesian Tobacco Journal*, October 1965.

¹⁶⁸ For further reading see Alexander, *The Unsettled Land*, 65-72; Phimister, 'Rethinking the Reserves', 225-239.

¹⁶⁹ Alexander, *The Unsettled Land*, 65-72.

¹⁷⁰ Michael Drinkwater, 'Technical Development and Peasant Impoverishment: Land Use Policy in Zimbabwe's Midlands Province', *Journal of Southern African Studies*, 15, 2 (January 1989), 287-305.

¹⁷¹ See Phimister, 'Rethinking the Reserves', 225-239.

¹⁷² Weinrich, *African Farmers in Rhodesia*, 35.

through grazing management and improvement of fertility and production.¹⁷³ The primary development program launched in 1963 had as its objectives resettling the unemployed landless within the sparsely populated areas in TTLs through expanding irrigation schemes.¹⁷⁴ The predominant aim of these land settlement schemes in the African areas under community development was to put as many Africans on the land as possible in order to reduce the rate of urban unemployment. The reason for this was to stem the tide of festering nationalism, urban unrest and political activism whose tide was sweeping through most urban centres in Southern Rhodesia during the 1960s.¹⁷⁵ This was indeed a reversal of the colonial schemes during the 1930s whose motive had been to force Africans into the labour market. Consequently, by 1969 the area under irrigation in the TTLs was 14 000 acres.¹⁷⁶

In Turkish tobacco production, the main attributes of community development initiatives found expression through financial assistance, integrated extension services, and participatory as distinct from coercive conservation in the TTLs. Financial assistance came from the African Loan Fund which had been set up in 1958 to grant loans to African peasants.¹⁷⁷ By 1961, over £150,000 had been loaned out to African peasants. In the 1960s the African Loan Fund supplied Turkish growers with seedlings and other requirements at a cost of £22. 1.s/acre grown by each grower from the gross payment.¹⁷⁸ On the extension front, black state-trained tobacco officers were deployed to help African farmers. Knowledge dissemination was achieved through pre-planting meetings with oriental tobacco groups, demonstration, and training centres where various women and youth groups were co-opted.¹⁷⁹ Farming competitions were held to encourage the production of Turkish tobacco with other crops, integrated with pasture management for livestock.¹⁸⁰ The value of these competitions was to encourage better methods of land use. The main thrust of extension was community-based and meant to be a break from

¹⁷³ M. Froude, 'Veld Management in the Victoria Tribal Areas', *The Rhodesian Agricultural Journal*, 71, 2 (March-April 1974), 29-33.

¹⁷⁴ Alexander, *The Unsettled Land*, 72.

¹⁷⁵ For a comprehensive discussion on urban nationalism and violent protest during the 1960s in Southern Rhodesia see Kudakwashe Chitofiri, 'Urban protest, Citizenship and the City: The History of Residents Associations and African Urban Representation in Colonial Harare, Zimbabwe', PhD Thesis, University of the Free State, 2015, 171-183.

¹⁷⁶ Alexander, *The Unsettled Land*, 72.

¹⁷⁷ Weinrich, *African Farmers in Rhodesia*, 27.

¹⁷⁸ NAZ, S3700, Production and Marketing of Oriental Tobacco, October 1975-July 1976, Senior Provincial Agricultural officer to Secretary Internal Affairs, 23 January 1975; A Developmental Program for Oriental Tobacco for Fort Victoria Province.

¹⁷⁹ NAZ, S3700, Production and Marketing of Oriental Tobacco, October 1975-July 1976, Senior Agricultural Officer to Secretary Internal affairs; Re: The Package Program as an Extension Aid, 18 October 1974.

¹⁸⁰ NAZ, S3700/29, Farming Competitions Policy, Secretary External Affairs to all Provincial agricultural officers, 14 August 1973.

the coercive methods of extension used during the era of high modernism to encourage African participation and co-operation. Based on this concept, extension was supposed to focus on arable conservation, maintenance of contours, grazing management and the maintenance of soil fertility by the promotion of sound farming practices.¹⁸¹ The main thrust was to use local capacities and initiatives to build an extension infrastructure less top-down but more embedded in grass-roots production systems and designs.

The Tobacco Research Board set up a Turkish tobacco research station at Fort Victoria to serve the large number of potential African growers in 1967. The policy of expanding Turkish tobacco culture to this area was informed by the need to encourage rural Africans to stay on the land at a time when the growth of nationalism, urban protests and political activism was becoming more rampant.¹⁸² However, the gross returns in most of the TTLs (particularly those of Gutu and Zimuto) were very poor, amounting to a mere £5/acre, while production cost hovered around £18-20/acre.¹⁸³ During the 1967/68 season there were 1 400 Africans growing Turkish tobacco in the colony mostly confined to the Victoria province particularly Gutu, Zimuto, and Bikita TTLs plus a few growers in the NPAs.¹⁸⁴ The total African Turkish acreage was 338 acres, which produced 67 000 lbs and realised £7 000 at an average price of 25d./lib.¹⁸⁵ The average TTL grower had planted ½ an acre, and NPA growers ranged from 1-2 ½ acres.¹⁸⁶ TTLs farmers had lower average production of 400 lbs/acre compared to 900 lbs/acre from NPA growers.¹⁸⁷ The poor remuneration during the 1967/1968 season saw the number of growers and acreage planted falling drastically during the 1968/69 season to 1,100 and 213 respectively.¹⁸⁸ Reservations began to be expressed on the commercial value of the enterprise

¹⁸¹ NAZ, S3700/29, Farming Competitions Policy, Secretary External Affairs to all Provincial agricultural officers, 14 August 1973.

¹⁸² NAZ, (Unprocessed), 42-13-3R, Box number 126958, minutes of the meeting of members of the Tobacco Marketing Board held on 13 June 1967.

¹⁸³ NAZ, (Unprocessed), 42-13-3R, Box number 126958, Tobacco Oriental Marketing and Production, Secretary of Internal Affairs to Secretary for Agriculture, 8 July 1969.

¹⁸⁴ NAZ, (Unprocessed), 42-13-3R, Box number 126958, Tobacco Oriental Marketing and Production, Secretary of Internal Affairs to Secretary of Agriculture, 8 July 1969: Turkish Tobacco African Production.

¹⁸⁵ NAZ, (Unprocessed), 42-13-3R, Box number 126958, Tobacco Oriental Marketing and Production, Secretary of Internal Affairs to Secretary of Agriculture, 8 July 1969: Turkish Tobacco African Production.

¹⁸⁶ NAZ, (Unprocessed), 42-13-3R, Box number 126958, Tobacco Oriental Marketing and Production, Secretary of Internal Affairs to Secretary of Agriculture, 8 July 1969: Turkish Tobacco African Production.

¹⁸⁷ NAZ, (Unprocessed), 42-13-3R, Box number 126958, Tobacco Oriental Marketing and Production, Secretary of Internal Affairs to Secretary of Agriculture, 8 July 1969: Turkish Tobacco African Production.
NAZ, (Unprocessed), 42-13-3R, Box number 126958, Tobacco Oriental Marketing and Production, Secretary of Internal Affairs to Secretary of Agriculture, 8 July 1969: Turkish Tobacco African Production.

¹⁸⁸ NAZ, (Unprocessed), 42-13-3R, Box number 126958, Tobacco Oriental Marketing and Production, Secretary of Internal Affairs to Secretary of Agriculture, 8 July 1969: Turkish Tobacco African Production.

particularly in the poor sand soils of the TTLs.¹⁸⁹The Secretary for Internal Affairs, in his correspondence with the Secretary for Agriculture, pointed out that the very low profit margins of the crop in the TTLs made it impossible to continue with government support for the crop. In fact, he recommended the abandonment of the project:

It seems to me that with the possible exception of very few Purchase Area Farmers who may be making something out of the crop. There is no attraction in the crop at the present price of 25d and if prices drop below this point it would be wrong to continue with production because people would be growing at a loss. In the circumstances I must support the recommendation that government support for the crop be dropped in the interim I think the present growers must be encouraged to switch to groundnuts as the best alternative cash crop for these areas.¹⁹⁰

The state decided to withdraw the support for the oriental tobacco crop. However, in 1969 Tribal Trust Lands Development Cooperation (TTLDCOR)¹⁹¹ was willing to underwrite the production of 150 000 to 200 000 lbs of oriental tobacco during the 1969/70 season and ensuing years as a result of a steady rise in demand of Turkish tobacco caused by a rise in local Turkish consumption.¹⁹² TTLDCOR supported farmers in the Gutu TTLs to grow a 180 acre crop during the 1969/70 season which produced 150 000 lbs. In 1971, however, the annual consumption of Turkish tobacco rose to 300 000 lbs with the increased demand for toasted brands such as Gunston and Texas cigarettes.¹⁹³ Stocks of oriental tobacco were voided, and there was a shortage of oriental tobacco on the local market during the 1971/72 season. A scheme was put in place for the production of 500 000 lbs of oriental by the local Gutu TTLs, NPAs, and European growers under the auspices of the Ministry of Internal Affairs, with the African growers in Gutu expected to produce 200 000 lbs/annum.¹⁹⁴ The shortage of oriental tobacco continued such that Southern Rhodesia production could not keep up with demand by local manufacturers for brands of cigarettes.¹⁹⁵ As a result, the trade offered to pay a price of

¹⁸⁹ NAZ, (Unprocessed), 42-13-3R, Box number 126958, Tobacco Oriental Marketing and Production, Secretary of Internal Affairs to Secretary of Agriculture, 8 July 1969: Turkish Tobacco African Production.

¹⁹⁰ NAZ, (Unprocessed), 42-13-3R, Box number 126958, Tobacco Oriental Marketing and Production, Secretary of Internal Affairs to Secretary for Agriculture, 8th July 1969

¹⁹¹ TTLDCOR had been formed in 1968 by the Tribal Trust Lands Development Act to develop TTLs using European private capital and African cooperation.

¹⁹² NAZ, (Unprocessed), 42-13-3R, Box number 126958, G.D Cox for Secretary Agriculture to Secretary Internal Affairs, 1 October 1969.

¹⁹³ NAZ, (Unprocessed), 42-13-3R, Box number 126958, Secretary for Internal Affairs Minutes on oriental tobacco production, 22 February 1971.

¹⁹⁴ NAZ, (Unprocessed), 42-13-3R, Box number 126958, Secretary for Internal Affairs Minutes on oriental tobacco production, 22 February 1971.

¹⁹⁵ NAZ, S3700/22, Production and Marketing of Oriental Tobacco, Secretary of Agriculture M.G.B Rooney to Secretary of Internal Affairs, 25 October 1974.

R\$ 1.35/kg for oriental tobacco over three years beginning in 1974.¹⁹⁶ The improvement of the market conditions saw the extension of oriental production in the tribal areas to Midlands and Manicaland provinces.¹⁹⁷ To assist in this endeavour, and meet the national Turkish requirements, the Rhodesian Oriental Tobacco Association (ROTA), a body of European Turkish producers agreed to provide funding for the production of seedlings for distribution to African growers and create a more expanded tobacco extension system to enhance the potential progress of the crop in the TTLs.¹⁹⁸

However, despite its touted development and conservation ideals, the oriental tobacco drive failed to have any significant positive impact in changing the physical landscape and accumulation patterns particularly within TTLs and had limited successes in the NPAs. The reason for this was the limited objectives of state policy intervention in the African countryside which was largely motivated by the inclination to impose political control and extend colonial authority in a way that could not lead to the emergence of a strong African rural bourgeoisie that could disrupt the basis of white settler farmer privilege. In the long run, the colonial projects ignored tackling the glaring pitfalls of the African rural economy such as capital, poor soils, investments in technical services and infrastructure and concentrated on token superficial interventions to politically appease rural communities. Thus, there was limited capital investment in the TTLs, inadequate land, deplorable infrastructure and insufficient technical capacity to deal with the major production challenges such as control of tobacco diseases and adequate facilities to raise a remunerative quality crop. This was more glaring as state expenditure for African agriculture had fallen from 2.8 % of total spending between 1966 and 1969 to 1.2% in the years 1975 to 1976 as a result of the Unilateral Declaration of Independence (UDI).¹⁹⁹ This was because the state began prioritising giving subsidies to European farmers to withstand the effects of the economic embargo imposed by Britain in 1965.²⁰⁰ Thus much of state funding for African farmers was withdrawn.²⁰¹ In this context, Mosley's argument of higher African agricultural production statistics during the 1950s in Kenya and Southern Rhodesia fails to grapple with these unequal and discriminative production conditions.

¹⁹⁶ NAZ, S3700/22, Production and Marketing of Oriental Tobacco, Secretary of Agriculture M.G.B Rooney to Secretary of Internal Affairs, 25 October 1974.

¹⁹⁷ During the 1973/74 season, Victoria province had 26 hectares of oriental tobacco, Midlands 5 hectares and Manicaland 10 hectares.

¹⁹⁸ NAZ, S3700/22, Production and Marketing of Oriental Tobacco, C.B Beaumont (Senior Training Specialist, training branch, Department of Conex to Provincial agricultural officers, 10 September 1974.

¹⁹⁹ Shutt, 'We are the Best of the Poor Farmers', 198

²⁰⁰ A. Astrow, *Zimbabwe: A Revolution that Lost Its Way?* (London; Zed Books, 1983), 65.

²⁰¹ Shutt, 'We are the Best of the Poor Farmers', 198.

Consequently, in most tribal areas, there was an extreme shortage of watering facilities for tobacco seedbeds and most African Turkish growers in the TTLs were not too quick to learn the new commercial methods of cultivating tobacco. The Provincial Agricultural Officer for Manicaland noted of the African tobacco farmers of Inyanga that they were “rightly traditional”, “very primitive” and underdeveloped – needing a lot of explanations, teaching and supervision which was very difficult since the farmers were scattered all over and available technical support could not cover provision of extension support to all the farmers.²⁰² As a result, the growers “grew crudely resulting in tobacco cured in the lands, harvested green, mouldy or too dry.”²⁰³ During the 1973/74 season the area under oriental tobacco in the TTLs of Victoria province was only 26 ha, while Manicaland TTLs only had 5 ha and Midlands 10 hectares.²⁰⁴ Production, however, kept going down. In Manicaland, although 100 Africans had grown the crop in Nyanga district, the number dropped significantly until there were only about 50 growers in 1975, and the quantity and quality had deteriorated due to “lack of motivation, sound extension and the upsurge of other crops.”²⁰⁵ The District Commissioner²⁰⁶ of Inyanga district had noted that the 50 growers of oriental tobacco could not even be qualified as real tobacco growers because they did not see the crop as a cash crop, but as a trivial “pocket money”-making effort.²⁰⁷ Much of the farming he added was now done by farmers’ wives in the backyard.²⁰⁸ In Victoria District, the number of growers had declined because of lack of watering facilities for seedlings and poor financial returns from the crop.²⁰⁹ In the Midlands, oriental tobacco was being overtaken by cotton which was doing particularly well in Gokwe where during the 1973/74 season R\$7 million worth of cotton was produced by African growers.²¹⁰ The oriental tobacco interim survey of 1975 concluded that under the prevailing standards of management tobacco production in the TTL’s was not sufficiently profitable to

²⁰² NAZ, S3700/22, Production and Marketing of Oriental Tobacco, Provincial Agricultural Officer to Secretary Internal Affairs, December 1973.

²⁰³ NAZ, S3700/22, Production and Marketing of Oriental Tobacco, Provincial Agricultural Officer to Secretary Internal Affairs, December 1973.

²⁰⁴ NAZ, S3700/22, Production and Marketing of Oriental Tobacco, Oriental Tobacco in Tribal Areas, 1973/74.

²⁰⁵ NAZ, S3700/22, Production and Marketing of Oriental Tobacco, Promotion of oriental tobacco policy meeting, Manicaland Province, Nyanga district Report, March 1975.

²⁰⁶ In 1969, the control of African agriculture in Southern Rhodesia passed to District Commissioners.

²⁰⁷ NAZ, S3700/22, Production and Marketing of Oriental Tobacco, C des Tombe (District Commissioner Inyanga district), Oriental Production in Inyanga, 5 March 1975.

²⁰⁸ NAZ, S3700/22, Production and Marketing of Oriental Tobacco, C des Tombe (District Commissioner Inyanga District), Oriental Production in Inyanga, 5 March 1975.

²⁰⁹ NAZ, S3700/22, Production and Marketing of Oriental Tobacco, Promotion of oriental tobacco policy meeting, Victoria district Report, March 1975.

²¹⁰ NAZ, S3700/22, Production and Marketing of Oriental Tobacco, Senior agricultural officer to Secretary Internal Affairs, 18 October 1974.

encourage significant further expansion.²¹¹ It argued that the only way yields and concomitantly profits could be raised would be through the standard of management of growers by means of an effective extension system and field management. Fields were supposed to be on well-drained sandy soil, well ploughed, with ridges laid down the slope to assist drainage, with fumigation to control nematodes, pest protection, adequate weeding and fertilising.²¹²

More significantly, the failure of the Turkish production drive can be linked to the general conditions of African agriculture of poor land, which could not support ambitious cash cropping programs requiring intensive cultivation. Yudelman points out that by 1964 settler agriculture took up 70% of the area suitable for intensive crop production at a time when the colonial state expected and required African producers to practice intensive cultivation in lands least suitable for such.²¹³ Despite the overwhelming hype about it being an ideal crop, Turkish tobacco failed to support the development of African areas in the TTLs largely because the infrastructure put up by the colonial state to support African farmers was superficial and tied to the broader objectives of political control of African areas, relegating African producers to second class farmers in a white dominated tobacco farming sector, producing those low-profit tobacco types unwanted by white farmers and sustaining the domestic demands for Turkish tobacco. Consequently, Turkish tobacco production collapsed and failed to act as a significant stimulant of rural development.

AFRICAN BURLEY PRODUCERS AND THE STATE, 1958-1980

While Turkish tobacco was the pivot of the ostensibly well-intentioned and ineffectual state-initiated African tobacco production in the TTLs and NPAs of the southern and more arid parts of the country, in the northern provinces of Mashonaland in areas such as Chiweshe, Mt Darwin, Madziwa, Sinoia, Vuti, Nyamaropa, Chinjeri and Marirangwe (See map below), it was Burley tobacco,²¹⁴ which became the core of African production.

²¹¹ NAZ, S3700/22, Production and Marketing of Oriental Tobacco, Oriental tobacco survey 1975.

²¹² NAZ, S3700/22, Production and Marketing of Oriental Tobacco, Oriental tobacco survey 1975.

²¹³ Yudelman, *Africans on the Land*, 78.

²¹⁴ Burley tobacco is air cured tobacco usually grown in heavier soils. It is light and used as a blend for cigarette manufacturing.

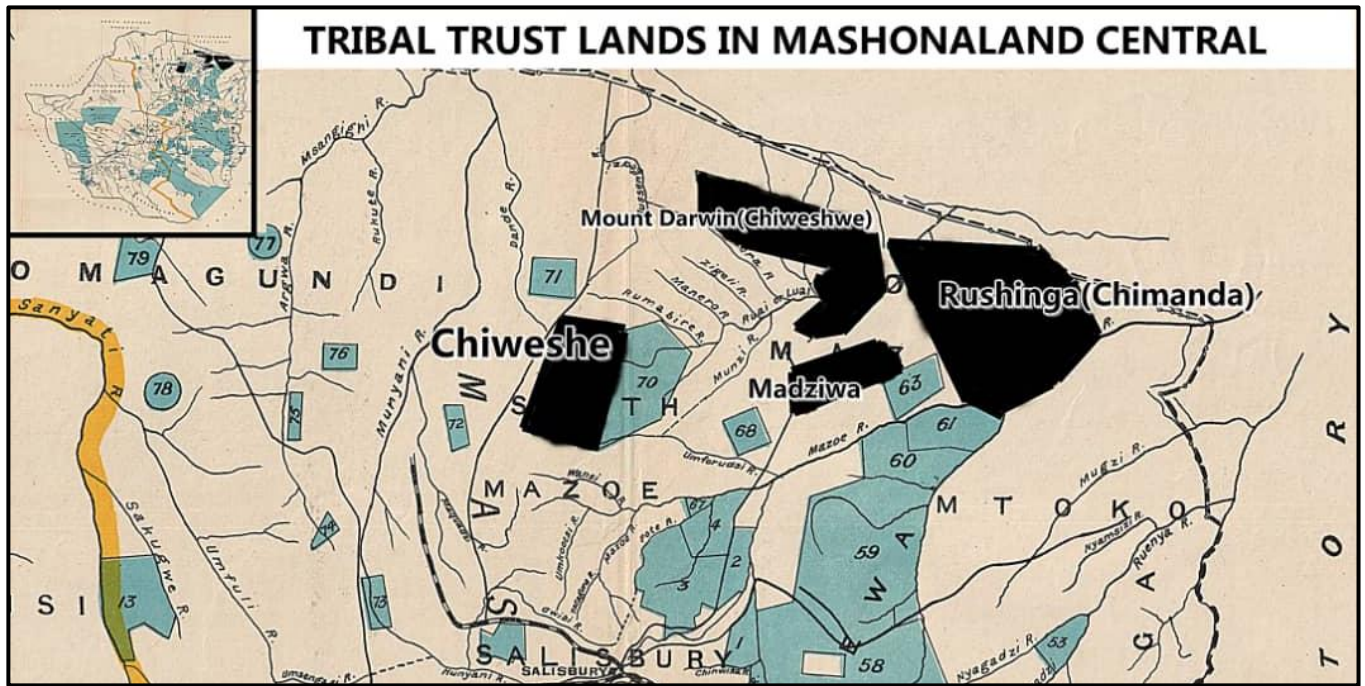


FIGURE 14 MAP OF TRIBAL TRUST LANDS IN MASHONALAND CENTRAL, ZIMBABWE.²¹⁵

Burley, or air cured, tobacco had been grown in Southern Rhodesia on a very small scale before the Second World War, but it was not until 1957/58, that the crop gained reputation particularly in the Shamva district where it was grown using American seeds and as a replacement to the dying fire cured tobacco industry.²¹⁶ Around the 1950s the popularity of the filter-tipped cigarette and low nicotine content tobaccos as a result of the cancer scare saw the demand for Burley in the American market surging.²¹⁷ The trial crops produced on farms and research work on varieties and fertilisation showed that the crop could do well in the country. Yet, the crop had a relatively unenthusiastic uptake amongst most European farmers (because it was less profitable than Virginia tobacco) who used it in rotation with maize on the heavier soils where flue-cured tobacco could not be grown.²¹⁸

²¹⁵ Cartographer: Sekai Kashamba.

