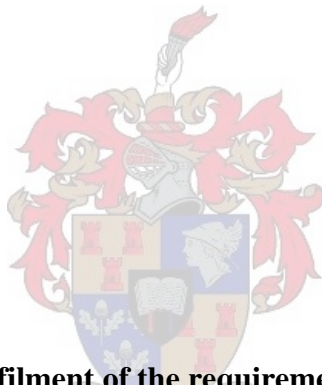# Knowledge Management and Early Warning Systems: The Case of Southern African Development Community's Conflict Prevention Strategy

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Thesis presented in partial fulfilment of the requirements for the degree of Master of Philosophy
(Information and Knowledge Management)

STELLENBOSCH UNIVERSITY

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December 2008

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 owner of the copyright thereof and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

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ACKNOWLEDGEMENTS

With great appreciation

Fankie L. Monama.

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CHAPTER 1

INTRODUCTION

1.1   Background and orientation to the study

Africa's socio-economic reconstruction and development is constrained by the spate of violent conflicts afflicting the continent.   Internecine strife and humanitarian concerns have prompted international debates surrounding the efficacy of existing conflict prevention, management and resolution strategies. With Africa seemingly in a semi-permanent state of tension and crisis, and the inability of the global and continental systems and structures to effectively deal with these situations, it requires a disentanglement of a "complex interplay of institutional-bureaucratic and political dynamics,"[1] that place the continent at the centre of intervention dilemma. Capturing these frustrations, Bakwesegha lamented that:

> *"Conflicts have turned Africa, the most diverse of all the continents in the world, into a Continent unable to turn its trend of diversity into opportunities for development … Conflicts have torn the social fabric of the African Society. Conflicts have separated and split families. Brother has risen against Brother; Father against Son and Son against Father."[2]*

Bakwesegha's compelling view necessitated an authentic inquiry into the complex challenges to the security and socio-economic development of Africa. At the end of the Cold War, violent conflicts on the continent did not wither away, but have become so *complex*[3], thus confounding efforts to achieve sustainable peace.[4] This complexity requires greater efforts to improve international, regional and subregional institutional capacities and contingency instruments to facilitate effective

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[1]   S. Schmeidl, 'Early Warning and Integrated Response Development,' (http://www.undp.ro/publications/pdf/sec3.pdf), p. 42.

[2]   Quoted in W. G. Nhara, 'Early Warning and Conflict in Africa,' *Institute for Security Studies (ISS) Occasional paper* No 1, February 1996, (http://www.iss.co.za/Pubs/PAPERS/1/Paper1.htmt).

[3]   A. Bennet and D. Bennet, 'The Decision-Making Process for Complex Situations in a Complex Environment.' In F. Burstein and C. W. Holsapple (eds), *Handbook on Decision Support Systems,* New York: Springer-Verlag, 2008, p. 2. A *Complex situation* in a *complex environment* refers to a situation that may be difficult to define and may not have a single "right answer", has many interrelated causative forces, has few precedents, has many stakeholders [with diverse & competing interests] and is often prone to surprise. In the extreme, Bennet and Bennet explain that the *"landscape of a complex situation is one with multiple and diverse connections with dynamic and interdependent relationships, events and process."* (Italics, own emphasis).

[4]   The collapse of the Soviet Union might have ended East-West power politics and proxy wars in Africa, however, inter- and intra-state conflicts have recently been witnessed. Notable examples here include the Democratic Republic of the Congo (DRC), Ethiopia-Somalia-Eritrea, Rwanda-Burundi, Darfur region in Sudan, Chad, Kenya and Comoros.

responses. The key emphasis within the international community is to enhance instruments to facilitate early detection of conflict situations in order to initiate preventive actions. Put differently, conflict prevention can be facilitated through the dynamic improvement of the processes, structures and functions of (conflict) early warning systems (EWS).[5] In addition, *political will* is crucial towards the operationalisation of such systems to ensure swift and coordinated implementation of preventive actions. Cedric de Coning argues that conflict early warning systems can "improve our ability to generate the political will necessary to authorize preventive action much earlier in the conflict cycle, by improving our ability to estimate the potential future cost of inaction, and the way we bring this information to the attention of decision makers."[6] Schmeidl also argues that "early warning needs to be seen as a precondition to developing *political will*, and thus initiate (or better inform) reasonable response strategies."[7] However, existing organisational structures crucial for facilitating and expediting conflict prevention initiatives, suffer from "inertia" due to entrenched political structures, hierarchies and competing interests.

The United Nations (UN) is an international body with the authority to facilitate conflict prevention. However, it is constrained by organisational complexities such as sectional political self-interest and the "bureaucratic red tape in large bureaucracies", thus hampering its ability to swiftly and with the correct mandate, to respond to a call for preventive intervention.[8] Hence the devolution of the responsibilities for the settlement of conflicts to the regional and subregional bodies. Conflicts have also "tended to pay little respect to State borders, proving the necessity for inter-State co-operation."[9] Because of the regionalisation[10] of conflicts, the case of inter-regional collaboration has become increasingly vital as the "appropriate initial actors in seeking to defuse tensions and resolve local disputes within the region."[11] To this end, stronger intergovernmental mechanisms to facilitate early recognition of conflict situations and early intervention to prevent eruption or mitigate escalation have to be maintained. African countries, as a result, bear the burden of peace

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[5] C. de Coning, 'Towards a Common Southern African Peacekeeping System,' Centre for International Political Studies, *Electronic Briefing Paper, No 16*, 2004, p.2.

[6] *Ibid.*

[7] Schmeidl, p. 38. (Italics, own emphasis).

[8] In Rwanda, General Dallaire who was heading the United Nations Mission in Rwanda in 1994, sent a fax to alert the UN of a possible genocide, and that fax circulated within the Department of Peace Keeping Operation and later in the departments of humanitarian and political departments, without ever reaching the "appropriate" offices of the Secretary General Kofi Annan or the Security Council, which resulted in less significant intervention to prevent the massive killing of people that followed.

[9] C. Collins, *et al*, 'Overview of Conflict Prevention Capacities in Regional, Sub-regional and Other Intergovernmental Organisations', Global Partnership for the Prevention of Armed Conflict (GPPAC), (accessed at www.gppac.org/documents/GPPAC/process/IGO_Overview_Final/External_version_20102006.pdf).

[10] See United Nations (UN) Charter, Chapter VIII, Articles 52-54, (accessed at www.un.org).