²¹⁶ NAZ, (Unprocessed), Tobacco Burley Association, 1962-1970, C.32.15.11R, Box number 126959, Burley tobacco Association AGM speech by Lord Graham, 28 September 1963.

²¹⁷ In 1954, the USA surgeon general released a report which linked smoking and cancer sparking a huge controversy and public health debate. Tobacco companies responded to this by promoting filter tipped cigarettes with low nicotine content. Burley tobacco became widely used in cigarettes blends because of its low nicotine content. For the public health debates and the response of tobacco companies to the cancer scare, see Peter Benson, *Tobacco Capitalism: Growers, Migrant Workers and the Changing Face of a Global Industry* (New Jersey: Princeton University Press, 2012); Naomi Oreskes and Erik M. Conway, *Merchants of Doubt: How a Handful of Scientist Obscured the Truth on Issues From Tobacco Smoke to Global Warming* (London: Bloomsbury Press, 2010), 136-168.

²¹⁸ 'Rhodesian Burley comes of age', *Tobacco Forum of Rhodesia*, May 1964.

However, not many white farmers were willing to grow the crop and as a result by the 1960s Burley began to be touted by the colonial agricultural officials as ideal for the emergent African agriculturalist capable of providing better living conditions because of its higher return per acre than most other crops such as maize and cotton.²¹⁹ During the 1962/63 season, the then Department of Native Agriculture introduced the crop to African farmers on irrigation plots in Devuli African Purchase Areas, the Nyanyadzi Irrigation Scheme and Ngorima Tribal Trust Lands in the eastern parts of the country (Manicaland).²²⁰ Barns were built and demonstration plots were set up and the results were deemed so encouraging that further expansion of the crop was encouraged.²²¹ The expansion of the crop into Mashonaland north was largely a result of the efforts of a group of European farmers in Centenary who in 1964 formed the African Farmers' Development Scheme (AFD) to give free advice and assistance to African farmers in the Chiweshe TTLs.²²²



FIGURE 15 GROWERS ON THE AFRICAN FARMING DEVELOPMENT SCHEME IN CHIWESHE TRIBAL TRUST LANDS REAPING THEIR BURLEY CROP IN 1968.²²³

²¹⁹ 'Rhodesian Burley comes of age', *Tobacco Forum of Rhodesia*, May 1964.

²²⁰ 'African Burley potentials and problems', *Tobacco Forum of Rhodesia*, November 1972.

²²¹ 'African Burley potentials and problems', *Tobacco Forum of Rhodesia*, November 1972.

²²² 'Rhodesian Burley comes of age', *Tobacco Forum of Rhodesia*, May 1964.

²²³ *Tobacco Forum of Rhodesia*, February 1968.

The success of the Chiweshe scheme witnessed the expansion of the project into 4 other TTLs, Mt Darwin, Rushinga, Madziwa and Shamva.²²⁴ By 1964 there were 80 African Burley growers concentrated in Manicaland, Mashonaland north and south.²²⁵ In Manicaland there were 28 growers growing a total of 17 acres of Burley, with 13 ½ acres grown under irrigation and 3 ½ under dryland.²²⁶ In Mashonaland north and south there was a total of 52 African Burley growers cultivating a total of 42 acres, all under dryland conditions.²²⁷ So the state, under the Ministry of Lands and Agriculture, set up a Burley Research Station in Banket in 1966. During the very same year the crop had become so firmly established amongst Africans that the Minister of Agriculture remarked that it had become a useful crop to the African farmer with “thousands of African producers who are capable of producing high quality tobacco”.²²⁸ In the same year, one African Burley producer from Darwin District won all the three prizes for Burley tobacco at the Royal Agricultural Show in Salisbury.²²⁹ The white growers’ interests group, the Rhodesian Tobacco Association, supported the Burley initiative amongst African growers as it appeared the major crop with the potential to provide a genuine incentive to progress beyond subsistence level, and encourage many Africans to remain on the land rather than drift to urban areas.²³⁰ The progress of the Burley production in the African areas drew many entrants into the industry with 300 new growers growing the crop between 1966 and 1967. During the 1966/67 season, there were some 950 growers.²³¹

The cultivation of Burley production in African areas was further incentivised by the government undertaking to purchase 5 million lbs of Burley tobacco from the 1967/68 crop at a lucrative average price of 26.d/ lb.²³² The market incentive spurred a huge rush by African farmers to cash in on Burley, creating worries of overproduction and prompting the Ministry

²²⁴ ‘African Burley potentials and problems’, *Tobacco Forum of Rhodesia*, November 1972.

²²⁵ NAZ, F226/1218/F3, Burley tobacco marketing and production, 1960-64, Burley Tobacco Extension Officer to Director of Conservation and Extension, 17 February 1964.

²²⁶ NAZ, F226/1218/F3, Burley tobacco marketing and production, 1960-64, Burley Tobacco Extension Officer to Director of Conservation and Extension, 17 February 1964.

²²⁷ NAZ, F226/1218/F3, Burley tobacco marketing and production, 1960-64, Burley Tobacco Extension Officer to Director of Conservation and Extension, 17 February 1964.

²²⁸ NAZ, (Unprocessed), Tobacco Burley Association, 1962-1970, C.32.15.11R, Box number 126959, Minister of Agriculture Speech at the AGM of Burley Tobacco Association, 20 October 1966.

²²⁹ NAZ, (Unprocessed), Tobacco Burley Association, 1962-1970, C.32.15.11R, Box number 126959, Minister of Agriculture Speech at the AGM of Burley Tobacco Association, 20 October 1966.

²³⁰ NAZ, (Unprocessed), Tobacco Burley Association, 1962-1970, C.32.15.11R, Box number 126959, RTA Memorandum on African grown Burley, 1968.

²³¹ NAZ, (Unprocessed), Tobacco Burley Production Quotas, 42-12-9R, Box number 126959, Secretary for Agriculture to Treasury Secretary; Production control of Burley crop, 12 August 1967.

²³² NAZ, (Unprocessed), Tobacco Burley Production Quotas, 42-12-9R, Box number 126959, Secretary for Agriculture to Treasury Secretary; Production control of Burley crop, 12 August 1967.

of Agriculture to instruct staff from the department of Conservation and Extension (Conex) not to encourage new growers in the African areas, and to discourage old growers from increasing their acreages.²³³ African growers were, however, exempt from the sophisticated individual quota system which was applied to European growers during the UDI to restrict production since Burley was seen as an important crop in the cash economy of African agriculture.²³⁴ Nevertheless, the composite quota allocated to Africans was still far lower than the aggregate of individual quota allocated to European farmers. For instance, during the 1969/70 season, out of an aggregate national Burley production quota of 7 million lbs European growers were allocated 5.6 million lbs, and African growers 1.9 million lbs.²³⁵ In 1968, African production of Burley tobacco amounted to 1.1 million lbs against 3 million lbs produced by Europeans.²³⁶ During the 1969/70 season, the figure went up to 1.5 million lbs against 5.5 million lbs for European producers.²³⁷ The average production by Africans was 1 030 lbs/acre, a figure which according to the Acting Senior tobacco extension officer Mr. T. Killie reflected that a substantial amount of any crop target could be produced by the African grower.²³⁸ By 1970, there were 1 500 African growers of Burley in the TTLs.²³⁹ These were centred around Chiweshe, Mount Darwin, Madziwa and Sinoia TTLs.

For most of the Burley producers, the crop was not only an important cash crop that raised farm incomes, but it also encouraged diversification away from maize and rotating the less fertile rocky soils in the TTLs which had been exhausted by the monocultural cropping with maize.²⁴⁰ On the negative side, Burley production put much pressure on the small land holdings of most African peasants as they sought to increase production and earn more money “like the big farmers in the purchase areas.”²⁴¹ In this rush to grow much tobacco, one farmer confessed that contour ridges were ploughed down to increase the surface area of land for cultivating tobacco

²³³ NAZ, (Unprocessed), Tobacco Burley Production Quotas, 42-12-9R, Box number 126959, Secretary for Agriculture to Treasury Secretary; Production control of Burley crop, 12 August 1967.

²³⁴ NAZ, (Unprocessed), Tobacco Burley Production Quotas, 42-12-9R, Box number 126959, Secretary for Agriculture to Treasury Secretary; Production control of Burley crop, 12 August 1967.

²³⁵ NAZ, (Unprocessed), Tobacco Burley Association, 1962-1970, C.32.15.11R, Box number 126959, Tobacco Sales Quota, 1970-71.

²³⁶ NAZ, (Unprocessed), Tobacco Burley Association, 1962-1970, C.32.15.11R, Box number 126959, Acting senior tobacco Extension officer (T Killie) to Secretary Agriculture, 10 December 1969

²³⁷ NAZ, (Unprocessed), Tobacco Burley Association, 1962-1970, C.32.15.11R, Box number 126959, Acting senior tobacco Extension officer (T Killie) to Secretary Agriculture, 10 December 1969.

²³⁸ NAZ, (Unprocessed), Tobacco Burley Association, 1962-1970, C.32.15.11R, Box number 126959, Acting senior tobacco Extension officer (T Killie) to Secretary Agriculture, 10 December 1969

²³⁹ NAZ, (Unprocessed), Tobacco Burley Association, 1962-1970, C.32.15.11R, Box number 126959, Tobacco Sales Quota, 1970-71.

²⁴⁰ Interview with Mr Masekeni (African tobacco farmer), Bare, Chiweshe, 12 December 2017.

²⁴¹ Interview with Mr Makanjera (African tobacco farmer), Karuyana, Mt Darwin, 18 December 2017.

and land reserved for other purposes such as grazing was often encroached onto.²⁴² In the end stimulating cash crop production in the African areas where there was inadequate land and natural resources resulted in poor land husbandry practices and land degradation.

The other major problem with African production was the poor handling and grading because of inadequate facilities for grading, stacking and bailing the tobacco. In 1968, the Secretary of Agriculture complained that there was deterioration in the standards of African grown Burley during the selling season that had resulted in rejection rates of between 40 to 50%.²⁴³ He added that the amount of re-handling²⁴⁴ or the re-grading of tobacco was an embarrassment to the floors who maintain that “the sale of Burley tobacco is becoming uneconomic and the poor returns to the growers are of no benefit to themselves and the economy”.²⁴⁵ To protect the reputation of Rhodesian Burley, the state started grading schemes to assist Africans in handling their crop for a fee. Grading sheds were erected in the TTLs as a community project with the state paying 50% of the cost and the other 50% paid through a levy of 2.5 cents per kg on weight of tobacco graded.²⁴⁶ In the Chiweshe TTLs, where indigenous timber was in short supply even for domestic use, timber had to be purchased from outside the TTLs from the Forestry Commission.²⁴⁷ Each user of the barn had to pay R\$50/ annum for six years to the African Loan Development Fund. In 1977 an amount of R\$6 000 was loaned to growers by the cooperative movement.²⁴⁸ In most of the TTLs in Mashonaland north, because of the concentration of Africans in protected villages for security purposes during the civil war in the 1970s, it became necessary to consider intensive cropping systems near villages.²⁴⁹

²⁴² Interview with Mr Makanjera (African tobacco farmer), Karuyana, Mt Darwin, 18 December 2017.

²⁴³ NAZ, (Unprocessed), C.32.15.11R, Box number 126959, Tobacco Burley Association, 1962-1970, M.G.B Rooney Secretary of Agriculture to Deputy secretary: Collective grading of African Burley tobacco, 23 July 1968.

²⁴⁴ Sub-standard tobacco that is rejected at the auction floors for various reasons including being mouldy, too moist, too dry, being mixed and not properly graded, or containing foreign matter goes through the process of re-handling at the auction floors to make it conform to quality standards before it is sold. The process of re-handling attracts a fine deductible from the proceeds of sale.

²⁴⁵ NAZ, (Unprocessed), Tobacco Burley Association, 1962-1970, C.32.15.11R, Box number 126959, M.G.B Rooney Secretary of Agriculture to Deputy secretary: Collective grading of African Burley tobacco, 23 July 1968.

²⁴⁶ NAZ, S3700/24, Burley production in Tribal Trust Lands, October 1973-February 1976, Burley tobacco project report Provincial agricultural officer, 16 September 1973.

²⁴⁷ NAZ, S3700/24, Burley production in Tribal Trust Lands, October 1973-February 1976, Expansion of Burley tobacco production: Project Report, 1975-78.

²⁴⁸ NAZ, S3700/24, Burley production in Tribal Trust Lands, October 1973-February 1976, Expansion of Burley tobacco production: Project Report, 1975-78.

²⁴⁹ NAZ, S3700/24, Burley production in Tribal Trust Lands, October 1973-February 1976, Burley grading sheds: Concession and Shamva projects reports: 13 July 1975.

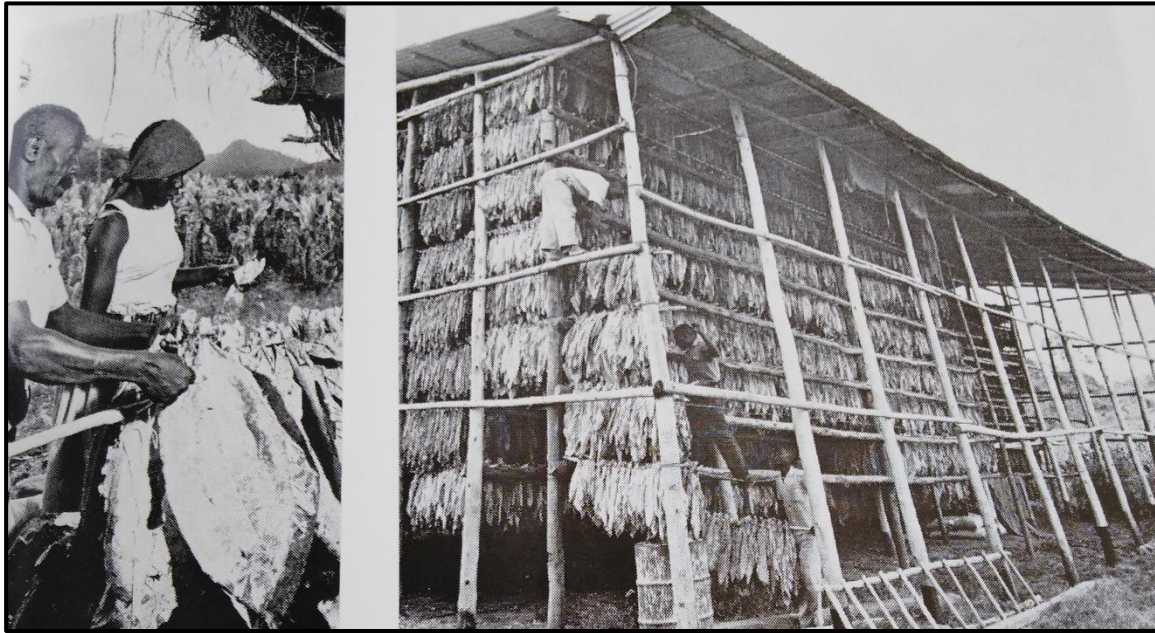


FIGURE 16 ONE OF THE CURING BARN FOR TOBACCO BUILT BY THE AFRICAN LOAN DEVELOPMENT FUND FOR AFRICAN FARMERS IN THE CHIWESHE TRIBAL TRUST LANDS.²⁵⁰

In Concession and Shamva projects of the ALDF an initial program of five curing barns and a grading shed during the 1974/75 season at a cost of R\$21 000 was launched.²⁵¹ Growers had to pay 2.5 % of the value of their crops for the use of the grading shed over 5 years.²⁵² The program was touted as such a huge success that one Panglossian journalist from New Zealand, Margaret Gibson, who visited the area and was shown a few “Potemkin village” examples, pointed out that the African no longer needed to look at the rocky scrub covered land with envy at the thriving tobacco estates of his European neighbour, “for he can gaze at his own neat fields, green with growing tobacco plants and full of the promise of a comfortable standard of living”.²⁵³ This of course was a hyperbolic assessment that failed to note some of the biggest challenges in African areas such as poor land holdings, aging infrastructure, limited financial support and paltry subsidies to African agriculture at a time the state was spending heavily subsidising white tobacco farmers.

²⁵⁰ *Tobacco Forum of Rhodesia*, February 1968.

²⁵¹ NAZ, S3700/24, Burley production in Tribal Trust Lands, October 1973-February 1976, Burley grading sheds: Concession and Shamva projects reports: 13 July 1975.

²⁵² NAZ, S3700/24, Burley production in Tribal Trust Lands, October 1973-February 1976, Burley grading sheds: Concession and Shamva projects reports: 13 July 1975.

²⁵³ ‘New Zealander looks at the Chiweshe Scheme’, *Tobacco Forum of Rhodesia*, August 1967.

After the limited success of the Burley tobacco venture under the African Loan Development Fund, the Zimbabwe-Rhodesia²⁵⁴ Tobacco Association embarked on a R\$5 million major training program at Kudzidza Settlement Training Scheme for black African growers in 1979 that ran for five years until 1984.²⁵⁵ The first stage was completed with the purchase of a 5 ha farm 16km from Salisbury under the funding of the RTA.²⁵⁶ The plan was to train blacks for settlement on family tobacco growing units. The scheme was mooted by the RTA with a view towards promoting settlement of African small holder tobacco producers in the vacant farms deserted by European as a result of the war.²⁵⁷ Vacant farms were becoming a serious problem, with about 50 farms being vacant in the Karoi area only by 1977.²⁵⁸ The Chief Executive of the RTA Mr Syd Kelly had argued that organised African farming in the areas would combat denudation of the land, and rural incomes could be increased in a short period of time through tobacco production.²⁵⁹ The main motivation, though, for this program was military. Vacant farms were becoming breeding grounds for “terrorist” insurgents and settling them with black tobacco farmers would create a buffer against attacks on white farms through territorial consolidation using black settlements. Sibanengi Ncube argued that most tobacco farms in Mashonaland north often acted as buffers against incursions into the interior by the nationalist fighters and thus were an important asset of the colony’s defence during the war most often described as the “colony first line of defence”.²⁶⁰

On 1 October, the first intake of 60 trainees and 10 trainers started a one-year course in the basic theory and practice of tobacco growing for family units.²⁶¹ This was the first phase of a program which was designed to lead to family settlements units where Africans who had completed training could join schemes to grow tobacco and supplementary crops as a family.²⁶² In spite of this, the scheme was largely unsuccessful as 58 of the 60 entrants had abandoned

²⁵⁴ In 1979, the white minority government of Southern Rhodesia entered into a political settlement with African nationalists Bishop Abel Muzorewa, Reverend Ndabaningi Sithole and Chief Jeremiah Chirau called the Internal Settlement. As a result of that agreement the country changed its name to Zimbabwe-Rhodesia. It was a short-lived political transition which was overtaken by events as the country later gained black majority rule in 1980.

²⁵⁵ ‘Major training scheme for black growers’, *The Rhodesian Herald*, 8 September 1979.

²⁵⁶ ‘Major training scheme for black growers’, *The Rhodesian Herald*, 8 September 1979.

²⁵⁷ ‘Vacant farms causing concern’, *The Rhodesian Herald*, 20 May 1977.

²⁵⁸ ‘Vacant farms causing concern’, *The Rhodesian Herald*, 20 May 1977.

²⁵⁹ ‘RTA seeks small holder tobacco men’, *The Rhodesian Herald*, 20 October 1978.

²⁶⁰ Sibanengi Ncube, ‘Colonial Zimbabwe Tobacco Industry: Global, Regional and Local Relations, 1949-1979’, PhD Thesis, University of the Free State, November 2018, 127-28.

²⁶¹ ‘Major training scheme for black growers’, *The Rhodesian Herald*, 8 September 1979.

²⁶² ‘Major training scheme for black growers’, *The Rhodesian Herald*, 8 September 1979.

the course by June 1980 as a result of limited funding and poor selection of candidates.²⁶³ Therefore, just as with Turkish production, state attempts to support Burley production in African areas and small holder tobacco production were largely unsuccessful as these were largely token initiatives to improve African areas and lacked the robust financial commitment of the colonial state. The next section will critically evaluate the impact and nature of these state initiatives on African peasant producers.

A MODEL FOR CONSERVATION AND DEVELOPMENT OR A POLITICAL TOOL?

The tobacco production drive in African areas was touted by the state from 1952 as a significant pillar of modernisation and development in the TTLs and NPAs, tying together the contingencies of land conservation and cash crop production. According to this state-constructed narrative, good farming methods were inculcated in African growers through state-sponsored extension advice and competitions to encourage better methods of land use. The state was often quick to point out that as a result of tobacco cash cropping, the restrictive effects of centuries old tribal subsistence economy were beginning to roll away with the spread of enlightened agricultural knowledge.²⁶⁴ These claims by colonial officials need to be interrogated.

It is indeed true to say that there was a handful of African farmers who were successes of these state programs – mostly those in the Purchase Areas with access to relatively better land and capital opportunities. In 1975, the President of the African Farmers' Union, Mr. W.H. Kona, testified that in the NPAs the African farmer had done admirable work in conserving natural resources on the land by constructing counter banks and building dams.²⁶⁵ The conservation of natural resources had become an important factor to Africans in those areas as continued production could only be maintained by keeping the land fertile and by increasing water supplies.²⁶⁶ Surplus money was also giving these few African producers advantages and incentives for greater efforts resulting in the production of Virginia tobacco by a handful of Africans from 1964.²⁶⁷ One of these few successful farmers, Mr S.D. Nyamweda of

²⁶³ Desiree L. Cole and James S. Cole, 'Tobacco Research and Development' in M. Rukuni and Carl. K. Eicher (eds), *Zimbabwe's Agricultural Revolution*, (Harare: University of Zimbabwe Publications, 1994), 240.

²⁶⁴ 'Africans now turning to flue-cured tobacco', *The Rhodesian Herald*, 13 February 1964.

²⁶⁵ *The Rhodesian Financial Gazette*, 18 July 1975.

²⁶⁶ *The Rhodesian Financial Gazette*, 18 July 1975.

²⁶⁷ 'Africans now turning to flue-cured tobacco', *The Rhodesian Herald*, 13 February 1964.

Muchaombera farm, had immediate success with 10 acres of the crop which was described as “the biggest crop ever produced by an African”.²⁶⁸ He had bought the 300-hectare farm thirty years before in 1932 as an undeveloped area of land, but since growing tobacco he had built it into a thriving area.²⁶⁹ He had ploughed 6 acres of virgin stumped soil and 4 acres of reverted land which five years before had been under Turkish.²⁷⁰ Later he prepared the necessary seedbeds, ridged the lands and fumigated.²⁷¹ The cultural practices on his farm reflected principles of good husbandry and conservation farming. But these were only a handful of exceptions.

This was because, amongst most NPA and TTLs farmers, these state initiatives did very little to stimulate large-scale change on land settlement and environmental degradation and only resulted in negligibly significant cash earnings because of limited land resources and capital support. An African farmer who once grew tobacco in the TTLs of Chiweshe during the colonial days pointed out that the support from the state was very little and usually targeted very few selected so-called “master farmers”.²⁷² He also noted that their plots were too small and the soils too poor such that tobacco cultivation resulted in “no gains” for the rural farmers in the TTLs.²⁷³ The Chief planning officer of the Ministry of Internal Affairs pointed out in 1971, the danger of erosion on poorly managed lands that were being continuously cultivated despite the teachings of extension services, the training of master farmers and other efforts which were proving too slow to deal with the problem.²⁷⁴ Mr. E. Cross, chief economist to the Rhodesian Agricultural Marketing Authority, highlighted in 1978 that the efforts made in the TTLs had not succeeded in raising the standard of living for the so-called “tribesman”, or in slowing down the rate of deterioration in the country’s natural resources.²⁷⁵ He added that very little self-sustaining development was taking place in the TTLs with severe depletion of resources evident, and the whole system was unable to cope with pressures exerted by population pressure.²⁷⁶ The number of cattle grazing on badly neglected TTLs had increased from 2 million in the late 1960s to over 3.4 million by 1979.²⁷⁷ From 1961 to 1977, the number

²⁶⁸ ‘Africans now turning to flue-cured tobacco’, *The Rhodesian Herald*, 13 February 1964.

²⁶⁹ ‘Africans now turning to flue-cured tobacco’, *The Rhodesian Herald*, 13 February 1964.

²⁷⁰ ‘Africans now turning to flue-cured tobacco’, *The Rhodesian Herald*, 13 February 1964.

²⁷¹ ‘Africans now turning to flue-cured tobacco’, *The Rhodesian Herald*, 13 February 1964.

²⁷² Interview with Mr Chavhakaira, African tobacco farmer), Bare, Chiweshe, 13 December 2017.

²⁷³ Interview with Mr. Chavhakaira (African tobacco farmer), Bare, Chiweshe, 13 December 2017.

²⁷⁴ T.A. Murton, ‘Land-use Planning in Tribal Areas in Rhodesia’, *The Rhodesia Agricultural Journal*, 68, 2579 (January -February 1971), 5.

²⁷⁵ ‘TTL development a failure’, *The Rhodesian Financial Gazette*, 19 May 1978.

²⁷⁶ ‘TTL development a failure’, *The Rhodesian Financial Gazette*, 19 May 1978.

²⁷⁷ ‘TTLs reform a priority’, *The Rhodesian Financial Gazette*, 30 March 1979.

of cultivators on the land had rocketed from 359000 to 675 000 an increase of 88%!²⁷⁸ The government's Five Year Plan in 1979 admitted that severe land pressure existed in most TTLs causing livelihood insecurity and poverty amongst the people and was destroying the land.²⁷⁹ This was so because the deterioration of the human to land ratio had not been accompanied by compensating improvements in human-land relationships.²⁸⁰

The consequence of population pressure caused by intensive cash cropping had been widespread destruction of the soil and vegetation cover, and the lowering of soil fertility. Most of the soils in the TTLs was sand veld, poor for crop production unless inorganic fertilisers could be applied at high levels.²⁸¹ The introduction of cash crops had been a mixed blessing since the tendency became to cultivate more land and reduce fallow periods.²⁸² Declining productivity of the cash croplands had necessitated extension of cultivated areas which in most cases happened on steeper slopes and shallower soils with high risks of erosion.²⁸³

These conditions of environmental degradation in African areas as a result of intensive cash cropping on limited and declining land and natural resources were much akin to what happened in Malawi where intensive production of tobacco amongst peasant holders actively encouraged by the state with support from the World Bank between 1983 and 1992 resulted in serious concerns for the accompanying environmental costs.²⁸⁴ The Initial Environmental Examination undertaken by the United States Agency for International Aid (USAID) in 1994 under the Agricultural Sector Assistance Program (ASAP) noted that there was a huge probability of Malawian water and soil was being impacted negatively as a result.²⁸⁵ The Examination noted that increased incomes from tobacco cultivation had stimulated an increased desire for much

²⁷⁸ 'TTLs reform a priority', *The Rhodesian Financial Gazette*, 30 March 1979.

²⁷⁹ 'TTLs reform a priority', *The Rhodesian Financial Gazette*, 30 March 1979.

²⁸⁰ Kay, *Rhodesia: A Human Geography*, 80.

²⁸¹ D.M. Chavunduka, 'African Attitudes to Conservation', *The Rhodesian Agricultural Journal*, 75, 3 (May-June 1978), 61-63.

²⁸² J.R. Whitlow, 'Land Use, Population Pressure and Rock Outcrops in the Tribal Areas of Zimbabwe-Rhodesia' *The Rhodesia Agricultural Journal*, 77, 1 (January-February 1980), 173-181.

²⁸³ Whitlow, 'Land Use, Population Pressure and Rock Outcrops in the Tribal Areas of Zimbabwe-Rhodesia', 173-181.

²⁸⁴ Tobin and Knausenberger, 'Dilemmas of Development: Burley Tobacco, The Environment and Economic Growth in Malawi', 405-424.

²⁸⁵ Tobin and Knausenberger, 'Dilemmas of Development: Burley Tobacco, The Environment and Economic Growth in Malawi', 405-424.

more cultivation resulting in an intensity of farming on existing land.²⁸⁶ It pointed out rather more gloomily:

The pressure to increase cultivation on steep highly erodible, and more marginal lands could increase. This in turn could increase the probability for increased erosion, deforestation and deterioration of water quality. Similarly, intensified farming practices including increased use of fertilisers may increase the level of nitrates and phosphates in water supplies and result in eutrophication of surface waters.²⁸⁷

In the Southern Rhodesia's TTLs, pressure on the land intensified as lands previously reserved for grazing were being allocated for cultivation of cash crops.²⁸⁸ A study revealed that between 1972 and 77, the area under cultivation in the TTLs constituted 24.7% of the total compared to 16.4% national average.²⁸⁹ The diminishing of land available for ploughing and the inability of TTL farmers to invest in agricultural inputs to raise production coupled with the eating away of grazing land led to the emergence of "communities less able to feed themselves".²⁹⁰ An African expert in the Department of Veterinary Services of Southern Rhodesia pointed out that such conditions were leading to the exploitation of natural resources as trees were cut down, the land was laid bare, wild game migrated and erosion destroyed fertile soil.²⁹¹

Thus, while the tobacco production drive in the Tribal areas failed to significantly raise real incomes, it intensified land-use and accelerated the exploitation of the scarce land and natural resources hastening the environmental decline in these areas. In the final analysis, the greatest disaster of the state-sponsored cash crop effort in the TTLs was its inability to understand that the carrying-capacity of land in those areas could not sustain increasing cash crop production in marginal and depleted soils. Eventually, the promotion of tobacco farming in African areas failed to promote rural development and positively transform the physical landscape.

CONCLUSION

African tobacco production in Southern Rhodesia, just like colonial peasant production elsewhere, must be understood within the context of shifting colonial state priorities. It is the colonial state that structured not only factors of productions, but relations of production

²⁸⁶ Tobin and Knausenberger, 'Dilemmas of Development: Burley Tobacco, The Environment and Economic Growth in Malawi', 405-424.

²⁸⁷ Tobin and Knausenberger, 'Dilemmas of Development: Burley Tobacco, The Environment and Economic Growth in Malawi', 405-424.

²⁸⁸ Chavunduka, 'African Attitudes to Conservation', 61-63.

²⁸⁹ J.R. Whitlow, 'An Assessment of Cultivated Lands in Zimbabwe Rhodesia, 1972-1977', *Zimbabwe Rhodesia Science News*, 13, 10 (1979), 233-238.

²⁹⁰ Chavunduka, 'African Attitudes to Conservation', 61-63.

²⁹¹ Chavunduka, 'African Attitudes to Conservation', 61-63.

amongst producers on the land and the imperative to prop up settler capital always defined state response to peasant production. This chapter has joined the debates on the impact of colonial state policy on African peasant producers. It has argued that while there was peasant initiative to circumnavigate the restrictive colonial regulations as most scholars have shown, however, in the case of tobacco in Southern Rhodesia the whole African “indigenous” tobacco industry collapsed and Africans had to respond to state directives as to which types of tobaccos to grow. This invites us to revisit existing peasant theories and narratives and contextualise them more firmly within the colonial peasant experiences in Zimbabwe. Blank argues that resolving the nuanced definitional, ideological, gender and class identities of peasants leads to a mutual convergence that in the end leads to his historiographical open sesame statement that “peasants experienced both penury and prosperity” during colonial rule. However, this chapter has argued that the resolution to the great peasant historiographical debate in Southern Rhodesia does not lie with ideological and definitional nuances but with the understanding that each crop and agricultural commodity produced by Africans had a unique colonial encounter and context. These encounters and contexts were shaped by how colonialist viewed the crops, their value to the basis of white settler economic power and how native cultivation of such crops would impinge on and challenge that power and with it the whole institutions of colonial hegemony. Tobacco in Southern Rhodesia was a “hegemonic crop” solidifying the precincts of white economic dominance and for that reason African production had to be more significantly curtailed than in other commodities like maize, beef, small grains and cotton. Even when the state encouraged such production from 1952 to 1980 it was only with a condescending benevolence that only allowed Africans to cultivate the “inferior tobaccos” while flue-cured tobacco remained a preserve of Europeans until independence. In the end, this chapter contributes to peasant historiography by invoking the concept of “crop power hegemonies” as a useful lens through which to view colonial responses to peasant production. It argues that the value of a crop in the hierarchy of power hegemonies in the colonial state determined the extent and level of peasant curtailment, control and even extirpation.

CHAPTER SEVEN

‘THE THREAT OF SOIL EROSION IS FAR MORE PERMANENT THAN THE THREAT OF SANCTIONS’: THE UNILATERAL DECLARATION OF INDEPENDENCE, WAR, AND ECOLOGICAL CHANGE IN SOUTHERN RHODESIA’S TOBACCO FARMS, 1960-1980.

“No longer is the weed the magic crop for opening new lands and creating closer settlement. Some profit may remain in tobacco, but no satisfaction and no future”.

RTA President and tobacco farmer Gordon Hoskins Davies, 1966.

“It is obvious that the degree of intensification and diversification of land use practiced on many farms is such that it cannot be tolerated with safety by the prevailing land, soil and climatic conditions -as evidenced by the increasing incidences of erosion.”

The Director of Conservation and Extension (CONEX). J.H. Lowrens, 1970.

INTRODUCTION

The tobacco bubble that had characterised much of Southern Rhodesia’s economic development in the post-war years continued steadily through the 1950s on the back of increasing demand from the British and European markets. The surge continued into the 1960s before being slowed down in 1963 by a global production glut that depressed prices.¹ This coincided with a momentous political event within the Federation of Rhodesia and Nyasaland as the federal project collapsed and political tumult erupted in the three colonies of Southern Rhodesia, Northern Rhodesia, and Nyasaland. Widespread political agitation by Africans spread across the territories, precipitating the granting of black majority independence to the two territories of Nyasaland and Northern Rhodesia in 1964.

For Southern Rhodesia, the end of Federation triggered a series of political disturbances between 1963 and 1964 that led to the emigration of 20 000 whites.² These heightened political tensions were catalysed by the ascendancy to power of the radical Rhodesian Front party (RF) in the 1962 general elections. The Rhodesian Front wanted white minority self-independence and was backed by a bloc of white farmers (most of whom were tobacco farmers) who comprised the “rural backbone of the party”.³ It is little wonder then that the first leader of the

¹ In 1963 global tobacco prices dipped largely as a result of huge stocks of unsold tobacco that caused a glut.

² Peter Godwin and Ian Hancock, *‘Rhodesians Never Die’: The Impact of War and Political Change on White Rhodesia, c.1970-1980* (Oxford: Oxford University Press, 1993), 17.

³ David M. Rowe, *Manipulating the Market: Understanding Economic Sanctions, and the Political Unity of White Rhodesia* (Ann Arbor: The University of Michigan Press, 2001), 63.

party and Prime Minister of Southern Rhodesia between 1962 and 1964 Winston Field, was a tobacco farmer and former president of the Rhodesian Tobacco Association (RTA). His successor Ian Douglas Smith was also a tobacco farmer, cattle rancher and maize grower. In November 1965, Smith declared the Unilateral Declaration of Independence (UDI) which severed Southern Rhodesia's political ties with Britain.

UDI was a momentous political event particularly as the white economic and political institutions shifted in the subsequent economic embargo and sanctions from Britain.⁴ Agriculture was severely affected leading the state to intervene with various mitigatory measures to militate against the disastrous effects of the economic restrictions. For tobacco, the sanctions ruined much of the gains of the 1947 London Agreement and the progress made since then in securing a guaranteed cumulative tobacco market in Britain and Europe. The effect of this on the country's economy was to be more pronounced as tobacco occupied 19% of the total European cropland and contributed a third of national export revenue in 1965.⁵ The state was forced to intervene once again through imposing production quotas that severely reduced production and compelled tobacco farmers to diversify into other agricultural enterprises – under mostly unsuitable ecological conditions. The war that broke out in 1972 exacerbated this agricultural crisis in the tobacco countryside as farms were abandoned because of the worsening security conditions in the northern parts of the country where most tobacco farms were concentrated. This chapter examines the impact of UDI, the Rhodesian Bush War⁶ and the global public health debates on smoking and cancer on tobacco farm landscapes and ecology between 1960 and 1980. The chapter contributes to the economic history of the era and particularly the historiography of the Rhodesian tobacco industry between 1960 and 1980 by extending environmental narratives to existing political and economic tobacco histories of this period. It examines how tobacco farming's ecological and economic landscapes were formed between 1960 and 1980.

⁴ See Glenn V. Stephenson, 'The Impact of International Economic Sanctions on the Internal Viability of Rhodesia', *Geographical Review*, 65, 3 (July 1975), 377-389; Robert McKinnell, 'Sanctions and the Rhodesian Economy', *Journal of Modern African Studies*, 7, 4 (December 1969), 559-591; Joseph Mtisi, Munyaradzi Nyakudya and Teresa Barnes, 'Social and Economic Developments During the UDI', in Brian Raftopolous and A.S. Mlambo (eds), *Becoming Zimbabwe: A History From the Precolonial Period to 2008* (Harare: Weaver Press, 2009).

⁵ Stephenson, 'The Impact of International Economic Sanctions on the Internal Viability of Rhodesia', 377-389.

⁶ The Zimbabwe War of Liberation or Second Chimurenga from 1972 to 1979 is sometimes referred to as the "Rhodesian bush war".

HISTORIOGRAPHY OF THE UDI AND THE TOBACCO INDUSTRY IN SOUTHERN RHODESIA, 1960 TO 1980.

Historical works on the UDI and its impact on white Southern Rhodesian society is substantial. However, available literature has mostly looked at the political and economic ramifications of the UDI on white identity, politics and the economy between 1965 and 1980.⁷ These histories did not analyse how the political and economic changes brought about by the UDI and the subsequent economic sanctions physically affected the agrarian countryside and ecological conditions particularly on the tobacco farms which as – this chapter will show – weathered much of the storm from the resultant economic embargo. Existing literature only sparingly mentions and hints at how the tobacco embargo that followed the UDI forced tobacco farmers to diversify and engage in other pursuits such as maize and cotton growing.⁸ This literature did not further examine the impact of these production changes on the land, natural resources, and physical landscape on tobacco farms.

Furthermore, the history of the tobacco industry of Southern Rhodesia between 1960 and 1980 has so far been under-researched. This period is only covered by two historical works: by David Rowe and very recently by Sibanengi Ncube.⁹ Rowe examined developments within the industry during this period focussing on the changing political dynamics and grower-state relations unleashed by the 1966 tobacco embargo and the new state directed paraphernalia of tobacco marketing.¹⁰ He argues that the heightened interventionistic role of the state in regulating production quotas and marketing institutions weakened the political influence of

⁷ There is a huge corpus of literature on the UDI and settler society which focuses on the economic and political conditions of white farmers. See Hancock and Godwin, *Rhodesians Never Die*; Rory Pilosoff, 'The Unbearable Whiteness of Being: White Farming Voices in Zimbabwe and their Narration of the Recent Past, c.1970-2004', Ph.D. Thesis, History Department, Sheffield University, 2010; Joseph Mtisi, Munyaradzi Nyakudya and Teresa Barnes, 'Social and Economic Developments During the UDI'. This literature, however, although examining the economic and political ramifications of the UDI to the white settler agrarian environment does not interrogate how the economic and political conditions of the UDI impacted on the natural landscape in the European farms and conservation.

⁸ See Mandivamba. Rukuni, 'The Evolution of Agricultural Policy: 1890-1990', in Mandivamba. Rukuni et al (eds), *Zimbabwe's Agricultural Revolution Revisited* (Harare: University of Zimbabwe Publications, 2006), 45-46; Joseph Mtisi, Munyaradzi Nyakudya and Theresa Barnes, 'Social and Economic Development During the UDI', 128; J.A McKenzie, 'Commercial Farmers in the Governmental System of Colonial Zimbabwe', DPhil Thesis, University of Zimbabwe, 1989, 97; Rowe. *Manipulating the Market*, 97; Sibanengi Ncube, 'Colonial Zimbabwe's Tobacco Industry: Regional and Local Relations, PhD thesis, University of the Free State, 2018, 16-22. Ncube discusses diversification, focussing on the economic implications to tobacco farmers and less on the changes on farmlands, soil conservation and land degradation.

⁹ Another notable work on the period is by Trish Mbanga which, however, is a general populist work and thus cannot be treated as a critical historical text. See Trish Mbanga, *Tobacco: A Century of Gold* (Harare: ZIL Publications, 1991).