[11] United Nations (UN) Charter, Chapter VIII, Regional Arrangements, Article 52 (2) states that "such agencies shall make every effort to achieve pacific settlement of local disputes through such regional arrangements or by such regional agencies before referring them to the Security Council", (accessed at www.un.org).

interventions from the African Union (AU) which consists of 53 members, to regional economic communities (RECs) such as Southern African Development Community (SADC), which consists of 14 members.[12] These organisations are attenuated by bureaucratic ineptitude for adaptive behaviour that impact on swift and flexible responses.

Nation states with diverse historical backgrounds, different political systems and unequal economic strengths are inclined to have fundamental inequalities in power and influence. Consequently, opposing political values, national interest and competing rationalities underlining their actions become sources of contention and impede the establishment of a common ground. These hurdles breed tensions and suspicion that impact on coordination of effort and information sharing regarding conflict situations. Thus, to surmount these barriers, it is imperative to reconcile competing interests through comprehensive inclusiveness, cooperation and effective collaborative partnerships among various stakeholders, particularly civil society and political decision makers. 'Preventive action' must, insists the International Peace Academy (IPA), "not be considered as an expedient product or event, but as a continuous, organic process that necessitates a highest degree of inclusiveness and multisectoral participation in dialogue and peace-building."[13] These aspects should be institutionalised within the inter-regional organisations to establish *the culture of common effort for common purpose.*

In the interest of collective effort and to expand AU's capacity for conflict prevention, the Peace and Security Council (PSC) was established in 2003. The PSC is defined as "a collective security and early warning arrangement to facilitate timely and efficient response to conflict and crisis situation in Africa."[14] Apparently, the PSC, as an instrument of conflict prevention on the continent, is also aimed at achieving *unity of thought* in dealing with the threats to peace and stability. In conflict situations, state sovereignty, political desirability and competing goals often render peace processes ineffective due to differences regarding the best course of action. The PSC is regarded as the means to create a platform for shared understanding and common vision regarding the challenge of conflict prevention. Still, to be more effective, it requires a strong collaboration with subregional organisations (e.g. SADC) and multisectoral participation of, for example academics, research institutes, civil society organisations (CSOs), non-governmental (NGOs) and community-based organisations (CBOs). The main thrust should be to create a shared

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[12]   A detailed discussion on SADC is in chapter 3 of this study.

[13]   International Peace Academy (IPA) Workshop Report, 'Sharing Best Practices on Conflict Prevention: The UN, Regional and Subregional Organizations, National and Local Actors', Swedish Institute, Alexandria, Egypt, 8-10 April 2002, (www.ipacademy.org), p. 2.

[14]   African Union, Protocol on Peace and Security, Article 2 (1), (www.africa-union.org/root/UA/Conference/december/PSC).

framework for political decision makers to make "collective sense" of the problems on the continent, and be in a position to synchronise efforts to achieve peace and stability. Conversely, the AU and also SADC remain politically diverse organisations. As such, operationalisation of conflict prevention initiatives is likely to encounter obstacles emanating from, as Gina van Schalkwyk indicated, "conflict around political values amongst states in the [sub]region and …disputes on the basis of divergent interpretations [of policies]."[15] This creates a paradox between the necessity of conflict prevention and the divergent national interests. Convergent thinking and creating a shared outlook in the existing organisational frameworks (e.g. SADC) is imperative in order to generate political will and to facilitate improved decision making and implementation of proactive responses in the prevention of conflicts.

1.1.1. Overview of the African institutional instruments for conflict prevention

Continentally, the AU, through its Constitutive Act, various protocols and formal declarations, has the political authority to co-ordinate conflict prevention activities. It held successive expert workshops in order to get the conflict prevention strategies off the ground.[16] What emerged was an improved security agenda for Africa. Ideas such as collective security, co-operation, interdependence and building a security society became prominent.[17] These could better be facilitated at subregional level where RECs have local interest and familiarity with actors and conditions on the ground.

SADC launched the Organ on Politics, Defence and Security (hereafter referred to as the Organ).[18] The Organ has provided a framework for the promotion of sustainable development, peace and security, as envisioned by SADC Treaty.[19] In 2001, SADC members signed a Protocol on Politics,

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[15]   G. van Schalkwyk, 'Challenges Facing the Newly Restructured SADC Organ for Politics, Defence and Security,' *Africa Insight,* Vol 32 (4), 2002, p. 65.

[16]   See African Union, Meeting of Governmental Experts on Early Warning and Conflict Prevention, *Meeting the Challenge of Conflict Prevention in Africa-Towards the Operationalisation of the Continental Early Warning System, Kempton Park, South Africa, 17-19 December 2006,* pp. 1-7 (www.africa-union.org/root/UA/Conference/december/PSC); J. Cilliers, 'Towards a Continental Early Warning System for Africa,' *ISS Paper 102,* April 2005, p. 1; M. Malan, 'The OAU and African Subregional Organisations-A Closer Look at the Peace Pyramid,' ISS *Occasional Paper No 36,* January 1999, (www.iss.co.za/pubs/PAPERS/36/Paper36.html), p. 2.

[17]   A. Zacarias, 'SADC: From a System to Community of Security?' *African Security Journal, Vol 7(6),* 1998, pp. 44-45.

[18]   The historical development and establishment of the SADC Organ is addressed in chapter 3.

[19]   See SADC Treaty; M. van Aardt, 'The SADC Organ for Politics, Defence and Security: Challenges for Regional Community Building,' *The South African Journal of International Affairs,* Vol 4(2*),* Winter 1997, p. 144.; J. Dzimba, 'A Common Subregional Agenda for Peace, Human Security and Conflict Prevention: A View from SADC,' p. 1.; See also the list of proposals captured by J. Cilliers, 'The Evolving Security Architecture in Southern Africa,' *African Security Review,* Vol 4(5*),* 1995, pp. 1-23.; M. Malan, 'Regional

Defence and Security Co-operation (hereafter referred to as the Protocol), which subsequently gave legitimacy and substance to the objectives of SADC.[20] Article 11 of the Protocol addresses the concept of conflict *prevention*. It states that the Organ "shall establish and early warning system in order to facilitate timeous action to *prevent* the outbreak and escalation of conflict."[21] In the first place, this provides for the operationalisation of mechanism envisaged previously by the OAU Seminar held in 1996 in Ethiopia, during which it was submitted that Africa, through its subregional organisations should develop "instruments for preparedness, prevention and mitigation of disasters, emergencies and conflict situations."[22] Secondly, within the SADC security paradigm, it is an inherent recognition of *proactive* engagement with regard to preventing conflicts and promoting sustainable peace. The operative concept is *prevention.*[23]

At theoretical level, the Protocol has identified three key dimensions in conflict maintenance system:[24]

- *conflict prevention*: it concerns itself with averting violent trials of strength from even breaking out, and it is a long term project.[25] (key objectives are trust building, coalition building, negotiated settlement, preventive diplomacy or preventive deployment);

- *conflict (crisis) management*: this is directed at preventing escalation, once conflict has erupted-more of a fire-fighting short term operation.[26] (main objectives are promotion of trust and confidence, peacekeeping, and peace-enforcement or humanitarian intervention); and

- *conflict resolution*: this is process of attempting to re-establish peace, if prevention and management have failed. (key objectives are maintaining and re-building civil society and state institutions to permit transparency and accountability).[27]

Power Political Under Cover of SADC-Running Amok with Mythical Organ,' *Occasional paper No 35*, October 1998, (www.iss.co.za/Pubs/PAPERS/35/Papers35.html), pp. 1-12.