¹⁰ See Rowe, *Manipulating the Market*, 63-95.

tobacco farmers into an unprecedented position of docility and acquiescence.¹¹ Ncube challenged Rowe's assumptions about the capture of the Rhodesian tobacco industry by the state during the UDI. He contends that the RTA still had significant leverage over the state and benefitted through preferential state price support subsidies after UDI.¹² Ncube further examines the internal dynamics of tobacco politics during the 1960s and 1970s, the impact of the war of liberation on the cohesive identity of tobacco growers and grower-state relations. However, although Ncube and Rowe offer engaging readings on the political and economic dynamics of the tobacco industry from the 1960s to 1980 including the post-UDI dispensation and the tobacco embargo, they miss two main significant points that this chapter addresses. Firstly, they fail to locate the global public health debates linking tobacco smoking and cancer that arose during the mid-1950s and how these conversations were articulated in Southern Rhodesia, and how and if they led to agrarian change. Secondly, they did not discuss how the politics and economics of the UDI led to transitions in land use and environmental change within the tobacco farms.

Simeon Maravanyika's 2013 doctoral thesis is the only work that had the opportunity to set the environmental history context of the post-UDI era, and it has broken fresh ground in the arena of soil conservation history. His work revolved around the argument that the economic embargo that resulted from the UDI slowed down the pace of land conservation in the white agrarian environment since "conservation was closely linked to the issue of productivity".¹³ He also argued that conservation works stalled in most ICAs as a result of a shortage of fuel and state funding.¹⁴ However, he largely focussed on the bureaucratic dimension of conservation instead of the ecology of production dynamics after UDI. Furthermore, he offered only a generalised narrative of the environmental impact of sanctions on settler agriculture despite the fact that different sectors were affected differently by UDI and crops such as maize and non-exporting beef actually did well.¹⁵ So this chapter argues that the impact of sanctions at an economic and ecological level was most severe on tobacco farmers: they were forced to diversify within the sand veld environs that could not sustain any other crop or agricultural enterprise on a large scale but tobacco. This led to rapid land degradation as a result of environmentally unsound cropping systems. In addition, this chapter examines the scale of

¹¹ Rowe, *Manipulating the Market*, 84-92.

¹² Ncube, 'Colonial Zimbabwe's Tobacco Industry', 123-24.

¹³ Maravanyika, 'Soil Conservation and the White Agrarian Environment', 283.

¹⁴ Maravanyika, 'Soil Conservation and the White Agrarian Environment', 280-290.

¹⁵ Selby, 'Commercial Farmers and the State', 91.

environmental degradation on the tobacco farms at a micro-level by focussing on conservation farming data from ICAs in the Centenary and Umvukwesi area. In the end this chapter takes a new approach unlike previous Southern Rhodesia's agrarian and tobacco histories of the 1960s to 1980s by using the environment as a prism through which to observe political and economic change.

The chapter embraces Ellen Stroud's challenge to reject the mere gesture towards environmental histories by mainstream historical texts that shove environmental histories into marginalia – introductions, sidebars and footnotes – as secondary to “real” political, social and economic histories.¹⁶ Concerns over the natural environment can offer better tools to tell stories about power and society, by inviting historians to join in “our attention to the physical and biological, ecological nature of dirt, water, air, sea, trees and animals to uncover new answers and questions about the past”.¹⁷ Changes to environmental ecosystems have a history of their own that is as equally important as the political and social history simultaneously unfolding with them.¹⁸ Stroud and others' compelling call for historians to pay attention to “dirt” and nature has conscripted a whole new wave of historical scholarship that emphasises the materiality of physical geographies over political and economic narratives.¹⁹ Unfortunately, this scholarship has failed to influence the writing of environmental histories for this period in Southern Rhodesia. So, this chapter is a first step in this direction and hopes to open a new historiographical niche.

¹⁶ Ellen Stroud, ‘Does Nature Always Matter? Following Dirt through History,’ *History and Theory*, 42, (December 2004), 75–81.

¹⁷ Stroud, ‘Does Nature Always Matter?’, 75-81.

¹⁸ This point is made more strongly by William Cronon who viewed the environment as more than a stage on which history unfolds, but an actor on its own. See William Cronon, William Cronon, *Changes in the Land: Indians, Colonists, and the Ecology of New England* (New York: Hill and Wang, 2003).

¹⁹ See Tim Cole, “Nature Was Helping Us”: Forests, Trees, and Environmental Histories of the Holocaust’, *Environmental History*, 19, 4 (October 2014), 665–686. Cole devoted his article to a riveting history of the Jewish holocaust by merely focussing on trees and forests and how survivors interacted with nature. Also, see Chris Pearson, *Mobilizing Nature: The Environmental History of War and Militarization in Modern France* (Manchester: Manchester University Press, 2012).

THE GLOBAL PUBLIC HEALTH DEBATE, THE CANCER SCARES AND THE RESPONSE OF SOUTHERN RHODESIA'S TOBACCO INDUSTRY, 1953-1965.

In 1953, the American Cancer Society (ACS) released research findings that linked tobacco smoking to lung cancer.²⁰ This report opened a flood gate of similar studies and scientific investigations. By the mid-1950s researchers and clinicians were convinced and had reached consensus that indeed smoking caused cancer of the lung and tobacco was a health risk.²¹ Research findings in Britain by the Royal College of Physicians and two medical journals, the *Lancet* and *The British Medical Journal* also concluded that cigarette smoking was a cause of lung cancer and called on governments across the world to curb the habit.²² The revelation of this new scientific evidence linking smoking to serious risk of disease rattled the tobacco industry to its core. In fact, no other industry had faced such an uncertain, ominous future and a threat to its existence before. Journalist and the media disseminated these new scientific and medical studies to the public and they appeared in widely circulated publications such as the *Readers' Digest* and *The Time*.²³ The result of this negative publicity was a dramatic fall in the global consumption of tobacco products. For the first time, cigarette consumption which had been rising since the days of the Depression in the 1930s slumped from 394.1 million cigarettes in 1952 to 386 million cigarettes in 1953 and 368 million cigarettes in 1954.²⁴

The tobacco companies were faced with a deluge of scientific evidence incriminating its profitable product and linking it with a global public health catastrophe. The bigger companies responded with more aggressive marketing strategies, advertising and sponsoring their own parallel scientific research to counter the public health outcry.²⁵ Consequently, expenditure on

²⁰ Two American researchers Dr E. Cuyler Hammond and Daniel Horn from the Cancer Society conducted a study that surveyed 187,000 men between the ages of 50 and 70. The study concluded that there was a link between smoking, lung cancer, and heart diseases. The report of their findings was published at the American Medical Association conference in 1954 and drew such a widespread response in the mass media such as *The Times*, *World Report* and *US News*. The report opened an avalanche of other global studies that vindicated their findings and put smoking under the spotlight of global public health discourse.

²¹ Allan M. Brandt, *The Cigarette Century: The Rise and Fall of the Deadly Persistence of the Product that Defined America* (New York: Basic Books), 156.

²² Richard Doll and A. Bradford Hill, 'Lung Cancer and Other Causes of Death in Relation to Smoking: A Second Report on the Mortality of British Doctors', *The British Medical Journal*, 2, 5001 (November 1956), 1071-1081.

²³ *The Times* produced an article entitled 'Beyond any doubt' in November 1953 that vouched for the credibility of scientific evidence linking cancer to smoking. *Readers Digest* had circulated a piece titled 'Cancer by the carton' in November 1952.

²⁴ 'US Cigarette firms are worried about the threat of a new anti-smoking campaign', *The Rhodesian Herald*, 27 March 1962.

²⁵ Brandt, *The Cigarette Century*, 159-207.

advertising by the big global tobacco companies increased by 134% between 1954 and 1960.²⁶ Another innovative strategy used by the tobacco industry during the 1950s and 1960s was the introduction of a series of tobacco products that were presented as much safer and marketed as part of smokers' health protection.²⁷ These innovative products included filter tipped and low tar and nicotine content cigarettes. By 1955, two hundred and fifty seven filter brands were on the market in 29 different countries and 10% of total cigarette sales in the USA were in filter brands as opposed to less than 1% in 1951.²⁸ The output of filter tipped cigarettes further climbed by 130% between 1956 and 1961 and accounted for 54% of the market by 1961.²⁹ This upward trend continued such that by the mid-1970s filter tipped production had a 90% stake in the global cigarette market.³⁰

However, in 1964 the United States' Surgeon General's report solidified the existing scientific medical consensus about smoking and health and ended many lingering doubts about the harmfulness of smoking.³¹ But even then, the tobacco industry remained opposed to this new evidence. Malcom B. Seawall, the Executive Secretary to the Leaf Tobacco Supporters Association (a conglomeration of seventy five American companies which bought and exported American leaf), in his statement before the Committee of Agriculture of the US Congress pointed out the importance of tobacco to federal revenue and the imperative for tobacco companies to stay in business.³² He added that if the federal government was to accept the scientific approach to all health problems, "we will live in the rural areas, and return to our boyhood habit of smoking rabbit tobacco, corn silk, and cubebs³³".³⁴ The Surgeon General's Report did not end the stand-off between the tobacco industry and the medical scientific establishment over tobacco and its public health risks. However, it generated a key watershed

²⁶ 'US cigarette firms are worried about the threats of a new anti-smoking campaign,' *The Rhodesian Herald*, 27 March 1962.

²⁷ Benson, *Tobacco Capitalism*, 45.

²⁸ NAZ, F114/473/E.8/8/ (473) Tobacco economic section 1955-1957, Major Peter Spearing (Agricultural Adviser), Report No.40 of 1955, 26 September 1955, 1. Also see Brandt, *The Cigarette Century*, 244.

²⁹ 'US cigarette firms are worried about the threats of a new anti-smoking campaign', *The Rhodesian Herald*, 27 March 1962.

³⁰ Brandt, *The Cigarette Century*, 244.

³¹ United States Department of Health, Education and Welfare, 'Smoking and Health: Report of the Advisory Committee to the Surgeon General of the Public Health Service', Public Health Service Publication No. 1103, (Washington D.C., 1964). This report is also referred to as the "Terry report" after the then Surgeon General of the United States Luther Leonidas Terry (1961-65).

³² NAZ, F226/1217/F22/3, Tobacco United States Newsletters, 1961-64, Statement of Malcolm B. Seawall before the tobacco sub-committee, House of Representatives Committee on Agriculture, 30 January 1964.

³³ A plant of the genus *Piper Cubeba* grown for its fruit and oil but used sometimes as a flavouring for cigarettes. Cubebs were also historically smoked as cigarettes for treatment of conditions such as Asthma.

³⁴ NAZ, F226/1217/F22/3, Tobacco United States Newsletters, 1961-64, Statement of Malcolm B. Seawall before the tobacco sub-committee, House of Representatives Committee on Agriculture, 30 January 1964.

moment towards the regulation of tobacco and the beginning of a global conversation towards universal tobacco control. The immediate effect of the report was a transient fall in cigarette sales in the USA by between 15 and 20 % during the first half of 1964.³⁵ However, ironically, in 1965, there was a huge boom of per capita cigarette consumption that reached a record 4,318 cigarettes and generated the biggest ever profits for the industry.³⁶ Nevertheless, the report became an important document in the history of public health. It gave legitimacy and exposure to the harms of smoking and the role of the federal government's regulatory powers. Several regulations were enforced in several countries after the report. In the USA in 1965, the Cigarette Labelling and Advertising Act made health warning labels compulsory on cigarette packs.³⁷ In Britain and Canada, the Government had already started circulating a report titled "smoking and cancer" which warned the public on the dangers of smoking.³⁸ In Denmark the Danish National Society for the Combating of Cancer had issued a report urging the government to restrict or abolish all persons under 16 years from smoking in public.³⁹

This global debate on cancer and smoking that raged during the 1950s and 1960s inevitably permeated into Southern Rhodesia. The significant importance of tobacco to the colonial economy meant that the state and the tobacco industry were keen to engage with these global discourses. However, in Southern Rhodesia, there were no vibrant scientific bodies, health lobby groups or anti-smoking movements like in the west that could galvanise the state and the tobacco industry to respond responsibly to the public health risks. *The Rhodesian Herald* noted this disengagement and commented that although the government contributed to reports on the subject, it had not embarked on any effort to curb smoking "as was being done in other countries like Britain".⁴⁰ Peter Godwin and Ian Hancock add that no one in Southern Rhodesia "was too bothered by cigarettes" and despite the American Surgeon General's report on the effects of smoking tobacco remained an important local crop.⁴¹ Therefore, local tobacco

³⁵ Brandt, *The Cigarette Century*, 237.

³⁶ Brandt, *The Cigarette Century*, 237.

³⁷ Brandt, *The Cigarette Century*, 256. However, the ambiguous language used on the cigarette packets to frame the health risk of smoking as a "possibility" despite the Surgeon report having established that as a "certainty" drew a lot of criticism to the Act. *The New York Times* described it as "a shocking piece of special interest legislation."

³⁸ 'US cigarette firms are worried about the threats of a new anti-smoking campaign', *The Rhodesian Herald*, 27 March 1962.

³⁹ 'US cigarette firms are worried about the threats of a new anti-smoking campaign', *The Rhodesian Herald*, 27 March 1962.

⁴⁰ 'US cigarette firms are worried about the threats of a new anti-smoking campaign', *The Rhodesian Herald*, 27 March 1962.

⁴¹ Godwin and Hancock, *Rhodesians Never Die*, 33.

interests' groups aided by state support were keener to spearhead research to counter the scientific evidence linking smoking and lung cancer. In 1962, one of the tobacco merchants in Southern Rhodesia and Russian expatriate Elia Salzman put up £50,000 towards the construction of a tobacco research institute for the study of tobacco and smoke to be placed at the disposal of the University College of Rhodesia and Nyasaland.⁴² To show the close links between the tobacco industry and its political support, then Prime Minister of the Federation Sir Roy Welensky was given the honour of full life patronage of the tobacco institution.⁴³ Surprisingly, before the research institute had even been built, or conducted its own independent research on the subject its chief benefactor Salzman was already criticising the global scientific reports linking smoking and lung cancer as “vicious propaganda” aimed at discrediting the industry and meant to protect interests in the oil and motor industries.⁴⁴ He further claimed cancer occurred more frequently in urban areas with heavy concentration of traffic with diesel and ordinary motor pollution.⁴⁵

The RTA emphasized in 1962 that the attitude of the country towards smoking was supposed to be positive as “exhortation, curbing cigarette publicity or fear campaigns” were not going to have any lasting effect on the cigarette smoking habit.⁴⁶ The Association further added that the only realistic strategy was “accepting smoking as a pleasant and permanent worldwide practice” while researching on ways through which lung cancer could be curbed.⁴⁷ The Association thus encouraged research into curbing cancer rather than the propagation of publicity on the health risks of smoking. This endeavour the Association reckoned would make the tobacco industry in Southern Rhodesia gain both “morally and practically”.⁴⁸ This approach of deflecting the risk of tobacco into a factor that could be managed through technology and scientific research was one of the strategies used by the tobacco industry to avoid the public health backlash. Peter Benson shows how such an approach involved replacing the object of eliminating tobacco with the “biopolitical goal” of enhancing the “probabilities of life”.⁴⁹ Such approaches had seen the federal government and tobacco companies in the USA work together

⁴² ‘£50,000 Tobacco Institute for Salisbury’, *The Rhodesian Herald*, 29 March 1962.

⁴³ ‘£50,000 Tobacco Institute for Salisbury’, *The Rhodesian Herald*, 29 March 1962.

⁴⁴ ‘£50,000 Tobacco Institute for Salisbury’, *The Rhodesian Herald*, 29 March 1962.

⁴⁵ ‘£50,000 Tobacco Institute for Salisbury’, *The Rhodesian Herald*, 29 March 1962.

⁴⁶ ‘Rhodesia should help fight cancer’, *The Rhodesian Herald*, 23 March 1962.

⁴⁷ ‘Rhodesia should help fight cancer’, *The Rhodesian Herald*, 23 March 1962.

⁴⁸ ‘Rhodesia should help fight cancer’, *The Rhodesian Herald*, 23 March 1962.

⁴⁹ Benson, *Tobacco Capitalism*, 42.

to develop “less risky” tobacco products such as low tar and filter cigarettes during the 1960s and 1970s.⁵⁰

The state also further engaged with the public health debates by portraying Southern Rhodesian tobacco as uniquely clean and free from carcinogenic chemicals. In 1964, while responding to the Surgeon General’s report, the Southern Rhodesia Secretary for Health noted that Rhodesian tobaccos contained less cancer-causing substances than tobacco smoked in other parts of the world.⁵¹ He added that the low cancer death rates recorded in Southern Rhodesia (23 deaths per 100 000) as compared to Britain’s (50 deaths per 100 000) reflected that there was reason to investigate further the causes of cancer which could be linked to the health effects of tobacco grown in other parts of the world.⁵² In 1963, another official, a senior chemist of the Tobacco Research Board (TRB) Dr G.H. Wiltshire vindicated Rhodesian leaf of having cancer-causing properties. While presenting a paper at the Third World Tobacco Congress, Wiltshire revealed that Rhodesian leaf had 1.92% nicotine as opposed to 3.12% found in the USA leaf, and 5.37 against 8.86% petroleum-ether content.⁵³ Thus, while some countries such as Britain and the USA had at least put in place regulations on tobacco advertising and created platforms of campaigns on smoking harmful effects as a result of the Terry Report, Southern Rhodesia remained fixated on protecting the interest of its tobacco industry. This, it did by funding research refuting such claims through the Rhodesia Elia Sulzman Tobacco Science Institute and invoking the uniqueness of Rhodesian tobacco brands such as Gunston, Rhodian and Texan as superior and harmless when compared to other global brands.

⁵⁰ Benson, *Tobacco Capitalism*, 43.

⁵¹ ‘Southern Rhodesia lung cancer is half that of Britain’, *The Rhodesian Herald*, 14 January 1964.

⁵² ‘Southern Rhodesia lung cancer is half that of Britain’, *The Rhodesian Herald*, 14 January 1964.

⁵³ ‘Rhodesia and USA Virginia Tobaccos: What Chemical Analysis Reveal’, *Tobacco Forum of Rhodesia and Nyasaland*, August 1963.



FIGURE 17 A PACK OF RHODIAN CIGARETTES WITH BRANDING EMPHASIZING THAT IT WAS MADE ENTIRELY FROM RHODESIAN TOBACCO AND NOT BLENDED WITH OTHER TOBACCOS.⁵⁴

This defence of the reputation of its tobacco industry and denialism of the health risks even continued into the 1970s. In June 1971, the *Rhodesian Tobacco Journal* dismissed the new evidence based on experiments on dogs and chimpanzees that had confirmed smoking caused cancer.⁵⁵ In 1975, the Bulawayo City Council banned smoking in the cinemas.⁵⁶ The move was met with a huge public backlash instigated by the tobacco industry which mobilised thousands of signatures across all races to mount a formidable petition in opposition.⁵⁷ During the same year a legislator Hilary Squires moved a motion in the legislative assembly calling on the government to prohibit smoking in confined and public areas as had happened in other countries in the west to reduce the risk of second-hand smoke to non-smokers.⁵⁸ His motion was shot down by other legislators who argued that the cinema industry would lose money. One of the legislators from a tobacco growing constituency Ian Sanders argued during the

⁵⁴ <http://www.oldshopstuff.com/Shop/tabid/1248/ItemID/21984/Listing/Old-live-cigarette-packet-full-with-contents-Rhodian-Lambert-and-Butler/Default.aspx>, accessed 23 August 2019.

⁵⁵ *Rhodesian Tobacco Journal*, June 1971.

⁵⁶ Godwin and Hancock, *Rhodesians Never Die*, 139-40.

⁵⁷ Godwin and Hancock, *Rhodesians Never Die*, 140.

⁵⁸ Godwin and Hancock, *Rhodesians Never Die*, 140.

course of the debate that the evidence by the World Health Organisation on smoking and cancer was based on “foreign tobacco”, and not Rhodesian tobacco which was “entirely safe for people to smoke”.⁵⁹ Although the motion was eventually passed in Parliament, it was ignored by cabinet.⁶⁰

The post-colonial government in independent Zimbabwe also continued with this denialist trajectory. In 1994, while addressing a white commercial farmers dominated Zimbabwe Tobacco Association (ZTA) then President the late Robert Mugabe pointed out that WHO had no business trying to regulate tobacco smoking and it was supposed to leave that for the individual to choose how much nicotine he wanted in his bloodstream.⁶¹ He added that Zimbabwe tobacco was “of high quality” and more people died of alcohol than cancer and perhaps in other environments cancer was from tobacco, but certainly not Zimbabwe:

I have always argued that WHO has got its priorities wrong. I may be wrong, but I take my own country as an example. I do not know how many people have died of nicotine here, lung cancer, but I know that very many more, almost on a weekly basis, have died of too much alcohol.⁶²

In 1998 the state countered the public health debates by pointing out that revenue from tobacco taxes and levies was in fact funding the health sector, and the condition of national medical care would deteriorate if WHO tobacco control proposals were to be implemented.⁶³ The then Minister of Health, Dr Timothy Stamps argued that tobacco brought in a lot of money into the country which sustained health and banning tobacco would be like “cutting our own throat”.⁶⁴ The next section discusses how these public health controversies over smoking in the 1950s and 1960s affected global consumption patterns and Southern Rhodesia’s tobacco industry through the threat of over production that in turn raised the fears of production control from 1962 to 1965.

⁵⁹ Godwin and Hancock, *Rhodesians Never Die*, 140.

⁶⁰ From the 1970s the debates on smoking and public health broadened from the personal health impact to the social impact as a result of pollution caused by second-hand smoke to non-smokers. Cigarette smoke came to be viewed as an environmental toxin affecting innocent victims. The impact of smoking on non-smokers transformed the regulation and cultural perception of the cigarette in ways which led to smoking prohibitions in public places as well as tobacco advertising in the public media. In April 1970, the United States Congress passed a law, the Public Health Cigarette Smoking Act that outlawed cigarette advertising on the radio and television. From 1971 a number of airlines had put up segregated sections for smokers and non-smokers. In 1990 legislation was introduced to ban smoking aboard all domestic flights in the USA and in 1992 the Environmental Protection Agency (EPA) classified tobacco smoke as group A carcinogen opening floodgates for its ban at the workplace.

⁶¹ ‘Leave it to the individual-Mugabe’, *Tobacco News*, October 1994.

⁶² ‘Leave it to the individual-Mugabe’, *Tobacco News*, October 1994.

⁶³ ‘Tobacco levy boost ailing health sector’, *The Herald*, 4 July 1998.

⁶⁴ ‘Despite lobby tobacco still the biggest forex earner’, *The Herald*, 15 January 1998.

THE SPECTRE OF TOBACCO PRODUCTION CONTROL IN SOUTHERN RHODESIA, 1962-65.

Although the overall effect of the cancer scares on limiting tobacco consumption was insignificant in the long run as consumption trends remained buoyant, the transient dips in cigarette sales had a conspicuous effect on global production trends. Figures supplied by the Tobacco Export Promotion Council of Rhodesia and Nyasaland (TEPCORN) revealed that global tobacco consumption and the expansion of cigarette output had declined from 5% per annum between 1956 and 1961 to 2.4% in 1962 as a result of global health concerns.⁶⁵ Therefore, global stocks of tobacco were at record high levels and these totalled 972 million lbs in January 1963 representing 30% of annual global flue-cured tobacco.⁶⁶ The Terry Report released in early 1964 had added fresh impetus to the smoking and public health issues and witnessed widespread reductions in cigarette sales in the first half of 1964 by up to 20%.⁶⁷ The result of this dynamic in the USA was that acreage allotments for 1964 were reduced in most farms by 10% making 639 861 acres available from the 710 191 acres that had been planted in 1963.⁶⁸ The repercussions of these global pressures in Southern Rhodesia were fears that the 1963 tobacco crop of 280 million lbs would leave a carryover of 50 to 70 million lbs.⁶⁹ In light of this, it was therefore considered prudent to restrict the 1964/65 seasonal production to only 200 to 210 million lbs to avoid overproduction and a glut.⁷⁰ The council of the RTA authorised a working committee to investigate overproduction and the position of the 1964/65 crop and look for ways to enforce domestic control and to hear the different views of the growers.⁷¹ The committee recommended that any scheme of voluntary control by individual farmers would fail, and there was need for a comprehensive and global control system.⁷²

⁶⁵ NAZ, F226/1211/F2, Production Control 1964 to 1965, Tobacco Export Council of Rhodesia, 1964 to 1965 crop recommendations.

⁶⁶ NAZ, F226/1211/F2, Production Control 1964 to 1965, Tobacco Export Council of Rhodesia, 1964 to 1965 crop recommendations.

⁶⁷ NAZ, F226/1211/F2, Production Control 1964 to 1965, Tobacco Export Council of Rhodesia, 1964 to 1965 crop recommendations.

⁶⁸ 'USDA Announces Changes for 1964 Crop', *Flue-Cured Tobacco Cooperative Stabilisation Cooperation Newsletter*, 2 December 1963.

⁶⁹ NAZ, F226/1211/F2, Production Control 1964 to 1965, Tobacco Export Council of Rhodesia, 1964 to 1965 crop recommendations.

⁷⁰ NAZ, F226/1211/F2, Production Control 1964 to 1965, Tobacco Export Council of Rhodesia, 1964 to 1965 crop recommendations.

⁷¹ NAZ, F226/121/F2, Production Control 1964 to 1965, RTA Production Control: Report of the Working Committee

⁷² NAZ, F226/121/F2, Production Control 1964 to 1965, RTA Production Control: Report of the Working Committee.

Acreage Group Acres	Number of Growers
Under 20 acres	34
20-29	73
30-39	129
40-49	203
50-59	323
60-69	383
70-79	362
80-89	303
90-99	194
100-199	590
200-299	53
300 and over	21
Total	2 658

FIGURE 18 NUMBER OF EUROPEAN TOBACCO GROWERS BY ACREAGE GROUPS IN SOUTHERN RHODESIA, 1962-63.⁷³

Consequently, Government Notice No. 16 of 1964, and in terms of the Tobacco Marketing Levy Act was gazetted. Under it the total amount of tobacco to be sold in Rhodesia during the 1965 selling season was not to exceed 250 million lbs.⁷⁴ Each registered grower was to be allotted a basic quota. In the case of a new grower using new facilities 40 000 lbs, a new grower on old facilities previously used for tobacco production, a weight of tobacco equal to the greatest weight sold by the registered grower who previously used such facilities in the selling season in the three years prior to 1965, and in the case of old growers the quota was the weight equal to the greatest weight sold by the grower in the three seasons prior to 1964.⁷⁵ All tobacco to be produced in excess of the approved quotas was to be destroyed. In a press statement, the Minister of agriculture lauded the control scheme as a measure which would effectively lead

⁷³ NAZ, F226/121/F2, Production Control 1964 to 1965, RTA Production Control: Report of the Working Committee.

⁷⁴ The Tobacco Marketing and Levy (Marketing Quota) Order, 1964.

⁷⁵ The Tobacco Marketing and Levy (Marketing Quota) Order, 1964.

to greater diversification and intensive use of land in the tobacco growing areas. He pointed out; “I hope that the limitation to be imposed on tobacco production will hasten the diversification that I and previous ministers have for so long advocated. To mention the more obvious lines to fill the gap, I would mention cattle first, cotton second, monkey nuts third and sheep fourth.”⁷⁶

While the control scheme had been initially received by growers with mild enthusiasm, opposition to it grew until there was a marked degree of protest amongst most farmers, particularly the smaller, not well-established farmers who argued that it only served to protect the big growers and made it impossible for new growers to enter the industry.⁷⁷ Tobacco farmers from Bindura, in their letter to the Secretary for Lands and Agriculture, pointed out that 40 000 lbs were uneconomic as many growers had been handicapped in their expansion by the shortage of available land, an obstacle that they hoped would be overcome in future by purchasing more land and developing. The farmers argued that “by cutting their production many of them would be forced to leave the land as they represented in the main the developing farmer.”⁷⁸ The other argument against control was that there were very good tobacco areas in the country which were not yet fully developed and which under the control scheme could be underutilised. Production would tend to be frozen in present areas and thus prevent a shift to the best areas, hence causing a misuse of natural resources.⁷⁹

On its part, the RTA was adamant that production control was the only mechanism which would guarantee the stability of the tobacco industry in the face of global volatile marketing conditions.⁸⁰ Its President E.H. Jeffreys told an angry gathering of tobacco farmers that he was determined to go on with the control scheme. He argued that without the scheme the industry would be plunged into a state of chaos and made a laughingstock by other global producers.⁸¹ Farmers’ Associations protested the control scheme and protest meetings were held across the country. However, the dissatisfaction with the control scheme was largely confined to the fringe tobacco growing areas in the newly resettled places like Tengwe, Gadzema, Mrehwa,

⁷⁶ NAZ, F226/1211/F2, Production Control 1964 to 1965, Press Statement by Minister of Agriculture on tobacco production control. The press statement is undated but happened around September 1964.

⁷⁷ *The Rhodesia Herald*, 17 October 1964.

⁷⁸ NAZ, F226/1211/F2, Control of Production 1964 to 1965, Bindura Farmers to Secretary Agriculture, 27 September 1964.

⁷⁹ NAZ, F226/1211/F2, Production Control 1964 to 1965, Bindura Farmers to Secretary Agriculture 27 September 1964.

⁸⁰ ‘Chief is determined to implement quota plan’, *The Rhodesian Herald*, 14 October 1964.

⁸¹ ‘Chief is determined to implement quota plan’, *The Rhodesian Herald*, 14 October 1964.

Mutoko, and Centenary.⁸² These farmers presented the argument that their farm holding consisting of 500 to 700 acres arable land gave limited scope for diversification under the present accepted farming practices.⁸³ The Tengwe Farmers' Association noted that most farmers in their area were settled based on cultivating 60 acres of tobacco to make a living of £1,500/ annum. Their geographical and financial position as well as the lack of capital to diversify, and the capital already poured into the 60-acre portions precluded seeking revenue from other farm enterprises.⁸⁴ Votes of no confidence in the leadership of the RTA were passed during those meetings.⁸⁵ Consequently, as a result of these protest, the government was forced to abandon the mandatory tobacco control scheme and settled for a voluntary scheme which was implemented during the 1965 selling season.

Thus by 1965, on the eve of the UDI, two possible portents were apparent in the Rhodesian tobacco industry. The first that state-regulated control of production could become a feature of the industry with the changing global marketing scenarios. The second was that farm diversification to accommodate these existential pressures in the tobacco farms could become necessary in future. These omens were to be fulfilled a year later as a result of the tobacco embargo brought about by the UDI.

TOBACCO FARMS, DIVERSIFICATION, AND ECOLOGICAL CHANGE IN SOUTHERN RHODESIA, 1966 TO 1980.

On 11 November 1965, the Rhodesian Front government of Southern Rhodesia declared unilateral independence, severing the colony's political attachment to Britain. The response from the British government was a raft of economic restrictions and sanctions on Rhodesia banning the import of Rhodesian mineral products, the sale of petroleum products and the imposition of a boycott on Rhodesian tobacco.⁸⁶ The effects of the boycott on the tobacco industry were tellingly disastrous. The tobacco embargo stripped Southern Rhodesia off the benefits of the 1947 London Agreement resulting in losses of at least 50% of its traditional

⁸² NAZ, F226/1211/F2, Production Control 1964-65, Memorandum of Tengwe Farmers Association on the Tobacco Quota, 3 October 1964.

⁸³ NAZ, F226/1211/F2, Production Control 1964 to 1965, Memorandum of the Tengwe Farmers Association on the Tobacco Quota, 3 October 1964.

⁸⁴ NAZ, F226/1211/F2, Production Control 1964 to 1965, Memorandum of the Tengwe Farmers Association on the Tobacco Quota, 3 October 1964.

⁸⁵ 'RTA stand sparks protests', *The Rhodesian Herald*, 20 October 1964.

⁸⁶ Rowe, *Manipulating the Market*, 60.

tobacco market.⁸⁷ It was apparent that in light of limited marketing opportunities the state had to once again raise the spectre of production control to cushion the white farmers from the disaster of depressed prices and overproduction starting from the 1966 season.

So the state set up the Tobacco Cooperation in 1966, a statutory entity whose task was to dispose of the tobacco crop and create the requisite marketing framework.⁸⁸ The Cooperation's terms of reference included ensuring continuity of supplies to external markets, supporting growers' production and maintaining the existing auction system.⁸⁹ In terms of the law, the Cooperation became the sole monopoly body that could buy, export and regulate tobacco in Southern Rhodesia in a manner reminiscent of a communist command economy despite their paranoia of communism.⁹⁰ Each farmer was allocated a basic quota calculated on the basis of weight sold by him during the 1965 season which was then reduced to a production quota by a percentage designed to equate the total crop to meet marketing requirements.⁹¹ The control scheme came into effect on 15 July 1966, and the seasonal national quota was put at 200 million lbs.⁹² During the 1967/68 season on the back of a huge glut of 93 980 metric tonnes created by a very disastrous 1966 selling season the quota was revised down to 132 million lbs, representing a cut back of 34%.⁹³ In acreage terms this was a reduction of 56 700 acres from 166700 during the 1966/67 season to 110,000 in 1967/68.⁹⁴ The Tobacco Cooperation had further difficulties in disposing of the crop. In 1966, only 120 million lbs of the 200 million lib crop were disposed of leaving huge unsold stockpiles.⁹⁵ During the 1969 season, unsold stockpiles went as high as 300 million lbs.⁹⁶

⁸⁷ Rowe, *Manipulating the Market*, 73.

⁸⁸ Donald L. Losman, 'Rhodesia: A Decade Under Sanctions', *Il Politico*, 43, 2 (1978), 321-340.

⁸⁹ For a more detailed discussion of the Tobacco Cooperation, its membership, broader statutory obligations, terms of reference and funding see Rowe, *Manipulating the Market*, 73-74.

⁹⁰ Southern Rhodesia considered itself the last bastion on the fight against communism in southern Africa. In his memoirs Southern Rhodesia Prime minister (1964-1980) Ian Douglas Smith pointed out that southern Africa faced the threat of communist imperialism that was being worsened by "unbridled black nationalism". See Ian Smith, *Bitter Harvest: The Great Betrayal and the Dreadful Aftermath* (Johannesburg: Jonathan Ball Publishers, 2001), 124-25.

⁹¹ 'The production control scheme', *Tobacco Forum of Rhodesia*, August 1966. There was a lot of reticence concerning tobacco production and marketing from the government during the UDI so much that some of the statistics put in the public domain may not be very accurate. Tobacco marketing and production figures were a heavily guarded secret and the Prime Minister Ian Douglas Smith said that the open tobacco auctioning system had to come to an end in 1966 since British spies were trying to identify buyers and influence the marketing of the crop. See Smith, *Bitter Harvest*, 118.

⁹² 'Tobacco control scheme details sent to growers', *The Rhodesian Herald*, 16 July 1966.

⁹³ 'Flue-cured tobacco growers and a reduced marketing quota', *Rhodesian Tobacco Journal*, December 1967.

⁹⁴ 'Flue-cured tobacco growers and a reduced marketing quota', *Rhodesian Tobacco Journal*, December 1967.

⁹⁵ Losman, 'Rhodesia: A Decade Under Sanctions', 321-340.

⁹⁶ Losman, 'Rhodesia: A Decade Under Sanction', 321-340.

The financial implications of this for tobacco growers was a reduction in incomes, as the value of Rhodesia's tobacco exports fell precipitously by 82% from R\$ 93.9 million to R\$16.7 million between 1965 and 1966.⁹⁷ Gross incomes of tobacco farmers fell down as they could not meet overhead expenditure and personal living expenses.⁹⁸ The situation was so desperate that Mr. Gordon Hoskins Davies, former RTA President and Sinoia farmer, agonised that “no longer is the weed the magic crop for opening up new lands and creating closer settlement”.⁹⁹ He added, “some profit may remain in tobacco, but no satisfaction and no future.”¹⁰⁰ Most farmers surrendered their production quotas because they could not profitably grow and dispose of the crop. By December 1967, of the 68 million lbs target reduction imposed by the government for the season, 50 million lbs had been voluntarily surrendered by producers to the government at the cost of 6.d/lb payable to the growers.¹⁰¹ By early 1968, about 900 farmers had been driven out of tobacco by sanctions.¹⁰² There was also a corresponding sharp drop in the number of Asian and European people employed in agriculture from 4 700 before UDI to 3 800; the number of African employees dropped from 300 000 to 218 000.¹⁰³

In the light of these adverse economic conditions, the state pushed forward agricultural diversification¹⁰⁴ as a relevant tobacco farming policy. The state brought in a farm irrigation fund which allocated grants worth £409 000 to 211 tobacco farmers and put 12 631 acres under irrigation to grow other crops between 1966 and 1967.¹⁰⁵ During 1966, 300 tobacco farmers used this facility bringing over 8 000 hectares of land under irrigation to grow wheat under a state wheat subsidy support scheme.¹⁰⁶ The President of the RTA, Mr Carol Heurtley appealed to tobacco growers to diversify their exploits into other ventures. He urged them:

Increase the lines you know can be profitable, remember your soil and your future on the farms. There were signs well before UDI that our economy was too dependent on one or two products. Tobacco accounted for half of the agricultural production and a

⁹⁷ Rowe, *Manipulating the Market*, 74.

⁹⁸ ‘Flue-cured tobacco growers and a reduced marketing quota’, *Rhodesian Tobacco Journal*, December 1967.

⁹⁹ ‘Surrendered tobacco quotas now 2.8 million’, *The Rhodesian Herald*, 27 July 1967.

¹⁰⁰ ‘Surrendered tobacco quotas now 2.8 million’, *The Rhodesian Herald*, 27 July 1967.

¹⁰¹ ‘Flue-cured tobacco growers and a reduced marketing quota’, *Rhodesian Tobacco Journal*, December 1967.

¹⁰² *The Star*, 8 March 1968.

¹⁰³ *The Star*, 8 March 1968.

¹⁰⁴ In Agricultural sciences, diversified farming systems are farming units that grow several crops and engage in other non-crop agricultural activities such as livestock or fish farming. Diversified farms constitute farming landscapes which stimulate biodiversity within the soil through mixed cropping systems, rotation of crops and rotational livestock grazing. At the landscape scale diversified farming systems include such other physical farm landforms as fallows, fields, pastures, woodlot plantations, marshes, streams, rivers and lakes.

¹⁰⁵ ‘Tobacco cut back has had its credit speeding up farm diversification’, *The Rhodesian Herald*, 6 July 1967.

¹⁰⁶ Rukuni, ‘The Evolution of Agricultural Policy’, 46.

third of all the value of exports...too many Rhodesian farmers are over specialised and hence subject to excessive risk.¹⁰⁷

Tobacco farmers turned – in large numbers – to other crops and enterprises such as cotton. Cotton became a particularly important diversification crop as it had a ready domestic market provided by the growing Rhodesian textile industry and could be exported to South Africa.¹⁰⁸ The diversification drive, however, created serious ecological problems within the tobacco sand veld environment. Faced with the necessity to continue an all-out effort to produce as much as possible from alternative crops to compensate for the loss of income from tobacco production farmers were cultivating larger acreages, leading to over cropping well above the inherent capability of the land.¹⁰⁹ This was so because where tobacco production was discontinued, it was replaced by at least twice the acreage of cotton, with the result that the total area planted in the sand veld more than doubled making it necessary for changes in rotational practices to accommodate the increased cropping acreage.¹¹⁰ Previously cropping for tobacco on the sand veld soils had been planned based on a rotational system involving two crops of tobacco followed by maize, and then followed by three years rotational pasture planted to indigenous grasses. This rotational practice ensured that for every acre of tobacco cropped, at least double the amount of land had lain under pasture or grass fallow.¹¹¹ Thus, for every 100 acres of cropping on a tobacco farm, there would be a minimum of 200 acres under pasture or fallow, requiring in all some 300 to 400 acres of arable land.¹¹² This rotation with long periods under grass was desirable for the restoration of organic matter and the depression of soil pests such as the common root nematode. However, cotton produced very small quantities of crop residues owing to it being woody and the continuous cultivation of cotton as replacement for tobacco could not provide enough organic matter to replace the soil fertility.¹¹³

As a result, the soil structure in the tobacco farms became poorer. Cotton also gave poor cover in the earlier part of the rainy season, had longer growing periods and continued to fruit long after the end of the rains resulting in abnormally dry soils which precluded early planting of the following crop. It also reduced the infiltration rate and permeability of the soil and produced

¹⁰⁷ 'Tobacco farmers urged to retain employees', *The Rhodesian Herald*, 7 July 1967.

¹⁰⁸ Stephenson, 'The Impact of International Economic Sanctions on the Internal Viability of Rhodesia', 377-389.

¹⁰⁹ W.R. Robertson, 'Cotton Rotations on Sand Veld Farms', *Rhodesia Agricultural Journal*, 66 (1969), 2-6.

¹¹⁰ Robertson, 'Cotton Rotations on Sand Veld Farms', 2-6.

¹¹¹ Robertson, 'Cotton Rotations on Sand Veld Farms', 2-6.

¹¹² Robertson, 'Cotton Rotations on Sand Veld Farms', 2-6.

¹¹³ Robertson, 'Cotton Rotations on Sand Veld Farms', 2-6.

greater soil and water losses than tobacco.¹¹⁴ Consequently in 1968, during a special congress, the RTA President lamented this ecological breakdown and pointed out with despair that for the vast majority of the remaining 1 700 tobacco growers, the limits of diversification had been reached as the types of soils, annual rainfall, and general ecological situation on most tobacco farms made it virtually impossible for the cultivation of other crops other than the commodity for which they were originally developed.¹¹⁵

While taking note of these challenges, the Director of Conservation and Extension Mr. J.H. Lowrens pointed out during the annual conference of ICA committees: “it is obvious that the degree of intensification and diversification of land use practiced on many farms is such that it cannot be tolerated with safety by the prevailing land, soil and climatic conditions -as evidenced by the increasing incidences of erosion”.¹¹⁶ He also highlighted that there was a general slackening of concern for the mechanical protection of soil in arable areas. There had also been a considerable decrease on the number of dams built and their total capacities compared with previous years.¹¹⁷ Diversification also required sound sand veld management techniques to in cooperate new crops. This was not being practiced on a sound basis such that by March 1970 only 1070 (8 666 700 acres) farms had been planned to represent only 19.7% of the 44 million acres in the European and NPA areas.¹¹⁸

The result of these ecological problems was that the diversification drive was too slow to change the fortunes of many tobacco growers who were frustrated and unable to adapt to the changing production environment. Mr Hoffman of Lee farm in Inyazura wrote a letter to the Prime minister in 1970 complaining that the future of the grower was “bleak and dismal, one of woe, and regrets and financial ruin, and eventual evacuation of rural areas”.¹¹⁹ Young men disillusioned by the diversification scheme and unable to meet their financial commitments were already throwing in the towel and leaving the district.¹²⁰ The Mrehwa -Mutoko farmers

¹¹⁴ J. M. Cormack, ‘Efficient Utilisation of Water Through Land Management’, *Rhodesia Agricultural Journal*, 69, 1 (March 1973), 12.