[20]   Detailed discussion on these aspects is in Chapter 3.

[21]   See SADC Protocol of the Organ on Politics, Defence and Security Co-operation (accessed at http://www.sadc.int).

[22]   Nhara, *ISS Occasional paper No 1*, p. 1.

[23]   Note that the concept of prevention in the text has been italicized, except in direct quotations. This is deliberately done to highlight its significance, within the framework of early warning imperatives and to set the stage for its integration with knowledge management principles.

[24]   See Levitt, 'Conflict Prevention, Management, and Resolution: Africa-Regional Strategies For the Prevention of Displacement and Protection of Displaced Person: The cases of the OAU, ECOWAS, SADC, and IGAD,' *Duke Journal of Comparative and International law 39*, pp. 42-55.

[25]   *Ibid*., C Hill, 'The EU's Capacity for Conflict Prevention,' *European Foreign Affairs Review 6,* 2001, p. 330.

[26]   Hill, p. 30.

[27]   Hill, p. 30; Levitt, pp. 42-55.

Upon closer examination, it is evident that to achieve subregional objectives of peace, security and socio-economic development, it is imperative to take cognisance of the above factors and devise creative response strategies. Firstly, there is need to have a *common approach*, which could be facilitated through "open and honest dialogue complemented by a free flow of information."[28] Hence Van Schalkwyk stresses the fact that "communication and information sharing" are key elements that have been lacking in the SADC subregion."[29] Secondly, Van Aardt, in a summary of the objectives of the Organ, particularly as they relate to building institutional capacity, highlights the imperative of the development of "intellectual" capacity for operations in the sub-region and on the continent.[30] Greater attention needs to be directed towards strengthening inter-organisational cooperative efforts and dynamic interactions to facilitate synergy, creation of shared context and common vision, as well as "fostering unity of consciousness" to enhance accelerated decision-making processes and taking effective actions with regard to preventing conflicts.[31]

1.1.2. *The challenges of contemporary conflict dynamics*

A plethora of theories and approaches have been advanced to address the wide-ranging aspects of conflicts, from identifying the underlying causes to prescribing the possible courses of action and solutions.[32] As mentioned above, in Africa, the contemporary conflict dynamics reflect complex characteristics. The foremost features include war economies (resource wars), warlords and private military companies[33]; intra-state conflict with mass social unrest, ethno-rebellion and genocide,[34] humanitarian emergencies[35]; use of irregular forces and militias (non-statutory)[36]; unstable civil-military relations, proliferation of small arms, state fragility/collapse or absence of effective

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[28]   Van Schalkwyk, pp. 64-65.

[29]   *Ibid.,* p. 66.

[30]   M van Aardt, 'The Emerging Security Framework in Southern Africa: Regime or Community?' *Strategic Review for Southern Africa,* Vol XIX (1), May 1997, pp. 16-17.

[31]   A. Bennet and D. Porter, 'The Force of Knowledge: A Case Study of Knowledge Management Implementation in the Department of the Navy,' In C. W. Holsapple (ed), *Handbook on Knowledge Management 2: Knowledge Directions,* New York: Springer-Verlag, 2004, p. 468.

[32]   Hugh Miall, 'Conflict Transformation: A Multidimensional Task,' Berghof Research Centre for Constructive Conflict Management, 2004, pp. 1-19, (http;//www.berghof-handbook.net); the Institute for Security Studies (ISS) published articles in the *Africa Security Review Journal* and also monographs available on line (http://www.iss.co.za/Pubs/monographs); Volker Boege, 'Traditional Approaches to Conflict Transformation-Potentials and Limits,' Berghof Research Centre for Constructive Conflict Management, 2004, pp. 1-21, (http;//www.berghof-handbook.net); Hill, 'The EU's Capacity for Conflict Prevention,' pp. 315-333.

[33]   Miall, 'Conflict Transformation: A Multidimensional Task,' pp 5-10.

[34]   H. Krummenacher and S. Schmeidal, 'Practical Challenges in Predicting Violent Conflict. FAST: An Example of a Comprehensive Early-Warning Methodology,' Working Paper 34, Swisspeace, (www.swisspeace.ch), p. 5.

[35]   A. Austin, 'Early Warning and The Field: A Cargo Cult Science?' Berghof Research Centre for Constructive Conflict Management, August 2004, (http;//www.berghof-handbook.net), pp. 4-5; Levitt, 'Conflict Prevention, Management, and Resolution,' pp. 39-40.

[36]   De Coning, p. 2.

governance[37]; and in some cases, disputed borders, such as Botswana and Namibia, Eritrea and Ethiopia.[38] Irrespective of the origin, conflict in the contemporary world has assumed regional dimensions - threatening regional stability due to spill over effects. It requires constructive engagement and co-operation of nation states and multisectoral organisations to effectively initiate interventions.

In addition, other threats to security include forced migrations, refugees, trans-border crime, debt crisis, corruption and poor management, as well as economic shocks.[39] It is on this basis that the United Nations Development Programme (UNDP) Human Development Report of 1994 redefined "the understanding of security from the traditional state security paradigm where threats to national interests and state borders" received high priority.[40] This UNDP Report drew attention to a *people-centred approach*, also referred to as human security, which includes factors that threaten sustainable development, for instance economic, food, health, environment, personal, community and political security.[41] Kofi Anan, former UN Secretary General, implored Africa to take the lead and engage regional and sub-regional organizations to *prevent,* manage and resolve conflicts, based on the challenges of structural inequalities.[42] The implication is to take account of human security challenges and incorporate them in developing holistic and integrated approaches towards conflict prevention. Holistic and integrated interventions require cooperative effort emanating from mutual understanding of the problems and congenial interactive relations of subregional (political) role players. Compounding the issues of complex characteristics of African conflicts are the varying conceptions of threats to peace that often produce inaction or inappropriate responses. The question can be raised about what constitutes legitimate warning indication that is sufficiently truthful to take action, especially in a politically charged environment (e.g. SADC on Zimbabwe situation). There could be contrary analysis of the same events, leading to conflicting interpretations, thus producing indecisiveness and lack of action. Issues of politics, power and different value systems have huge

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[37]   Dzimba, 'A Common Subregional Agenda for Peace, Human Security and Conflict Prevention: A View from SADC,' Published in Peace, Human Security and Conflict Prevention in Africa Proceedings of the UNESCO-ISS Expert Meeting, Pretoria, 23-24 July 2001, (http://www.iss.co.za/Pubs/Books/Unesco/Dzimba.html), p. 3.