¹¹⁵ RTA Presidential Speech at the Special Congress held on 22 April 1968.

¹¹⁶ ‘Farmers warned of the consequences of over-cropping’, *The Rhodesian Herald*, 30 July 1970.

¹¹⁷ ‘Farmers warned of the consequences of over-cropping’, *The Rhodesian Herald*, 30 July 1970.

¹¹⁸ ‘Farmers warned of the consequences of over-cropping’, *The Rhodesian Herald*, 30 July 1970.

¹¹⁹ NAZ, (Unprocessed) C.32.15.11R, Box number 126959, Tobacco Burley Association, 1962 -1970, Tobacco Sales Quota and General, 12 March /1970 to 21 September 1971, Mr. Du Toit Hoffman to P.M Ian Smith, 3 March 1970.

¹²⁰ The tobacco farmers were furious and mostly united in clamouring against what they thought was state ineptitude to address their plight. During an annual Congress of the RTA in 1969, the tobacco farmers expressed

Association wrote to the Minister of Agriculture noting that although most of them had planted cotton and acquired a few cattle, “the cotton had proved to be difficult and damaging” to their ecological conditions.¹²¹ In much of Mashonaland, the diversification into cotton was proving to be a disaster as cotton in the sand veld had thrown up a number of unexpected problems. The most serious of these problems was the tendency of the cotton plants to develop tap root problems when two or three inches high, as well as the higher incidences of weeds and insect pests such as eelworm.¹²² This was attributed to the lengthy wet spells, the lack of hot weather. As a result of these ecological impediments, most tobacco farmers abandoned cotton production as a viable diversification alternative.

The diversification drive was given further impetus by the expansion of Burley tobacco production, which had begun during the 1956/57 season on a trial basis to meet the huge demand of the American blended cigarette market. Although Burley tobacco had been grown in the 1930s, its production had ceased during the war years as a result of limited markets.¹²³ Burley had the advantage of supplementing flue-cured Virginia, as Virginia required sandy soils while Burley did best in heavier soils.¹²⁴ Burley could also fit well with maize rotations since it required fewer imported materials like fertiliser and the heavier soils within which it was grown retained soil fertility for the next crop rotations.¹²⁵ From 1968, most farmers appreciative of the erosion hazard engendered by the diversification of the sand veld particularly on small farms, were adopting Burley tobacco.¹²⁶ The expansion of Burley tobacco in European farms, however, remained restrained because of the lower return per acre

their lack of confidence in the government’s handling of the problems relating to the tobacco industry which they said were ruining the industry and causing a security problem due to abandoned farms. They pointed at the refusal of the government to pay a guaranteed 25.d/ lb support price. Rowe presents much of this political bickering between tobacco farmers as being very unsubstantial in shoring up the combined political power of the growers against the state during the UDI. The state was able to use its control of the institutions of tobacco marketing and production control to influence tobacco farmers much more effectively than the now the disparate RTA. While Rowe's interpretation might be true at a political level in understanding the relationship between tobacco farmers and the state, it fails to appreciate the significant leverage tobacco farmers still commanded that was decisive in compelling the state to make a lot of sacrifices to alleviate the impact of the sanctions on the growers. This was because tobacco farmers were a significant pillar of its political support. In 1970, close to R\$22,8 million was spent on the tobacco support program and only a paltry R\$ 3,6 million was allocated to a combined crops subsidy for cotton, soya beans, and maize.

¹²¹ NAZ, (Unprocessed) C.32.15.11R, Box number 126959, Tobacco Burley Association, 1962 to 1970, Tobacco Sales Quota and General, 12 March 1970 to 21 September 1971, Mrehwa-Mutoko Farmers Association to Minister of Agriculture, 22 April 1970.

¹²² ‘Sand veld tobacco growers may drop cotton production’, *The Rhodesian Herald*, 15 May 1969.

¹²³ ‘Burley: An outline of its history and a look into the future’, *Tobacco Forum of Rhodesia*, November 1969.

¹²⁴ ‘Burley – the crop with a big future’, *Tobacco Forum of Rhodesia and Nyasaland*, August 1963,

¹²⁵ ‘Burley – the crop with a big future’, *Tobacco Forum of Rhodesia and Nyasaland*, August 1963

¹²⁶ NAZ, (Unprocessed) C.32.15.11R, Box number 126959, Tobacco Burley Association, 1962 to 1970, Chairman Centenary Farmers Association to Minister of Agriculture, 21 March 1968.

compared to Virginia. By 1973, Burley was grown by 416 European growers across the 21 tobacco producing districts of Southern Rhodesia and sold at an average price of 51.79 cents/kg.¹²⁷ Despite this, however, the president of the Rhodesian National Farmers' Union, Mike Butler, noted that the profitability and diversity following the decline in tobacco markets were difficult for most growers.¹²⁸ The situation was made worse by the rising costs of inputs such as fuel and fertilisers that were imported and which were now expensive because of the sanctions.¹²⁹ By 1972, the number of European tobacco growers in Rhodesia had fallen from 2 500 in 1965 to 1,666 as a result of these hardships.¹³⁰

Diversification was not easy. Most tobacco farmers had invested their capital in land suitable for the exclusive production of the crop. Compared with land for general cropping and livestock, most tobacco farms were relatively smaller and had become expensive to their owners largely because income from one acre of tobacco generally equalled that of four acres of other crops.¹³¹ The common size of a sand veld farm was between 1 500 and 2 000 acres of which roughly 40% could be classified as arable.¹³² The arable land was further subject to a loss of 25% in arable land taken up by roads, buildings, small unusable areas, and soil conservation works.¹³³ Eventually, this would leave only 450 to 500 acres available for cropping rotations on a 1500 acre farm.¹³⁴ A survey of land use in the Mazowe valley revealed that there was a steady drop in the area of fallow land from 11 480 acres between 1968 and 1969 to 9 800 acres between 1970 and 1971 (31% of total arable).¹³⁵ The number of farms with fallow land also decreased from 67 to 55.¹³⁶ The problem, then of growers shifting from highly intensive tobacco production on limited acreages to general farming requiring large of areas of land became more glaring.¹³⁷ Low-profit margins compounded the problem. Prices from the other crops were very low compared to tobacco; cotton, for instance, gave a return of £20 per acre against £70 per acre for tobacco.¹³⁸ A survey of 40 tobacco farms in the northern

¹²⁷ '1973 Burley sales', *Tobacco Today*, December 1973.

¹²⁸ Rowe, *Manipulating the Market*, 79.

¹²⁹ Rowe, *Manipulating the Market*, 79.

¹³⁰ 'The Rhodesian tobacco grower since 1965', *Tobacco Forum of Rhodesia*, February 1972.

¹³¹ Toil and sweat, but success', *The Rhodesian Herald*, 25 November 1971.

¹³² Robertson, 'Cotton Rotations on Sand Veld Farms', 2-6

¹³³ Robertson, 'Cotton Rotations on Sand Veld Farms', 2-6

¹³⁴ Robertson, 'Cotton Rotations on Sand Veld Farms', 2-6

¹³⁵ M.H. Buttress, 'Agricultural Land-use in the Mazowe Valley During the Period 1966-1971', *Rhodesia Agricultural Journal*, 70, 5 (April 1972), 105.

¹³⁶ Buttress, 'Agricultural Land-use in the Mazowe Valley', 105.

¹³⁷ 'Toil and sweat, but success', *The Rhodesian Herald*, 25 November 1971.

¹³⁸ Rowe *Muzzled Dogs Don't Bark*, 79.

fringe of Mashonaland (Karoi, Tengwe, Doma, Raffingora, Centenary, Umvukwesi, and Spolilo) revealed that between 1969 and 1970, all the farms had made an average loss of R\$628.¹³⁹ An economic survey by the RTA during 1972 and 1973 showed that out of a sample of 222 farmers, 50 were in the red.¹⁴⁰ The worsening economic crisis in 1975 hit tobacco farmers most hardly.¹⁴¹ The financial crisis was a result of unfavourable exchange rates, poor harvest as a result of the 1974/75 drought, overseas marketing competitions, the higher input costs and falling prices.¹⁴² A third of tobacco farmers recorded a loss during the 1974/75 season, several were highly in debt with growers owing R\$120 million in short term credits by March 1975.¹⁴³ The precarious financial condition of most tobacco farmers thus slowed down investments in land conservation and farm planning.

In November 1972, H.A. Ellwell from the Department of Conex complained that the result of UDI had been that the survival of tobacco soil was threatened. Indeed, he argued, “the reality of soil erosion was far more permanent than the threat of sanctions”.¹⁴⁴ He noted with regret that many of the steep tobacco lands were irreparably damaged by soil erosion because of the neglect of long grass ley rotations.¹⁴⁵ This was because tobacco soils were notoriously shallow, gravel, infertile subsoils of decomposing rock which once exposed had to be abandoned:

Remember the days of the long grass ley rotations. These old rotations were based on the knowledge that tobacco soils are highly erodible and require special treatment if they are to remain productive. The detrimental influence of an erosion-prone crop like tobacco was diluted by several years of a very erosion resistant crop like grass pasture...the cutback in tobacco has put increased pressure on the land and farmers on the small tobacco farms are fighting for economic survival...the safe rotations have gone to the board, tobacco followed by maize and back to tobacco is not an uncommon rotation on most farms.¹⁴⁶

He pointed out that the higher erosion rates in the tobacco lands had a profound effect on the efficiency of conservation works as the soil eroded from the land between the contours was deposited in the contour channels.¹⁴⁷ While before UDI farmers could have “gotten away” with such practices since there was enough land to practice long ley rotations and it could be rested,

¹³⁹ ‘Low-profit margins in the Mashonaland fringe areas’, *The Rhodesian Herald*, 9 February 1973.

¹⁴⁰ ‘More tobacco growers are in the red’, *The Rhodesian Herald*, 27 June 1975.

¹⁴¹ Godwin and Hancock, *Rhodesians Never Die*, 132.

¹⁴² Godwin and Hancock, *Rhodesians Never Die*, 132.

¹⁴³ Godwin and Hancock, *Rhodesians Never Die*, 132.

¹⁴⁴ ‘Protect the future of tobacco’, *Rhodesian Tobacco Journal*, November 1972.

¹⁴⁵ ‘Protect the future of tobacco’, *Rhodesian Tobacco Journal*, November 1972.

¹⁴⁶ ‘Protect the future of tobacco’, *Rhodesian Tobacco Journal*, November 1972.

¹⁴⁷ ‘Protect the future of tobacco’, *Rhodesian Tobacco Journal*, November 1972.

the reduced area under tobacco changed all that.¹⁴⁸ Indeed, a writer in the *Rhodesian Tobacco Journal* pointed out that under the prevailing cropping systems tobacco farms were losing soils at an alarming rate:

Tobacco is still our valuable cash crop. Tobacco soils are therefore the foundations and backbone of the economic viability of many of our farms...valuable assets demand and deserve great care and consideration. Contour farming ensures that soils are given attention not only does contour farming decrease the rate of erosion and thereby protect the future of the industry, but it also offers the prospects of more economic all-round farming.¹⁴⁹

Within the Sinoa group of ICAs for instance, there was a general concern over the mechanical conservation works. The Group Conex officer Mr W.D. Nicolli pointed out that the problem was more serious in the ICA because 49% of the cropping area was in the sand veld and most sensitive to soil erosion that was hastened by the construction of tobacco ridges up and down the slope, which was now being aggravated by over cropping and incorrect rotation systems adopted during the UDI.¹⁵⁰ In the Centenary ICA, of the 90 farms, the Natural Resources Board (NRB) noted that only 39 had been planned.¹⁵¹ The board also noted that mechanical conservation was still an issue, with only 43% of the farmers using parallel ridging in 1975.¹⁵² A survey done by Conex in December 1975 on conservation practices on tobacco lands in the Umvukwesi group of ICAs revealed that of the total 3 421 acres of tobacco planted only 848 acres, that is 26.9% by total area were conserved by modern methods (see table below).¹⁵³

¹⁴⁸ 'Protect the future of tobacco', *Rhodesian Tobacco Journal*, November 1972.

¹⁴⁹ 'Largest concentrations of farming units in Rhodesia', *Rhodesian Tobacco Journal*, January 1973.

¹⁵⁰ 'Soil erosion aggravated', *Rhodesian Financial Gazette*, 15 April 1976.

¹⁵¹ 'Controlled Conservation of Arable land', Centenary East and West ICA Newsletter, no.6, June 1976.

¹⁵² 'Controlled Conservation of Arable land', Centenary East and West ICA Newsletter, no.6, June 1976.

¹⁵³ Minutes of the 15th AGM of the Centenary ICA held on Friday 17 September 1976.

<i>AREA</i>	<i>Umvukwesi ICA</i>	<i>Horseshoe ICA</i>	<i>Centenary West ICA</i>	<i>Centenary East ICA</i>
Tobacco farmers applying conservation new practices by area 1975-76	58.8%	49.4%	24.8%	21.6%
Tobacco farmers applying new conservation practices by area 1976-77	67.0%	68.7%	38.7%	17.6%
Tobacco farmers applying new conservation practices by a number of farms, 1975-76	53.8%	56.8%	26.9%	19.0%
Tobacco farmers applying new conservation practices by number of farms, 1975-76	67.3%	73.5%	42.5%	15.0%

FIGURE 19 MORDEN CONSERVATION FARMING PRACTICES AMONGST TOBACCO FARMERS IN THE UMVUKWESI GROUP of ICAs, 1975-77.¹⁵⁴

The situation in the countryside was further exacerbated by the outbreak of attacks by ‘terrorists’ (or liberation fighters, depending on one’s political perspective) and the deteriorating security environment caused by nationalist activities from as early as 1965.¹⁵⁵ This escalated from 1972¹⁵⁶ particularly in the northern parts of the country in such areas as Tengwe, Karoi, Guruve, Centenary and Mount Darwin (these areas were largely tobacco

¹⁵⁴ Morden Conservation Practices: Adoption Rate-Umvukwesi group of ICAs’, Centenary East and West ICA Newsletter, no.3, April 1977.

¹⁵⁵ In 1965, there were widespread reports of the destruction of tobacco plants in the Karoi area leading to the arrest of several African youths from the Hurungwe Tribal Trust Lands.

¹⁵⁶ The nationalist leaders changed their strategic conduct of the liberation war in 1972 from conventional warfare against a well-equipped Rhodesian army into politicizing and mobilising the rural populace and launching guerrilla warfare. This phase meant that much of the rural areas were now infiltrated with guerrilla units who attacked white farms and farmers. See David Martin and Phyllis Johnson, *The Struggle for Zimbabwe: The Chimurenga War* (London: Faber and Faber, 1981), 2-3, 13.

producing) where more white farmers' lives were lost.¹⁵⁷ In Mutoko District, incursions by "terrorist" resulted in the exodus of a third of white farmers.¹⁵⁸ One farmer was compelled to leave in 1977 after his farm had been attacked several times by "terrorist" and his tobacco crops and barns destroyed.¹⁵⁹ However, much of the desertions happened within the less profitable tobacco growing areas such as Mrehwa and Mutoko while in the lucrative tobacco areas like Centenary most farmers stayed on their lands.¹⁶⁰ Angus Selby points out that in the more profitable tobacco growing areas, farmers were less likely to abandon their properties in the face of 'terrorist' attacks.¹⁶¹ The lifting of the tobacco quota between 1973 and 1974 and the restoration of the tobacco auction system which improved tobacco prices witnessed a wave of young tobacco farmers moving into the troubled Centenary area as demand for tobacco farms around these areas increased.¹⁶² These farms usually became buffers against guerrilla attacks as localised defences were constructed around them to repel attacks.¹⁶³

In 1977, however, with the escalation of the security situation, the government instituted mandatory call ups for young men to serve in the military. The military call up proposals were deemed by the RTA to be more severe to growers between the ages of 24 and 35 most of whom it reckoned would not be able to continue production.¹⁶⁴ In these conditions, the gender roles of production in the tobacco farms also changed as farmers' wives also came to be more involved in farming and other duties on the farm. Margaret Strong, wife to former Rhodesian National Farmers' Union President (RNFU) pointed out during the annual congress of the RNFU in 1979 that while farmers' wives had in the past "ran the home, shouted at the children and arranged the flowers", they were now assuming active roles in farm management while their husbands were on call-ups.¹⁶⁵ For the first time, tobacco farmers' wives and daughters took part in various tobacco courses organised by the RTA and the emphasis was on those women whose husbands were away for long periods. In 1974 a three-day course on fumigation, seedbed mulching, watering and pest, and diseases for 'farmers' wives' was conducted.¹⁶⁶ In

¹⁵⁷ Pilosof, 'The Unbearable Whiteness of Being', 26. Pilosof points out that the area lost more than 80 members during the war. Godwin and Hancock add that 50% of tobacco growers farmed in or near these security sensitive areas.

¹⁵⁸ Godwin and Hancock, *Rhodesians Never Die*, 132.

¹⁵⁹ Godwin and Hancock, *Rhodesians and Never Die*, 256.

¹⁶⁰ Godwin and Hancock, *Rhodesians Never Die*, 132.

¹⁶¹ Selby, 'Commercial Farmers and the State', 80.

¹⁶² Losman, 'Rhodesia: A Decade Under Sanction', 321-340.

¹⁶³ Ncube, 'Colonial Zimbabwe's Tobacco Industry', 128.

¹⁶⁴ 'RTA council report: Call up proposals', *Tobacco Today*, February 1977.

¹⁶⁵ Godwin and Hancock, *Rhodesians Never Die*, 292.

¹⁶⁶ 'Courses for farmers wives', *Tobacco Today*, May 1974

1976, white women in Burma Valley, a low-lying area on the border between Zimbabwe and Mozambique, attended another course hosted by the TRB and Department of Conservation and Extension on top dressing in the lands.¹⁶⁷ Another follow up course on reaping and curing was conducted and attended by 66 women.¹⁶⁸ The objectives of these courses were not to make these ‘wives’ expert growers, but to give them some understanding of tobacco so that they could take care of the farming temporarily when their husbands were away.

Nevertheless, the security situation led to the problem of vacant farms across the country, which was blamed on the “townie farmer” who remote controlled the management of his farm.¹⁶⁹ In 1977, just within the rich tobacco-producing Karoi area, there were 50 such farms.¹⁷⁰ In Mtoko District by 1979, only 50 of the 93 farms were still occupied, 33 were completely abandoned and 10 were being run by caretakers.¹⁷¹ Townie farmers and caretakers cared less about maintaining the costly business of land conservation in the midst of political and economic volatility. To make matters worse some of these farmers had their tobacco crops and seed beds plucked out and burnt by the “terrorists”.¹⁷² In 1978, the Chairman report of the Centenary west ICA lamented that farmers were tending to mine their farms, and rotation had gone by the board because of the war situation.¹⁷³ He, however, chastened growers:

You are reminded that it is still your land and you will not find any area in Rhodesia like this one. Just because conditions are such that you might not always be in possession of land is no excuse-you might be here and if world markets improve you could lose out”.¹⁷⁴

He said that the results of the year with regards to conservation were very poor as only six growers had their contour up to standard, and only 11 out of 92 farmers had a satisfactory bank.¹⁷⁵ The Kutsaga tobacco research station pointed out in 1978 that in many tobacco farms there were no grass ley rotations, and this trend had been discernible over the past seven or eight years.¹⁷⁶ They argued:

There appears to be a growing body of thought that says, hammer the land and to hell with next year. From this same philosophy comes the very dangerous practice of

¹⁶⁷ ‘Burma valley: Ladies course and field day’, *Tobacco Today*, November 1976.

¹⁶⁸ ‘Ripping and curing for growers’ wives’, *Tobacco Today*, December 1976.

¹⁶⁹ Pilosof, ‘The Unbearable Whiteness of Being’, 26.

¹⁷⁰ ‘Vacant farms causing concern’, *The Rhodesian Herald*, 30 September 1977.

¹⁷¹ Godwin and Hancock, *Rhodesians Never Die*, 290.

¹⁷² Centenary East and West ICA Newsletter, No.9, October 1979.

¹⁷³ Minutes of the AGM of the Centenary West ICA, 20 October 1978: Chairman’s Report.

¹⁷⁴ Minutes of the AGM of the Centenary West ICA, 20 October 1978: Chairman’s Report.

¹⁷⁵ Minutes of the AGM of the Centenary West ICA, 20 October 1978: Chairman’s Report.

¹⁷⁶ Natural Resources Board (NRB) Newsletter no.4, April 1978, 3.

continuous tobacco cropping. The trend is alarming and knowledgeable conservationist predict that it could be a disaster parallel to the rapidly declining TTLs. If farmers are custodians of the land, then many of them are highly negligent in their duty.¹⁷⁷

During this time much of the awareness concerning the erosional hazards for tobacco lands was becoming more visible through a design system which could estimate soil losses on farms called Soil Loss Estimator for Southern Africa (SLEMSA).¹⁷⁸ It had been developed at Cedara Agricultural College in Natal (South Africa) and disproved conventional wisdom that contour ridges alone protected arable land from erosion. In fact, it showed that on poorly protected steep lands losses of soil between contours could be as high as 100 tonnes per hectare every year.¹⁷⁹ Using SLEMSA, the Department of conservation and extension showed that soil losses on tobacco fields could be halved from 40 to 10 tonnes/ hectare by changing the direction of the contour ridges to run on a gradient of 1 in 250.¹⁸⁰ This would result in improved soil condition, less, maintenance on the conservation works and increased yields because of moisture conservation.

A WELL DISGUISED BLESSING? DIVERSIFICATION AND THE NEW TOBACCO FARMING LANDSCAPES.

Despite its bleak prospects, the diversification initiative, however, had begun to achieve significant successes particularly from the late 1970s as farm incomes improved. The number of cattle held by Europeans increased by 54% since UDI from 1.6 million herds to 2.5 million in 1970.¹⁸¹ This increase was largely because many tobacco farmers produced some beef prior to UDI under a crop rotation in which tobacco was grown one year followed by 3-5 years of planted grass. Thus, when tobacco production was curtailed, the response by some of the farmers with bigger farms was to raise beef by allocating resources to livestock production.¹⁸² Smith argued in his autobiography that the Tobacco Cooperation was a “magnificent success” and tobacco farmers streamlined production methods and increased efficiency - establishing irrigation schemes and creating food self-sufficiency and surplus for the export market.¹⁸³

¹⁷⁷ NRB Newsletter no.4, April 1978, 3.

¹⁷⁸ ‘Understanding erosion vital for agriculture’ *The Rhodesian Herald*, 21 April 1978.

¹⁷⁹ NRB Newsletter no.9, October 1979.

¹⁸⁰ NRB Newsletter no.9, October 1979.

¹⁸¹ ‘UN sanctions against Rhodesia brings changes in farm production’, *Rhodesian Tobacco Journal*, November 1972.

¹⁸² ‘UN sanctions against Rhodesia brings changes in farm production’, *Rhodesian Tobacco Journal*, November 1972.

¹⁸³ Smith, *Bitter Harvest*, 118.

Maize production increased reaching 1.2 million tonnes in 1970, while production of cotton lint increased over tenfold from an annual average of 3,000 tonnes between 1961 and 1965 to 36 000 tonnes during the period 1966 to 1970.¹⁸⁴ White farmers also increased their share of food production from 30% in 1960 to 75% in 1978.¹⁸⁵ A 1977 survey revealed that the gross value of tobacco production had dropped from 50% in 1965 to 27% of total European agricultural production, with the remaining 73% being distributed amongst maize, beef, cotton, sugar dairying and coffee.¹⁸⁶ By 1977 tobacco farmers also produced 45 % of maize, 29% of groundnuts, 52% of fodder crops, 17% of wheat, 13 % of cotton and owned 21% of the national beef herd, and 16 % of the dairy herd.¹⁸⁷ Resultantly, while the country had only produced 2% of its annual wheat requirements prior to 1965, by 1971 Southern Rhodesia could meet 75% of its domestic wheat needs and in 1976 it was self-sufficient and an importer of wheat.¹⁸⁸

Diversification also led to greater use of coal furnaces.¹⁸⁹ Bush timber had been the traditional source of fuel for curing flue-cured tobacco since suitable soils for tobacco culture in Mashonaland supported fair to heavy growths of indigenous trees which had to be cleared and stumped to permit cultivation and its cost was considered negligible in new and developing farms.¹⁹⁰ In view of the rotational cropping requirements of tobacco culture, no pressing demand for an alternative fuel had arisen. However, during the UDI large areas of land were opened up to alternative crops and indigenous timber was suddenly and rapidly destroyed.¹⁹¹ Within the older tobacco growing areas dating from World War II, large unbroken tracts of land in the open rolling country had been put to the plough and the natural timber resources almost entirely depleted many years before.¹⁹² This evoked the need to find alternative fuel sources and heat efficient furnaces. Constant efforts had been made since 1948 to improve heating efficiency of wood-fired furnaces beginning with the Gundry furnace, then the TRB furnace and the Townsend furnace.¹⁹³ All these furnaces functioned through heating by combustion particularly through the partial provision of air to the firebox. Improved designs were being made by Wankie Colliery from the 1960s for conversion of these wood furnaces

¹⁸⁴ 'UN sanctions against Rhodesia brings changes in farm production', *Rhodesian Tobacco Journal*, November 1972.

¹⁸⁵ Selby, 'Commercial Farmers and the State', 69

¹⁸⁶ 'Spotlight on tobacco', *The Rhodesian Herald*, 16 December 1977.

¹⁸⁷ 'Spotlight on tobacco', *The Rhodesian Herald*, 16 December 1977.

¹⁸⁸ Rukuni, 'The Evolution of Agricultural Policy', 47.

¹⁸⁹ 'Wankie gives \$10,000 to the Tobacco Training Institute', *The Rhodesian Herald*, 23 December 1977.

¹⁹⁰ E. P. du Toit, 'Timber as a Tobacco Curing Fuel', *Rhodesia Agricultural Journal*, 70, 5 (1974), 107-110.

¹⁹¹ Du Toit, 'Timber as a Tobacco Curing Fuel', 107-110.

¹⁹² Du Toit, 'Timber as a Tobacco Curing Fuel', 107-110.

¹⁹³ Du Toit, 'Timber as a Tobacco Curing Fuel', 107-110.

into coal systems.¹⁹⁴ These efforts were important since natural timber in the tobacco farms was useful as a natural cover for wildlife, for aesthetic reasons and in the interests of soil conservation.¹⁹⁵ With coal being readily available farms were encouraged by the TRB to switch to coal. As a result, by 1976, 40% of tobacco farmers were using coal for all or part of their curing program, with growers spending R\$5 million annually on getting coal to their farms.¹⁹⁶

As a result of increasing coal and transport costs growers were also beginning to look for alternative renewable energy sources such as the growing of *Eucalyptus Grandis* in tobacco growing districts. Compared with indigenous wood which was a once and for all yield, eucalyptus was a continuous productive process yielding 7.2 cubic meters per hectare per annum against 0.70 cubic meters per hectare per annum for indigenous wood.¹⁹⁷ Seedlings were provided by the Rhodesian Forestry Commission at a cost of R\$25 per 1000 seedlings.¹⁹⁸ As a result of these initiatives, the total fuel wood consumption in Zimbabwe as estimated by the Whitsun foundation in 1980 stood at 4 974 000 cubic meters annually, with the tobacco industry consuming only 7% of the national aggregate.¹⁹⁹ Around the same time, in other African tobacco producing countries forestry resources were under threat as a result of the axing of trees for tobacco drying, which was contributing to “the poor man’s energy crisis”.²⁰⁰ In Kenya, Tanzania and Malawi tobacco production was threatening wood scarcity and desertification with 2 000 hectares of forest being axed each year by the tobacco industry in Kenya alone.²⁰¹ In Southern Rhodesia, the use of alternative energy sources for the curing of tobacco reduced the aggregate demand on forestry resources. In 1986, the International Forest Science Consultancy concluded that there was no serious problem in meeting future wood fuel requirements for curing tobacco, and the gradual switch to coal was reducing demand.²⁰² The report went further and pointed out that there was no evidence that any environmental degradation could be attributed to tobacco growing since the amount of wood consumed by the tobacco sector was small in proportion to total wood consumption.²⁰³ This, of course, was to change from the late 1990s and 2000s with the entry of many black, small holder farmers into

¹⁹⁴ Du Toit, ‘Timber as a Tobacco Curing Fuel’, 107-110.

¹⁹⁵ Du Toit, ‘Timber as a Tobacco Curing Fuel’, 107-110.

¹⁹⁶ ‘Gum trees or coal’, *Tobacco Today*, October 1976.

¹⁹⁷ ‘Gum trees or coal’, *Tobacco Today*, October 1976.

¹⁹⁸, ‘Gum trees or coal’, *Tobacco Today*, October 1976.

¹⁹⁹ Alastair Fraser and Robert C.D. Bowles, *The Use of Wood by the Tobacco Industry in Zimbabwe* (Edinburgh: International Forestry Science Consultancy, December 1986), 23.

²⁰⁰ ‘Death knell for Kenyan forests’, *The London Observer News*, 28 October 1981.

²⁰¹ ‘Death knell for Kenyan forests’, *The London Observer News*, 28 October 1981.

²⁰² Fraser and Bowles, *The Use of Wood by the Tobacco Industry in Zimbabwe*, 23.

²⁰³ Fraser and Bowles, *The Use of Wood by the Tobacco Industry in Zimbabwe*, 24.

tobacco farming who rely on indigenous woodlands for curing tobacco and the construction of barns. The conclusion of this thesis will briefly examine this dynamic and the prospects for national forestry resources and sustainable agriculture.

CONCLUSION

Between 1960 and 1980, three major events played a key role in shaping the tobacco farm physical environment in Southern Rhodesia – the global smoking and public health debates, the UDI economic embargo imposed by the British government in 1966 and the so-called Bush War that intensified from 1972. The first event ushered in a transient global tobacco consumption recession that caused a glut in 1963 and raised the sceptre of production control in Southern Rhodesia. However, its impact on agrarian change on the tobacco farms was negligible as it did not significantly affect production models and systems or lead to reduction of acreages. The second brought an economic slump that ruined many tobacco farmers, led to severe production cuts and diversified cropping systems in the sand veld. The result was a break down in sand veld ecologies and limited investment in land conservation. The third simply accentuated the effects of the second. All things considered, although these events were political and economic, they significantly shaped environmental and agrarian change within the tobacco landscape. This chapter contributes to the historiography of Southern Rhodesian tobacco industry between 1960 and 1980 by looking at the impact of political and economic changes on the actual farm physical environment. Ultimately, there is need to look at political and economic events in history as complex forces helping shape new geographies on the land, reprocessing the soil granules and crafting new ecological encounters. But equally the environmental impacts also define political and economic institutions. This chapter also further extends the economic history of Southern Rhodesia during the UDI by showing how production systems shifted between 1966 and 1980 and the consequence of this on settler agriculture. The chapter argues that the UDI and the so-called Bush War not only affected the economy and politics of the country, but they also significantly altered the environment on the white tobacco farms. It *visibilizes* the environment and physical landscapes from their obscurity in historiographical terrains populated with dominant political and economic narratives of war and sanctions in Southern Rhodesia during this period.

CHAPTER EIGHT

CONCLUSION

This thesis has examined the interrelationship between tobacco farming and the environment in Southern Rhodesian/Zimbabwean from 1893. It has discussed how the farmer-nature interface engendered changes in socio-environmental landscapes, social relations, cultural practices and tobacco farm production systems. It has traced the fluid socio-environmental dynamics in tobacco production from the pioneer days of the 1890s when white settlers hacked forests to establish tobacco farms, through to the turbulent years of economic depression and derelict farms during the 1930s to the halcyon days of the post-war tobacco boom from 1947 to 1965, and then to the era of diversified farming systems from 1966 to 1980. Across these several production eras, this thesis has discussed the ways in which tobacco farming imposed itself upon the physical landscape, structured new geographies, defined agrarian ecosystems, affected agrarian change and conservation thinking. Furthermore, the thesis has discussed the impact of the tobacco production systems on the human body and the conditions of African labour on the tobacco farms. It has also examined how colonial interventions in African peasant tobacco farming shaped rural economies, accumulation patterns and agrarian landscapes.

The thesis opens a new frontier in Southern Rhodesian agrarian historiography as it engages with the socio-environmental narratives of tobacco farming, which has been a neglected subject in existing literature. This study has discussed how tobacco cultural practices imposed heavier demands (than other crops) on the soils, forests, water resources and labour resulting in several socio-environmental dislocations such as soil erosion, deforestation, water pollution, contamination of the human and natural environment: essentially social violence and slow chemical death. These socio-environmental disruptions were conspicuous from the pioneering days of settler agriculture when tobacco farmers cleared up large tracts of bushes, burnt veld grass, established farms within the fragile and frangible sand veld granitic soils and exploited coerced African labour. The higher prices paid for tobacco during and after World War I infused rampant speculation and gambling that triggered a wave of tobacco farming land settlements across Southern Rhodesia. Resultantly, there was cyclic overproduction, extensive exploitation of land and forestry resources by tobacco “farmer-speculators”. The climax to this was the disastrous tobacco crush of 1928. As this thesis argues in Chapter Three, the 1928 crash coincided with the Great Depression and the Dust Bowl environmental catastrophe in the

USA. This coincidence brought into critical global focus the apocalyptic nature of overproduction and exploitative agricultural practices on natural ecosystems and the need for state enforced conservation. The state in Southern Rhodesia during the 1930s came up with various policy measures to curb overproduction in tobacco farming and enforce conservation practices such as the building of contour ridges, afforestation, green manuring and the adoption of suitable rotations to avoid monoculture and the depletion of virgin lands. However, these measures were largely unsuccessful because of the general economic uncertainty surrounding tobacco production during the interwar years, which stultified the gambling element and restive cultivation of tobacco.

However, the uncertainty surrounding marketing that had dogged the fortunes of most tobacco farmers during the inter-war years was ended by the war and post-war boom. This boom not only inflated tobacco prices but expanded the market as European countries and the United Kingdom looked upon Southern Rhodesia as a key supplier of tobacco for home consumption. As shown in Chapter Four the dynamic of capital, the high costs of land and the high cost of production brought by the tobacco boom proved to be an important catalyst precipitating changes that transmogrified conservation practices as it was becoming expensive and non-competitive for farmers to continue with extensive methods of production. Chapter Four goes beyond the degradation and declensionist narratives of most settler farmer conservation histories in Southern Rhodesia to show the progressive evolution of biological conservation and the construction of new environmental landscapes between 1945 and 1960. The thesis also engaged with debates on conservation in colonial southern Africa on the nature, origins and evolution of conservation ideologies amongst settler agricultural communities. It used the debates as a theoretical lens to view how the new production environments caused by high cost of production and exorbitant land prices during the post-war boom instilled new attitudes and ideas about conservation amongst settler tobacco farmers. New and novel agronomic practices emerged spearheaded by a robust research thrust under a newly constituted Tobacco Research Board (TRB) funded largely by private capital through the Rhodesia Tobacco Association (RTA) from 1948. Grass ley rotations with tobacco encouraged the integration of field husbandry and livestock farming resulting in the development of mixed farms. A lot of other changes such as afforestation with eucalyptus, dam building, the introduction of contour farming and farm planning in the mid-1950s spatially altered the tobacco farm environment creating new farming systems such that by 1965, tobacco production had distinctly altered the physical terrain in the white settler farms.

The changes in post-war agronomic practices also extended into new technologies of tobacco pest and disease control to maximise production and meet the demands of the export economy. Organochlorine pesticides became more widely available and used as part of the post-war pest control infrastructure set up by the TRB and RTA from around 1948. Chapter Five of this thesis showed the evolution of this new pest control edifice that was part of a global post-war pest control revolution. Organochlorine, then later, organophosphate and systemic pesticides came to be widely used to control tobacco pest and diseases then prevalent. The use of most of these chemicals in tobacco production occurred under unsafe conditions resulting in human poisoning and contamination of the environment. The colonial state was reluctant to pay much attention to these problems until 1965, when global pressures on public health and pesticide contamination threatened tobacco's export market. Indeed, the thesis argued that there was much concern over chemical contamination of the tobacco export commodity than the human and environmental cost of chemical exposure. This resulted in "slow violence" as some African labourers working in the tobacco fields were poisoned and the fauna in the tobacco farms such as wildlife, birdlife and fish also died. The thesis discussed the use of these chemical pesticides within the context of global discourses of modern environmentalism that arose in the 1960s, especially following Rachel Carson's 1962 *Silent Spring*.

Another significant transition in the tobacco environmental landscapes happened from 1966 after the Unilateral Declaration of Independence (UDI)¹ and the imposition of the tobacco embargo by the UK that stripped Southern Rhodesia of half of its traditional tobacco market. This was followed by huge cuts in production and reduced incomes that compelled farmers to diversify into other crops like cotton. Diversification within sand veld ecologies was fraught with a lot of problems such as the absence of suitable rotations with tobacco, inadequate arable land to grow other crops on the same profitable basis as tobacco, intensive over cropping of the sand veld and a breakdown of the soils followed by land degradation. These problems were aggravated by reduced tobacco farm incomes as most farmers were struggling to stay afloat. Consequently, investments in land conservation such as contour farming in tobacco lands drastically went down and much of the progress that had been achieved on building conservation systems on farms was undone. The security situation during the Rhodesia bush

¹ In November 1965, the white minority government of Southern Rhodesia made a Unilateral Declaration of Independence (UDI) that severed its status as a British colony and made the country self-dependent. The response from the British government was a series of punitive economic measures, including an oil blockade and a tobacco embargo from 1966, that crippled the tobacco export market. This led to farmers being forced to diversify into other crops.

war that intensified from 1972 also accelerated these problems as some tobacco farms were abandoned and land conservation practices stalled. However, despite the ecological and conservation problems of diversification it resulted in more stable farm economies as other enterprises such as wheat, maize and beef production came to claim a larger share than before of farm incomes from the mid-1970s.

African “peasants”² also participated within the tobacco economy of Southern Rhodesia. Precolonial African tobacco producers were displaced by white settler cultivators through systematic colonial policy aimed at promoting the interests of white growers and limiting native competition. Although the indigenous tobacco economy collapsed Africans began growing Turkish and Burley tobacco in 1952 under the tutelage of the colonial state whose ostensible objectives were to encourage Africans to stay on the land, modernising the African areas, introducing new farming methods and encouraging conservation of natural resources. These measures failed to stimulate significant accumulation patterns and institutionalise the so-called new farming methods to act as pillars for land and natural resources conservation within the African areas. On the contrary, the thesis shows in Chapter Six that tobacco cash cropping resulted in a much more intensive cultivation of the poor soils and limited land resources in the Tribal Trust Lands which contributed to severe land and environmental degradation which had become so severe by the late 1970s that colonial agricultural planners had begun to raise alarm. While doing so, Chapter Six contributes to peasant historiography in Southern Rhodesia by critiquing existing theories and positing the new concept of “crop power hegemonies” to explain the unique case of peasant tobacco production and colonial experience. The African tobacco economy in Southern Rhodesia went through a peculiar cycle of boom to virtual extirpation by colonial policy between 1900 and 1938, and then came the (at first glance surprising) state-sponsored and guarded production by Africans of European tobaccos that white farmers were less keen to grow between 1952 and 1980. This turnaround in colonial policy on African tobacco producers was not benevolent but rather still informed by the imperative to secure the interests of white tobacco producers while marginalising Africans producers’ access to finance, production infrastructure and land.

² The definitional identity of peasants has always been contested because of the heterogeneity of the concept that covers a broad group of producers existing and subsisting at different historical times, in different spatial settings, social conditions and economic differentiations. I use the term to refer to Africans in colonial Southern Rhodesia cultivating crops within their areas (Reserves, Native Purchase Areas, Tribal Trust Lands) for the market. While disparities of class have often been used to disaggregate these rural producers their experiences of colonial rule were not markedly different and the quest for a generic definition of a peasant slows down the more urgent task of historicising the experiences of African producers in the colonial economy.

This thesis contributes to existing Zimbabwe historiography by exploring how colonial agrarian encounters transformed more than the economic and political institutions, but also embedded new agricultural ecosystems, physical landscapes and new forms of social violence. Therefore, it adds to the existing limited and scant corpus of historical writing on tobacco by transcending the orthodox economic and political histories and examining how tobacco farming affected society, farm landscapes and the environment. The thesis thus offers a perspective on how the evolution of capitalist agricultural systems through history has shaped environmental change and society in colonial Africa.

SOCIO-ENVIRONMENTAL NARRATIVES AND TOBACCO FARMING IN ZIMBABWE, FROM 1980 TO 2000 AND BEYOND

While this thesis has focused on the period from 1893 to 1980, there is a dearth of historical writing on tobacco during the post-colonial period from 1980 to the present and this is a prospective area for future research.³ This section will conclude by a cursory analysis of transitions of the tobacco economy within the post-colonial state and the socio-environmental policy implications. At independence in 1980, the post-colonial state inherited a tobacco farming sector dominated by white commercial farmers with only a handful of African producers in the Tribal Trust Lands (later renamed communal areas at independence) and Purchase Areas. However, from independence in 1980, there was a concerted effort to encourage African peasants to grow tobacco as one of the ways to develop the rural areas and empower rural communities.⁴ Tobacco training and settlement schemes for African farmers were set up by the state with assistance from white tobacco merchants and the white-run Zimbabwe Tobacco Association.⁵ These new settlements called “family farm units” consisted of land allocations for African families on which they grew Burley tobacco and maize.⁶ The most famous of such schemes was the Tabex scheme set up in Mount Darwin in 1981 which resettled 100 peasants and farm labourers for tobacco production.⁷ Burley and Turkish tobacco

³ There is no historical work on tobacco farming in Zimbabwe during this period except Trish Mbanga’s general outline from 1890-1990, which is not actually a historical text. See Trish Mbanga, Trish Mbanga, *Tobacco: A Century of Gold* (Harare: ZIL Publications, 1991).