[38]   F. Olonisakin, 'Conflict Management in Africa: The Role of the OAU and Sub-regional Organisations,' Published in Monograph 46, Building Stability in Africa: Challenges for the new millennium, February 2000, (http://www.iss.co.za/pubs/Monographs/No46/Conflict.html), p. 2.

[39]   Van Aardt, 'The SADC Organ for Politics, Defence and Security: Challenges for Regional Community Building,' *The South African Journal of International Affairs, Vol 4(2),* Winter 1997, p. 145; Dzimba, p. 3.

[40]   Human Development Report, 1994, United Nations Development Programme (available at http://www.undp.org/hdro/94.htm).

[41]   C. Hendricks (ed), 'Introduction: From State Security to Human Security in Southern Africa, Policy Research and Capacity Building Challenges,' *ISS Monograph Series No 122*, April 2006, p. 3.

[42]   K. Annan, 'The Causes of Conflict and the Promotion of Durable Peace and Sustainable Development in Africa,' *Secretary General's Report to the United Nations Security Council (Brahimi Report)*, 16 April 1998, (http://www.un.org/ecosocdev/geninfo/afrec/sgreport/main.htm); Levitt, p. 42.

impact with regard to determining the "best decisions" (and developing political will to act accordingly) due to "multiple perspectives" and what can be described as *complex context*[43] that is implicit in political organisations.

The key challenge to conflict prevention strategies in Africa is to harness and integrate multiple perspectives in order to produce *collective sense* and *common outlook* consistent with the shared vision regarding the threats to peace. This has implications for organisational systems that should facilitate the synchronisation of effort and to ensure *unity of purpose* in carrying out conflict prevention strategies on the continent.

1.1.3. *Institutional instruments for conflict prevention – The case for knowledge management application*

Cheryl Hendricks asserts that the *raison d' être* for SADC is to "secure peace and security" as well as "economic and social development through regional integration."[44] Subsequently, to provide the normative and policy framework for peace and development, SADC engaged in institutional restructuring and set out policies, principles and programmes in pursuit of its objectives. However, numerous challenges, for example the pervasiveness of electoral irregularities, availability of small arms, human rights abuses and increase of refugees, still afflict the continent and the subregion. These challenges provide a fertile ground for violence and insecurity. They require integrated intervention strategies and flexible practices through subregional organisations.

To develop an integrated approach to conflict prevention, it is important to foster interagency cooperation in instituting polygonal and multidimensional instruments to attain the strategic imperative of sustainable peace. As sketched out earlier (section 1.1.1), one of the institutional instruments to pursue the *prevention* of conflicts is through *early warning systems* (EWS) - to avert the eruption of conflicts and to save on costs regarding the management and resolution. This is an integrated system that provides early warning indicators to support and assist (political) *policy decision makers* in taking *preventive actions* against outbreaks of conflicts.

The International Task Force on Preventive Diplomacy emphasised the point that:

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[43]   See a complete argument regarding the basis for understanding Knowledge Management in Decision Support by J. F. Courtney, 'Decision Making and Knowledge Management in Inquiring Organizations: Toward a New Decision-Making Paradigm for DSS,' *Decision Support Systems*, Vol 31, 2001, pp. 17-38.

[44]   Hendricks, p. 5.

"early warning and early response/action are central pillars of conflict prevention … the central challenge is how to move from early warning to early response, from information gathering, analysis, and strategy development to the mobilisation of stakeholders and the actual implementation of adequate responses."[45]

The field of Knowledge Management (KM),[46] has some significant "lessons" that can be integrated into and strengthen EWS, to enable the mobilisation of stakeholders and to enhance the development of *political will*. EWS, argues Alexander Austin, is meant to "obtain knowledge [from multiple sources] and … use that knowledge to assist in the mitigation of conflict [engage in preventive response actions]."[47] Proactive response to conflict situations needs *"knowledge"[48]* to facilitate a common consciousness regarding imminent trouble and thus enhance informed judgement, accelerate decision making, interconnect choices and implement appropriate actions to deal with the crisis. It is essentially the *practice* of KM to "ensure that the right knowledge is available … to the right entities at the right times."[49]

There are a few articulations about KM that express the above conceptions. The World Bank regards KM as "systematic approaches to help information and knowledge <u>emerge and flow </u>to the right people, at the right time to create value [improve decision making and to enable action]."[50] Mark Nissen emphasises the fact that "information must contribute something to the performance capabilities of the receiver before it represents knowledge … knowledge enables direct action."[51] It is imperative in EWS, through informed reasoning, knowledge and critical reflection, to enable political decision-makers to *know in advance where* threats of conflicts are emerging and also *know*

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[45]   International Task Force on Preventive Diplomacy, Guiding Principles: "Building Political Will for Conflict Prevention", EastWest Institute, (http://ewipreventivediplomacy.or/2_ITFDD_Guiding_Principles.pdf), May 2007, p. 1.

[46]   In literature, the concept of Knowledge Management (KM), though influenced by varying disciplinary foundations, broadly encompasses the systematic and interrelated processes of creation/generation, capture, storing/embedding, distribution/dissemination and implementation/application/use of *knowledge* in organizations to impact of performance. The conceptual properties and clarifications are elucidated in chapter 2 of this study.

[47]   Austin, p. 1.

[47]   *Ibid.*

[48]   M. A. Mohamed Salihi, 'Introduction: The Role of Social Science in Conflict Analysis: The Crisis of Contemporary Paradigms,' *Nordi Journal of African Studies,* Vol 2, No 2, 1993, pp. 6-7. Mohamed Salihi provides an interesting insight regarding the general description of what knowledge is about: A human cognitive activity (ideas, experience and values) facilitated through communicative interaction between people and involves sharing and transmission of meaning. An elaboration on the definition of the *"knowledge"* concept is dealt with in chapter 2 of this study.

[49]   C. W. Holsapple, 'Knowledge Management Support of Decision Making,' *Decision Support Systems,* Vol 31, 2001, p. 1.

[50]   As quoted in K. Pasteur *et al*, 'Knowledge Management and Organisational Learning for Development,' *KM4Dev Workshop Background Paper, Institute for Development Studies*, 10-12 July 2006, p. 1.

[51]   M. E. Nissen, 'Knowledge Flow Through a Military Joint Task Force Operation,' In C. W. Holsapple (ed), *Handbook on Knowledge Management 2,* 2004, pp. 549-550.

and take the appropriate actions to avert it. *However, it should not end here.* There should be a systematic evaluation of the effectiveness of the warning product and the actions taken in order to determine the impact of those actions, as well as using the feedback to *review*, *refine* and *learn* from them so as to improve the system. This conception of EWS in the context of KM should be a cyclical activity, not a once off linear (one-dimensional) system.

EWS is conceived to be *knowledge-driven* – it is about *knowledge*. It depends on ideas, experience, insights and understanding of the conflict warning indicators so as to produce informed decisions and actions from which feedback (based on the outcomes) would be evaluated to learn and to generate wisdom for future actions. Inherent in this conception is the imperative of open communication and amplified dialogue to facilitate sharing of ideas and experiences in an active collaborative process throughout the operational cycle of the system. A former United States Defence Intelligence Agency warning analyst, Cynthia Grabo, offers the following depiction of the concept of *warning:*

> *"an intangible, a theory, a deduction, a perception, a belief ... a product of reasoning or of logic, a hypothesis whose validity can neither be confirmed nor refuted until it is too late ... a product of intelligence judgement on the level of threat and risks posed by a particular scenario ...must be communicated as warning that exists only in the mind of the analyst is useless."[52]*

The value of KM for realising the objectives of EWS lies in the fact that it facilitates the connection of people – "creating the framework for mobilising stakeholders", "the knowledge people have, share and need,"[53] it fosters "the exchange of knowledge [communicate and share] in a community-oriented environment"[54] and makes knowledge (warning indicators) "visible" and "accessible" to make better decisions and taking better actions. This in turn facilitates averting excessive entropy (degree of disorder/randomness) in the system. The processes of KM include the "creation or generation, codification, storage, dissemination [communication/sharing] and implementation [application/utilisation] of knowledge"[55] to achieve "specific" organisational goals - early warning

[52]   C. M. Grabo, 'Anticipating Surprise Analysis for Strategic Warning,' (Washington DC, Joint Military Intelligence), as quoted in Criminal Intelligence Services Canada (CISC), *Strategic Early Warning for Criminal Intelligence: Theoretical Framework and Sentinel Methodology,* Central Bureau, Ottawa, 2007, p. 5.
[53]   B. Rubenstein-Montano *et al*, 'A Systems Thinking Framework for Knowledge Management,' *Decision Support Systems,* Vol 31, 2001, p. 6.
[54]   S. Ramanauskiene, 'Knowledge Management: Organizational Dimension,' *Swedish-Lithuanian Seminar, Information Management Research Issues*, Sweden, 21-22 September 2001, p. 7.
[55]   Information Society Technologies (IST), *ROCKET, Roadmap to Communicating Knowledge Essential for the*

and early response to prevent conflicts. Becerra-Fernanez *et al* provides the *most important reason* that underpins KM, which is "organising and making available important knowledge wherever and whenever it is needed."[56] This understanding of KM provides the framework to optimise the operational effectiveness of EWS.

EWS is defined as "any initiative that focuses on the systematic data collection, analysis and/or formulation of recommendations, including risk assessment and information sharing" relating to conflict situation with the purpose of anticipating an eruption of conflict and instituting preventive strategies.[57] The main purpose, argues Austin, is for EWS to effectively identify the causes of conflict, predict [anticipate] the outbreak of conflict and also to be able to mitigate that conflict. The successful EWS "depends on the collection of sufficient, relevant information; and timely analysis of this information; and formulation of feasible policy options leading to early action."[58] These views are in line with the principles and practices of KM.

Schmeidl observed that, for example, the genocide in Rwanda could have been avoided had there been a reliable source of information, *culture of trust* and sufficient analysis of risk, and *political will*, and better communication strategy in order for the "early warning to reach the right people" (in this case the United Nations Security Council) which might have led to the institution of appropriate course of action – *in time*.[59] The inadequacy and ineptness of the response, coupled with poor information coordination and sharing led to tragedy (basically due to "unlearned experiences" from similar incidence of ethnic killings that took place in the 1950s and the 1970s).[60] The military environment is replete with examples of what can be called strategic surprise. In most situations, when attacks were experienced, it was not because of the absence of warning, but it was due to the inability to anticipate surprise as a result of decision makers failing to grasp the changing tactical situation happening on the ground.[61] Hence the emphasis of mobilising stakeholders and generating

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IndusTrial Environment, WP2: Analysis of the State of the Art of Knowledge Management, File D2.1 – WP2 – V0.1.doc, (http://rocket.vub.ac.be), 30 September 2002, p. 15.

[56] I. Becerra-Fernandez *et al*, *Knowledge Management: Challenges, Solutions and Technologies,* 2004, New Jersey, Prentice Hall, p. 3.

[57] Austin, p. 1.

[58] Swiss Peace Foundation, Swisspeace's Early Warning Programme – FAST (*Früh-Analyse von Spannungen und Tatsachenermittlung* -Early Recognition of Tensions and Fact Finding), (available at http://www.swisspeace.ch/typo3/en/peace-conflict-research/early-warning/about).

[59] Schmeidl,'Early Warning and Integrated Response Development,' (http://www.undp.ro/publications/pdf/sec3.pdf), 2001.

[60] In the 1950s, with the change of government, Rwanda witnessed ethnic killings and also in the 1970s. This knowledge should have formed the basis of the United Nations strategy of intervention when the tension mounted after the death of the two Presidents of Rwanda and Burundi in the 1990s.

[61] For example, 11 September 2001 plane crash attacks in USA, Criminal Intelligence Services Canada (CISC), *Strategic Early Warning for Criminal Intelligence: Theoretical Framework and Sentinel Methodology,* Central Bureau, Ottawa, 2007, p. 4

political will to optimise the effective functioning of EWS. KM is relevant for the orchestration of "versatile interface among policy makers in governments … to create the knowledge networking platform to facilitate interaction and have simultaneous dialogue with all related expertise."[62]

Thus, intergovernmental organisations (at regional – AU and sub-regional – SADC levels), should interface meaningfully with other stakeholders, agencies and other individuals to ensure an effective operationalisation of EWS. Of importance is to foster comprehensive interaction with local communities because of their superior knowledge of local conditions deriving from their historical, political, economic, geographic and cultural links to the environment. This will enhance EWS's potential as a valuable and comprehensive conflict prevention system. Hence there is a need to integrate the "frameworks" of KM in the operation of EWS in order to increase its (EWS) capabilities as a tool for conflict prevention.