⁴ See Dumisani Magadla, ‘A Smoky Affair: Challenges Facing Some Small holder Burley Tobacco Producers in Zimbabwe’, *Zambezia*, XXIV, i (1997), 13-30; ‘Spread tobacco farming to rural areas’, *Sunday Mail*, 5 July 1981; ‘Move into cash crops, Kangai tells peasants’, *The Herald*, 16 July 1981.

⁵ The two most important tobacco merchants in this regard were Tabex and Carrington Michaux Tobacco Private Limited.

⁶ Tony Coetzee, ‘Tobacco plan for settlers’, *The Herald*, 16 May 1981.

⁷ ‘Peasants start a new life at model scheme’, *The Herald*, 27 February 1982.

was also introduced into the resettlements and communal areas by the department of Agriculture and Extension (Agritex)⁸ staff from the early 1980s in such areas as Vuti, Mt Darwin and Gutu. By 1983, 3 000 developing African farmers were involved in Burley cultivation with production doubling from 2 million kilograms during the 1980/81 season to 5 million kilograms in 1982/83.⁹ Small-holder African tobacco production grew steadily during the post-colonial era such that during the 1996 season Z\$90 million was realised by African small holders.¹⁰ From 1995, African small-holder producers began to shift from Burley tobacco to flue-cured Virginia as a result of low prices paid for Burley. This shift brought with it new environmental challenges as Forestry Commission officials complained that African farmers were already cutting down trees indiscriminately for curing purposes.¹¹ The expansion of flue-cured tobacco amongst African producers continued so that by 1998, there were 3 481 African flue-cured producers in the communal areas.¹² Nevertheless African small holder production, remained strongly subdued as a result of shortage of capital, water and land resources such that by 1998, there were only 3 500 African small holder tobacco producers.¹³

Meanwhile, the white commercial sector had grown into bigger diversified farm systems in which although tobacco provided the backbone, other crops such as wheat, maize, soya beans and groundnuts were grown in rotation. From the mid-1990s most of the white tobacco farms had fully diversified into high value crops such as export roses and horticultural enterprises so that 80% of all horticultural exports were now grown on tobacco farms.¹⁴ There was also extensive investment in farmland and water conservation. David McDermott Hughes's anthropological study of a tobacco producing Intensive Conservation Area (ICA) called Virginia in Marondera district during the 1990s shows how white tobacco farmers carried out a huge hydrological and ecological revolution through building dams, installing irrigation infrastructure and establishing nature based tourist landscapes on their farms – without the

⁸ Agritex replaced the colonial Department of conservation and extension (Conex) at independence in 1980.

⁹ 'Burley's bursting out', *The Herald*, 21 January 1983.

¹⁰ Matthew Takaona, 'Small holder tobacco farmers impress', *Financial Gazette*, 16 June 1996.

¹¹ 'Burley tobacco growers shift to flue-cured', *The Herald*, 10 November 1995.

¹² 'Flue-cured tobacco takes giant leap into communal areas', *The Herald*, 30 January 1998.

¹³ 'Woes threaten small scale tobacco farmers' production', *The Herald*, 6 January 1998.

¹⁴ John C. Keyser, 'Crop substitution and Alternative Crops for Tobacco', Study conducted as a technical document for the First Meeting of the Ad Hoc Study Group on Alternative Crops Established by the Conference of the Parties to the WHO Framework Convention on Tobacco Control, February 2007, 21.

state's help.¹⁵ By the year 2000, white commercial tobacco farms accounted for 87% of the area planted to tobacco, and 95% of the total harvested crop.¹⁶

However, the Fast Track Land Reform Program from 2000 changed the tobacco farming landscape as the whole infrastructure of white commercial production collapsed as a result of land invasions and farm occupations by war veterans and landless black peasants.¹⁷ Thus, the crop came to be grown by black small holder farmers who were allocated land in the new resettlements – as well as the communal area farmers. Small holder production has grown exponentially over the years with the number of tobacco farmers rising from 8 537 flue-cured tobacco growers in 2000 to 140 895 in 2018.¹⁸ In 2000, black small holder farmers only contributed 6 million kilograms to the 237 million kilogram flue-cured national harvest.¹⁹ This has now changed more dramatically. Production statistics reflect that of the record 252 million kilograms crop grown in 2018, 35% was cultivated by communal area farmers, while 28% was grown by farmers in the A1 resettlement areas, 29% by those in A2 resettlements, while the commercial farming sector only contributed a meagre 8%.²⁰ On 23 August 2019, with five days to go before the end of the selling season, the 2018 record crop of 252 million kilograms was surpassed with deliveries by farmers to the auction floors clocking 252.6 million kilograms valued at US\$507 million.²¹ This surge is largely a result of an increase in tobacco acreages from 104 395 hectares during the 2017/2018 season to 132 040 hectares during the 2018/2019 season.²² However, despite the increase in production, it must be pointed out that this year's revenue is 30.2% lower than the US\$731 million kilograms that was paid to farmers last year.²³ The shift to accelerated production in communal and resettlement areas has generated worries amongst forestry officials and other environmental observers on the long-term sustainability of tobacco production based on the current common property resource use models and the limits

¹⁵ David McDermott Hughes, 'Farms Dams, Conservation, and Whiteness in Zimbabwe', *American ethnologist*, 33, 2 (2006), 269-287.

¹⁶ Keyser, 'Crop Substitution and Alternative Crops for Tobacco', 20.

¹⁷ By July 2001 half the around 2,000 white owned tobacco farms had been designated for resettlement purposes. See Desiree L. Cole and James S. Cole, 'Tobacco Research and Development', in Mandivamba Rukuni et al (eds), *Zimbabwe's Agricultural Revolution Revisited* (Harare: University of Zimbabwe Publication, 2006), 405.

¹⁸ Tobacco Industries Marketing Board Annual Report, 2018, 26.

¹⁹ Cole and Cole, 'Tobacco Research and Development', 405.

²⁰ Tobacco Industries Marketing Board Annual Report, 2018, 20.

²¹ 'Zimbabwe tobacco production hits record high', available at <http://www.zbc.co.zw/zims-tobacco-production-hits-record-high/>, accessed 23 August 2019.

²² 'Tobacco deliveries to break record', *The Herald*, 20 August 2019.

²³ See 'Tobacco marketing season closes', *The Chronicle*, 27 August 2019.

placed by the availability of such resources in the future.²⁴ The decimation of indigenous forestry resources in these areas has been extensive with official estimates in 2016 putting the loss at 50 000 ha of forest each year.²⁵ The impact of this on local bio-diversity and climate patterns should not be underestimated. Although, afforestation using fast growing exotic trees has been espoused by the tobacco industry as an alternative, current policy in that regard has been weak. A forest control law was introduced through Statutory Instrument 116 of 2012, and an afforestation levy of 1.5% of earnings was imposed on tobacco farmers in 2014. However, these regulations are yet to be institutionalised. In July 2016, tobacco farmers confronted the government over the allocation of the funds generated under the afforestation levy with reports that the state had collected US\$ 12 million but had not channelled even a single cent towards supporting afforestation in tobacco growing areas.²⁶ During the presentation of the 2019 budget statement the Minister of Finance ordered the fund to be shared between the Forestry Commission and TIMB and to be invested in afforestation within tobacco farming areas.²⁷ However, it remains to be seen whether this commitment will come fruition.

More worryingly for tobacco farmers in Zimbabwe, other alternative energy sources for tobacco production such as coal and fast-growing eucalyptus trees have also come under new environmental scrutiny in light of climate change. Scientific studies have established that eucalyptus which is the ideal afforestation tree for the tobacco industry rapidly depletes the water table and threatens water security.²⁸ Another alternative source coal has high carbon emissions and greenhouse gas effects.²⁹ As a result of these concerns major global cigarette manufacturers such as Philip Morris have resolved to eliminate the use of coal in tobacco curing

²⁴ The Zimbabwe Forestry Commission has constantly pointed out the long-term unsustainability of current tobacco production models on forestry resources. In 2018, a Forestry Commission official noted that 20% of national forestry cover lost was a result of tobacco farming. She added that during the year tobacco farmers had destroyed 60,000 hectares of forests wood to cure tobacco. See 'Forest suffer amid tobacco record breaking euphoria', *The Herald*, 30 July 2018.

²⁵ Jeffrey Gogo, 'Zimbabwe's tobacco industry seeks to cure addiction to fuel wood', <http://news.trust.org/item/20140501090447-tjohm/>, accessed 21 August 2019.

²⁶ 'Farmers cry foul over levy', *The Zimbabwe Independent*, 29 July 2016.

²⁷ The 2019 National Budget Statement by Hon. Prof. Mthuli Ncube Minister of Finance and Economic Development, 22 November 2018, 63.

²⁸ See Janine M. Albaugh, Peter J. Dye and John S. King, 'Eucalyptus and Water Use in South Africa', *International Journal of Forestry Research*, (2013) available online at <http://dx.doi.org/10.1155/2013/852540>, accessed on 22 August 2019; 'Mounting Pressure Against Eucalyptus in Kenya Described as a Water Guzzler', World Rainforest Movement, Bulletin 147, October 2009, available at <https://wrm.org.uy/articles-from-the-wrm-bulletin/section2/mounting-pressure-against-eucalyptus-in-kenya-described-as-the-water-guzzler/>, accessed on 22 August 2019; Vic Engel et al, 'Hydrological Consequences of Eucalyptus Afforestation in the Argentine Pampas', *Water Resources Research*, 41 (2005), 1-14.

²⁹ 'Zimbabwe tobacco under threat', *The Herald*, 24 January 2018, available at <https://www.herald.co.zw/zimbabwe-tobacco-under-threat/>, accessed 22 August 2019.

processes by 2020 under the sustainable tobacco program by not purchasing tobacco cured with fossil fuels.³⁰ This is a huge threat to Zimbabwe's tobacco industry and prods the imperative for more proactive and cost effective renewable energy sources for tobacco curing. This becomes even much more dire considering that the country has struggled with a huge energy deficit since 2000 and relies on electricity imports from its neighbours particularly South Africa, Mozambique and Democratic Republic of Congo (DRC).³¹ Investments in renewable energy sources such as solar power has been limited.

The second significant socio-environmental issue that arose in the 2000s is the agricultural and ecological resilience of these post land reform single cropped farming systems. Diversified tobacco farming systems have been replaced by tobacco mono crops. This is not only disruptive to the soils and ecosystems, but it also makes the farming systems vulnerable to price collapses or sudden changes in the global tobacco industry as a result of global public health, environmental and tobacco control lobbies. The Zimbabwean economic meltdown for the past twenty years has further piled on economic misery for tobacco farmers whose dollar earnings have been confiscated by the state (in exchange for overvalued and worthless Zimbabwean currency resulting in farmers living in desperate circumstances and failing to grow the crop profitably).³² The current liquidity crunch and cash crisis has further led to the deterioration of the financial status of the tobacco growers. This has killed the prospects for capital investments in afforestation, agricultural innovation and diversification. In the end, tobacco-growing communities have been caught in the vicious cycle of indebtedness to tobacco contracting companies and have failed to sustain themselves.³³

³⁰ Philip Morris International: Eliminating coal from tobacco curing, World Business Council for Sustainable Development, available at <https://www.wbcsd.org/Programs/Redefining-Value/Business-Decision-Making/Masurement-Valuation/Business-Examples/Philip-Morris-International-Eliminating-coal-from-tobacco-curing>, accessed on 22 August 2019.

³¹ Zimbabwe imports 400 megawatts of power from Eskom South Africa and the country continues to experience erratic power cuts that have disrupted agricultural activities such as the production of wheat under irrigation.

³² These are perennial concerns that haunt every tobacco marketing season. See 'Zimbabwe tobacco sector booming but farmers growing it are not', Voice of America, 30 May 2017, available at <https://www.voanews.com/africa/zimbabwe-tobacco-booming-farmers-growing-it-are-not>, accessed on 22 August 2019; 'Tobacco farmers cry foul over forex payments', *The Herald*, 23 April 2019; 'Farmers cry foul over pricing of golden leaf', <http://www.zbc.co.zw/farmers-cry-foul-over-pricing-of-golden-leaf/>, accessed on 22 August 2019; 'Tobacco farmers cry foul over cash withdrawal limits', accessed on 22 August 2018; 'Tobacco prices go up in smoke', available at <https://www.businesslive.co.za/fm/features/africa/2019-06-13-tobacco-prices-go-up-in-smoke-in-zimbabwe/>, accessed 22 August 2019.

³³ Contract production of tobacco began in 2004 and the number of tobacco contracting companies in the country has grown significantly. The 2018 Annual report of the Tobacco Industries and Marketing Board (TIMB) noted that there were 30 licenced contractors during the season contracting 109,667 growers. The dominance of contract production is conspicuous as it accounted for 86% of national production amounting to 217 million kilograms in 2018. The Human Rights Watch (2018) report on human rights violations in tobacco farming points to abuse of

The health and social effects of tobacco farming have also been a major concern. The Human Rights Watch Report earlier discussed briefly in the introduction of this thesis and in Chapter Five revealed the wide extent of the problem which has received very little attention. There are a lot of undocumented abuses, cases of chemical exposure, nicotine poisoning and the violation of children's rights to education.

It is clear therefore that confronting the tobacco epidemic and its socio-environmental effects is one of the biggest challenges of the 21st century. This then begs the question about the role of the historian in the tobacco control and contemporary socio-environmental debates on tobacco farming. Can a historian situate himself or herself in a policy relevant posture and contribute knowledge to a subject that is within the scientific domain such as this? Indeed, Poul Holm states that while policy articulation is regarded an arena of scientific approaches, scientific knowledge by itself is inadequate to address socio-environmental problems such as soil erosion and climate change.³⁴ There is therefore the need for the input of historians to understand the social, cultural institutions behind environmental change across history as “environmental problems have their source in human culture”.³⁵ Donald Worster makes the appeal for environmental historians and environmental scientist to combine efforts and produce collaborative research that confronts the common global environmental crisis, manifesting in pollution and the threat to plant and animal ecosystems.³⁶ However, William Cronon ponders the dilemma that historians might face in trying to activate their stories in ways that make them functional to existing society without losing their inherent disciplinary identity.³⁷ He reflects that historians are often caught between “the Scylla” of disciplinary commitment to the autonomous sanctity of the past and “the Charybdis” of concerns for modern environmental problems that threaten human existence and fundamentally our understanding of how past, present and future are linked.³⁸ He succinctly sums up this dilemma as “navigating the rock of history and the whirlpool of prophecy”. In summing up this thesis will use “the rock” of the

tobacco farmers by tobacco contractors who do not avail farmers with copies of contracts or explain the conditions of contracts. See Human Rights Watch, ‘A Bitter Harvest: Child Labour and Human Rights Abuses on Tobacco Farms in Zimbabwe’, 2018, 63-65.

³⁴ Poul Holm et al, ‘Collaboration Between the Natural, Social and Human Sciences in Global Change Research’, *Environmental Science and Policy*, 28 (2013), 25-35.

³⁵ Donald Worster, ‘The Two Cultures Revisited: Environmental History and the Environmental Sciences’, *Environment and History*, 2 (1996), 3-14.

³⁶ Worster, ‘The Two Cultures Revisited’, 3-14.

³⁷ See William Cronon, ‘The Uses of Environmental History’, *Environmental History Review*, 17, 3 (Autumn 1993), 1-22.

³⁸ Cronon, ‘The Uses of Environmental History’, 1-22.

history of tobacco in Zimbabwe and the contemporary narratives to dive into “the whirlpool of tobacco farming “policy prophecy”.

Current tobacco production models in Zimbabwe are not socio-environmentally sustainable and will inevitably collapse in time from the ecological, economic and social pressures. The contraction of tobacco as a public consumable product in light of the global public health controversies and tobacco control legislation in most countries has severely restricted its market. This effectively means that the crop is existentially endangered and must not be used as a fulcrum for agricultural development in Zimbabwe, or for any strategic planning for an agrarian revolution. The lessons from history are that tobacco farms in Southern Rhodesia had to shift into mixed farming and diversification using integrated field management combining livestock and tobacco production as well as other crops. When the tobacco economy collapsed in 1966, the tobacco farmers were better prepared to handle this disastrous episode than would have been the case if tobacco farm systems had not transited from planter communities into mixed farmers especially during the post-war boom years. The diversified tobacco farm systems that emerged after the UDI also exerted little pressure on forestry resources. To this end agricultural policy must focus on building mixed farm systems in the tobacco growing areas, investing in irrigation infrastructure and looking for alternative crops that has prospects of replacing tobacco and suitable for each ecological region within which tobacco is grown. Policy framing must also understand that ad hoc, reactive and forced diversification of tobacco farm systems is not the best option and in the era of rapid climate change, ecological prudence must always inform all relevant policy options. Historians have a large part to play in locating the discourses of climate science – especially in creating alternative models of effective climate communication.³⁹ This means telling environmental stories embedded in narratives that connect to human experiences in the past and present. Historians have a role to tell and retell stories in ways that educate and inspire environmental activism.

The images below show some of the contemporary environmental problems in the physical landscapes as a result of tobacco cultivation in some of the areas the author visited during his field research. There is serious water depletion, siltation, eutrophication, riparian deforestation

³⁹ See Dagomar Degroot, *The Frigid Golden Age: Climate Change, the Little Ice Age, and the Dutch Republic, 1560-1720* (New York: Cambridge University Press, 2018), 307. Also see Emma Shortis, ‘Lessons from the Last Continent: Science, Emotion, and the Relevance of History’, in Katrin Kleeman and Jeroen Oomen (eds), ‘Communicating Climate Change: From Knowing Change to Changing Knowledge’, *RCC Perspectives Transformations in Environment and Society*, 4 (2019), 53-60.

and erosion as a result of tobacco farming in resettlement areas the author visited while doing fieldwork. These tobacco farming systems are not environmentally sustainable, they threaten water habitats, water security, and the resilience of agricultural communities to confront and adapt to climate change in most areas in rural Zimbabwe.



FIGURE 20 A DAM AT JUTLAND RESETTLEMENT FARM.⁴⁰

⁴⁰ Picture taken by author during field research, 24 December 2018.



FIGURE 21 EUTROPHICATED DAM IN A RESETTLEMENT AREA USED FOR IRRIGATING TOBACCO.⁴¹



FIGURE 22 AN ERODED TOBACCO FIELD IN A RESETTLEMENT AREA SHOWING POOR SOIL CONSERVATION TECHNIQUES.⁴²

⁴¹ Picture taken by author during field research, 24 December 2018.

⁴² Picture taken by author during field research, 24 December 2018.

Considering these challenges ameliorating the socio-environmental impact of tobacco farming becomes key. Current policy framework on afforestation and environmental protection is at best weak and disparate. Protection of indigenous forests from tobacco farmers must be a priority of legislation that must emphasize effective policing in all tobacco producing areas. At the same time afforestation programs must be systematically funded, planned strategically and implemented in the tobacco producing regions. On this note, the role of the corporate social responsibility of tobacco companies also becomes important, considering the dominance of contract farming in the country. The social responsibility models must focus on discouraging exploitative practices in tobacco production and investing more into sustainable production systems, monitoring compliance with the health and safety standards, safe labour practices in the tobacco farms and bringing an end to child labour. While most of the current socio-environmental challenges of tobacco are difficult to address more comprehensively in Zimbabwe as a result of the economic significance and political nature of the crop, it is important that environmental lobby groups and human rights civil society engage tobacco stakeholders and policy makers to create workable long term strategies for sustainable tobacco production. Ironically, the long-term future of the tobacco industry in Zimbabwe lies in developing agricultural systems that will gradually phase out the crop.

While this thesis had examined the social-environmental challenges of tobacco farming there are several areas for prospective research. Tobacco control particularly focussing on public policy on controlling the tobacco epidemic and the role of the state in regulating the tobacco industry is an area that is unexplored in Zimbabwe. Most research on the contemporary tobacco industry in Zimbabwe has focussed on the supply side of the tobacco epidemic much to the neglect of the demand side, which involves regulation of tobacco consumption, marketing and trade. This is a key research priority area as most tobacco companies have shifted to Africa and the third world as mentioned in Chapter One. The existence of weak regulations to control tobacco trade and monitor the consumption of tobacco products makes these countries the “Achilles heel” of global tobacco control efforts. There is also need for future research that sees historians collaborate scientific methods such as epidemiology, environmental scientific data and geoinformation systems to shed more light on the impact of tobacco farming on the human body and the environment.

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