1.1.4. Aspects of the significance of KM in EWS

As pointed out above, EWS is *knowledge-intensive*. Firstly, it is based on the *knowledge content* – facts (information about conditions and events), ideas and experiences that impact on people's relations and actions. In a richer sense, it includes knowledge about the "concepts, beliefs systems … myths, folklore of society … [it] shapes decisions and informs practice."[63] Austin insists that EWS is concerned with "the prognosis [basically knowing in advance] of when, why and where conflict will erupt … what is the problem, how imminent and what can we do about it?"[64] In order to meet the "informational requirements of decision makers [as political end-users]" to enable them to develop their intellectual dexterity, "draw conclusions" and make "informed judgements,"[65] it is fundamental to know (and locate) the sources of knowledge (people and databases), "extract" that knowledge, and make it accessible to the relevant structures at appropriate levels in the "system". The goal is to facilitate the ability of decision makers to make quality decisions and take appropriate steps in implementing effective actions with regard to conflict prevention.

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[62]   Knowledge Management in Disaster Risk Reduction: The Indian Approach, An Initiative under the GoI-UNDP Disaster Risk Management Programme, Ministry of Home Affairs: National Disaster Management Division, Government of India, (not dated), p. 1, (accessed at http://data.undp.org.in/dmweb/pub/knowledge-management.pdf).

[63]   A. Steiner, 'Indigenous Knowledge in Disaster Management,' *Environmental Emergencies News,* Issue 6, UNEP, April 2006, p. 2.

[64]   Austin, p. 2.

[65]   D. Carment and K. Garner, 'Early Warning and Conflict Prevention: Problems, Pitfalls and Avenues for Success,' *Canadian Foreign Policy,* (http://http-server.carleton.ca/~dcarment/papers/ew&cp.html), Winter 1998, p. 3.

Secondly, EWS is concerned with the "gathering of information, analysis and generating meaning from observation and events, evaluating risk factors, assessing the capacities, needs and response for dealing with crisis."[66]   The *knowledge content* referred to above, is not only about an accumulation of the body of knowledge, it also about the scope and extent of the "distributed knowledge" within EWS, meaning that "everyone from the desk officer to and NGO worker in the field [also field monitors and policy makers] are potential players on the information gathering and analysis team [and also possessors of knowledge]."[67]   Basically, EWS operates in the context of the accessibility of knowledge from various sources, evaluating its value and testing its validity through discussions and sharing, ultimately *using that knowledge* for making decisions and taking action. Strengthening linkages among stakeholders, specifically balancing knowledge acquisition with connections among people would facilitate the appropriation of "quality knowledge" to impact on decision making. Holsapple stresses that "decision making is a knowledge-intensive activity."[68]   In this context, the goal of EWS, in all intents and purposes, is to facilitate the provision of "timely and contextual knowledge [into escalating crisis] to decision makers [to enable them to act appropriately]."[69]   It is also concerned with the knowledge flow to the right people (political decision makers) who have the relevant authority and mandate to take decisions and act effectively. John Davies provides a comprehensive overview of the objectives and value of EWS:

> *"An early warning system is more that the flow of information and reports from those on the ground regarding visible or rapidly escalating crisis. It should also provide reliable analyses that identify still-latent or low-level conflicts or instabilities ... [EWS] can generate analyses that identify key factors driving the instability, providing the basis from which to assess likely future scenarios, and recommend appropriate options for local and international policy makers oriented towards preventive action. They should also keep track of what preventive strategies have been used in what contexts in the past, to what effect and at what cost."[70]*

The "richness" of EWS is signified in the above quote. It is "more than a flow of information", has the potential to "identify key factors driving instability", and on those basis therefore, the future

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[66]   Carment and Garner pp. 4-6.
[67]   *Ibid.*
[68]   Holsapple, p. 1.
[69]   D. Apostolou, A. Abecker and G. Mentzas, 'Harmonising Codification and Socialization in Knowledge Management,' *Knowledge Management Research and Practice,* Vol 5, (http://www.palgrave-journals.com/kmrp/journal/v5/n4/full/html), September 2007.
[70]   J. Davies, 'Conflict Early Warning and Early Response For Sub-Saharan Africa,' *Centre for International Development and Conflict Management: Linking Complex Emergency Response and Transition Initiative (CERTI)*, (http://www.certi.org/publications/policy/ewsummary_5.PDF), September 2000, pp. 1-2.

scenarios can be assessed and formulated. Most importantly, EWS has the potential for retaining the weaknesses and strengths of "past preventive strategies" in their various contexts in which they were applied. In addition to the "rich potential" of EWS, the quote also reflects the role of KM. The generation and exchange of knowledge, the development of infrastructures to facilitate the organisation, storage, accessibility and communication of conflict related knowledge, are critical processes in KM. These processes are ultimately aimed at ensuring that knowledge is used "for effective decision making" and to facilitate actions that contribute towards "the achievement of organisational goals."[71] An important contribution of KM is to enable EWS to function as a knowledge intensive *decision - support* tool that uses linkages across individuals and groups (political decision-makers, monitors and analysts) in collaborative networks, to exploit and distribute knowledge through the system to impact on decision making and taking actions.

Thirdly, in the context of decision-making process, EWS is conceived to be a cyclical system that is reinforced by acting and then monitoring the results of the actions in order to determine if those actions have been successful. The significant activity is the determination of the impact of the decisions and actions in order to derive value and to learn. Richard Wallace argues that the learning processes (e.g. after-action reviews) need to be embedded throughout organisational activities as a sure way to "improve performance."[72] Joseph Firestone calls attention to the fact that in the decision-making and execution activity, "feedback increases creative learning (knowledge claim formulation and evaluation)."[73] In a cyclical operational feedback, EWS feeds the processes by reflecting on the corresponding relations between what was intended (expected effects) and the "post-intervention [actual] effects"[74] to determine gaps and to facilitate learning. Thus, as an interactive social system, EWS expands the knowledge base, improves awareness and enhances interpretive flexibility for the political decision makers in a continuous process of learning and self-reflection. It is in this context that KM strategy is vital, for the reason that it is fundamentally about facilitating the learning organisations.

To advance the capacity of the SADC Organ to adequately and effectively fulfil their mandate of securing subregional peace, it is significant that it acts as a facilitating structure that enables a dynamic collaborative process that fosters communication among stakeholders and learning. It is necessary to ensure that government departments, intergovernmental organisations, civil society

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[71]   Becerra-Fernandez *et al*, p. 30.

[72]   R. B. Wallace, 'Storm Warning: Managing Knowledge in Turbulent Times,' *Lia,* Vol 25, No 3, July/August 2005, p. 11.

[73]   J. M. Firestone, 'On Doing Knowledge Management,' *Knowledge Management Research and Practice*, Vol 6, 2008, p. 18.

[74]   *Ibid.*

organisations and researchers continuously interact with one another in collaborative partnerships and not in silos as is the current situation. Wallace argues that knowledge requires "relationships and trust to move it and use it."[75] The development of mutual trust and the establishment of confidence-building measures (through mutual cooperation) to pursue a common subregional security agenda in the context of promoting knowledge sharing are consequently crucial A number of interlocking actions are necessary for a systematic management of knowledge in EWS to ensure the achievement of the conflict prevention objectives.

Recognising the KM dynamism in EWS, the Global Partnership for the Prevention of Armed Conflict (GPPAC) Southern Africa developed a Workplan 2006-2010, which outlined the value of KM strategy in the prevention of violent conflict.[76] Among key activities is the reference to engaging in research, collection and sharing of experiences and knowledge of practice and implementation of the prevention strategies. The urgency of preventing conflicts through EWS drew attention to the necessity of inter-regional interaction for facilitating knowledge-sharing on early warning and early response (EW-ER). According to that Workplan, to ensure the institutionalisation of EWS for conflict prevention in Southern Africa, relevant activities include holding inclusive working meetings on methodologies of EW-ER, presentations and debates at sub-regional meetings; document development, translation and report sharing networks; engaging in subregional training interventions on creating national frameworks for EW-ER and organising seminars involving civil society organisations, international, regional and local officials.[77] These are critical KM endeavours that could enhance SADC Organ's efficiency in the operationalisation of EWS in the subregion. For summary of KM activities about conflict prevention and peace-building envisaged in the GPPAC Workplan, see Table 1 below.

Table 1: Knowledge Generation and Dissemination Strategy of the GPPAC Workplan[78]

Objective	Target Groups	Indicators	Activities
Research and document sources of conflict in the [sub]region	GPPAC global, Southern Africa and national partner organisations	Production of research products-electronic and printed	• Development of methodology/guidelines for research • Each country focal point produces analysis of conflict to date • Exchange of documents and

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75   Wallace, p. 11.
76   Global Partnership for the Prevention of Armed Conflict (GPPAC) Southern Africa, Workplan 2006-2010, Statement Following the Meeting of the Regional Steering Group for Southern Africa, Pretoria, South Africa, 11-12 May 2006, (http://www.gppac.net).
77   GPPAC Workplan, pp. 4-5.
78   *Ibid*., p. 12.

			• determination of strategy for dissemination of knowledge • Production of newsletter
Dissemination of knowledge within higher levels of society	Governments, [sub]regional bodies	Visits to and briefings for target groups	• Task force to set-up appointments visits to governments, [sub]regional bodies like SADC • Recommendations drawn from research disseminated to region and global network
Peace education	Youth (Schools, academic institutions, Media)	Involvement of network partners in popularising and conceptualising peace education as part of their work	• Set-Extracurricular activities (debates, sporting events, drama - plays) • Using local media to promote peace education activities • Screening videos • Create toolkit for peace-education in schools • Utilise IT as resource for knowledge dissemination (develop Web page) - network building (e.g. discussion forums • Use existing structures within network to disseminate knowledge

These indicators and activities have been envisaged, according to the Workplan, to be operational by 2010.[79] The development of the Workplan demonstrates the high priority given to the drive towards conflict prevention in the sub-region through the use of KM strategy. Significantly, it touches on the essence of this study.

Though the importance of KM to a non-business environment has been recognised, it has not been the case in an area of EWS.[80] This study is conceived to fill that gap, and to explore the role of KM in enhancing SADC's capacity to operationalise EWS as a decision support tool for conflict prevention. This will contribute towards impacting on the promotion of security initiatives in the sub-region, to ensure the stability required for the full economic integration, and also to enrich the global security debate.

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[79]   GPPAC, Workplan 2006-2010, p. 12.
[80]   The fields of Law, Medicine and Military, have begun to integrate KM strategy in their practices.

1.2.   Significance for the study

This study is premised on the basic understanding that EWS is a *knowledge-intensive* instrument that inherently operates on the basis of converting knowledge into action (to mount responses to conflict situations). The key perspectives in the cycle involve *creation/generation, capture/organisation, storage/retrieval, dissemination/communication* (sharing) and *deployment/application* (activating response actions) in order to effectively enable the prevention and mitigation of violent conflicts.[81] EWS entails developing extensive social networks and partnerships on a broader scale, to facilitate interaction, sharing of knowledge and learning to facilitate a common understanding. In addition, it requires the integration of information and communication technology (ICT) as an enabling resource for network building and collaboration across new boundaries. It should also be appreciated as the greatest enabler of promulgating knowledge across the system. Despite its storage, retrieval and knowledge distribution capabilities, the true value of ICT is its facilitation of interconnections of people (knowledge agents) to share knowledge and to assist in the learning process. EWS is ultimately an integrated *knowledge-intensive* decision support "system". Using knowledge to facilitate action (knowledge, knowing plus acting, and also assessing the outcomes of actions to learn and improve) is the substance of EWS. It embodies knowledge possessed and shared by people across the "system", as well as including:

> *"interpretive and analytical reports based on field monitoring and country studies … databases which profile past conflicts and crisis, including information on crisis development and the effectiveness of attempts at crisis prevention or management …that can provide the empirical basis for recommending early response options which are likely to be more effective."[82]*

As an integrated "system", EWS involves dynamic and coordinated response actions with multiple steps undertaken at various levels. When a crisis develops, various stakeholders start to initiate interventions (mount response actions to crisis situations) and then the impact of the actions should be monitored in order to make adjustments to the responses and improve the system. It operates in an organisational (or interorganisational) framework where there is an active involvement, coordination and cooperation of different stakeholders "united" by a common vision of preventing conflicts. Through collaborative response development and participation of various stakeholders,

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[81]   These concepts are mostly used interchangeably in literature in principle and in practice, depending on the orientation of the discipline, but essentially refer to interrelated processes of knowledge management.

[82]   Davies, p. 3.

mutual understanding and consensus regarding intervention strategies as well as yielding effective and coordinated responses to conflict situations can be facilitated. From that perspective, the "*system*" is defined as a "set of elements and associated linkages designed to achieve a particular result."[83] That "system" is characterised by:

> "*the linkages of and interactions among all elements necessary to effective early warning and response ... the role of the human elements in the system ... political-administrative supporting entities, the district and community actors and the research community ... the explicit inclusion of multiple linkages and feedback paths, particularly from affected populations through their organisations to the political and technical actors.*"[84]

Underpinning this perspective is that the "system" should operate in the manner that facilitates the dissemination of knowledge to appropriate structures and sub-systems that enable effective action and self-evaluation through learning. This is basically how EWS is conceptualised in this study. It should be able to source knowledge from multiple domains, organise and deploy it across the "system" to support decision makers with well-informed judgements and to facilitate action regarding conflict prevention. Ultimately, learning should also be sustained through creating feedback loops for continuous monitoring and review of action results in order to ensure continuous improvement by transforming experiences into expertise. The field of KM can make significant contributions in the construction and development of EWS as a decision support system. Its relevance is to enable the linkage and interaction among various sectors in an active collaboration process of exchanging knowledge to enhance capacity to take effective actions.

This view is driven by a broad understanding of the concept of knowledge. *Knowledge* is regarded as "understanding gained from experience."[85] It enables the use of information to make decisions and take action.[86] Courtney emphasises that "knowledge can be viewed as the potential for action."[87] Damián Indij puts it decisively that "knowledge is information transformed into

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[83]   R. Basher, 'Global Early Warning System for Natural Hazards: Systematic and People-Centred,' UN-ISDR Platform for the Promotion of Early Warning, Philosophical Transactions of The Royal Society, 364, 28 June 2006, pp. 2175-2176.

[84]   Basher, p. 2175.

[85]   D. Weidner and M.S. Rahman, *Review of the SURF System: Way Forward for Knowledge Management in UNDP*, Report Prepared for Evaluation Office, UNDP, New York, July 2000, p.6.

[86]   Weidner and Rahman, p. 6.

[87]   Courtney, p. 22.

capabilities for effective action."[88] Essentially, it also involves the ability to "adjust behaviour in changing circumstances", meaning learning as circumstances change,[89] given the current complex and dynamic environments. Knowledge embodies several interrelated elements including "awareness, intelligence, beliefs, paradigms, observation, investigation, and interpretation of information," that influence decision making processes and actions.[90] It should however be noted that the "knowledge" concept referred to here, is considered in the context of organisations, not as the "sole province of individuals."[91] Within the framework of KM, though knowledge "originates in the minds of individuals," the term "management" implies that the focus is on organisations. In this context, knowledge impacts on organisational members' capacity to act effectively. KM follows the systematic and interactive processes that enable the "discovery, capture, sharing and application" of knowledge to impact on producing effective decisions and actions. Consequently, the usefulness of integrating KM framework in EWS is revealed. EWS follows "transparency, openness and sharing" in a decentralised approach, relying on "various sources for inputs and analysis," and it operates within the framework of collaboration.[92] *This is what KM is all about*.

This is relevant, in the case of SADC's conflict prevention strategy based on EWS. It is a political organisation that is highly complex (and politically charged) due to multiple and diverse stakeholders who naturally pursue sectional (state/national) interests. Creating a common knowledge platform, shared vision and outlook regarding peace intervention strategies is crucial. This study expounds on the imperative of integrating KM framework in EWS to facilitate common understanding and cooperative effort in coordinating responses to conflict prevention. Drawing from KM researchers, the key imperative is to harness and exploit the collective expertise, intelligence, and experiences[93] in order to increase, share or improve the use of knowledge in addressing the conflict challenges.[94]

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[88]   D. Indij, 'Knowledge Management: Active and Collaborative Alliances for Effective Development,' *Symposium on Learning Alliances for Scaling up Innovative Approaches in the Water and Sanitation Sector*, 7-9 June 2005, Delft, the Netherlands, p. 69.

[89]   Courtney, p. 22.

[90]   This is a conceptual network deriving from a multiplicity of literature that crux of this study:

[91]   H. Hasan and K. Crawford, 'Knowledge Mobilization in Communities Through Socio-Technical Systems,' *Knowledge Management Research and Practice*, Vol 5, (http://www.palgrave-journals.com/kmrp/journal/v5/n4/full/html), 2007.

[92]   *Ibid.*

[93]   A. S. Bollinger and R. D. Smith, 'The Organizational Knowledge as Strategic Assets,' *Journal of Knowledge Management*, Vol 5(1), 2001, pp. 8-10.

[94]   K. Haggie, 'Choosing Your Knowledge Management Strategy,' *Journal of Knowledge Management Practice*, June, 2003, (http://www.tlainc.com/jkmpv3.htm).

1.3.   Research objectives

In the context of the current subregional (SADC) security dispensation, taking into account the dynamic conflict paradigm and the requirements for operationalising EWS for conflict prevention, the objectives of this study are:

1.3.1. To ascertain the nature of institutional instruments in SADC designed to generate, organise and disseminate knowledge to impact on EWS for conflict prevention;
1.3.2. To examine SADC's security framework regarding how knowledge is acquired, organised, integrated and applied in the operationalisation of EWS;
1.3.3. To determine the KM processes in the improvement and effective operationalisation of EWS within SADC.

1.4.   Research questions

It is assumed that the appropriate integration of KM processes in the generation, organisation and dissemination of knowledge in EWS will enhance the SADC Organ's ability in quality decision making and response capability with reference to conflict prevention. In this context, and to resonate with the research objectives of this study as outlined above, the key research questions are as follows:

1.4.1. Do institutional instruments in SADC sufficiently support the generation, organisation and dissemination of knowledge to impact on EWS for conflict prevention?
1.4.2. What is the nature of knowledge acquisition and knowledge flow within SADC regarding the operationalisation of EWS?
1.2.3. How to facilitate the integration of KM processes for the effective operationalisation of EWS in SADC?

1.5.   Research methods

The study is qualitative in nature. Data collection involved the use of published policy and strategy documents from the United Nations, African Union, Inter-governmental Authority on Development, the South African Department of Defence, and the Southern African Development Community for analysis. The study is primarily critical and exploratory. The focus is on examining the institutional structures, procedures and practices within SADC, within the context of EWS for

conflict prevention, and to determine how its capabilities in decision making and response actions to contribute towards achieving sustainable peace in the subregion. The study is also focused on the SADC Organ for Politics, Defence and Security as well as the Organ's Protocol, as a unit of analysis in order to determine the nature and capability of existing institutional instruments for operationalising EWS for conflict prevention from the perspective of KM.

An array of secondary sources has also been used for theoretical input and to ascertain the state of the prevailing debates. The literature material is largely from the business management, organisational development and strategic management domains, although there are other publications from the political science and as well as defence and security management sector that have been used in this study. To facilitate a richer conceptual development, publications that advance critical theoretical analysis of the concept of knowledge and knowledge management have been used. Publications written by accredited researchers and practioners of KM have provided valuable theoretical content to the study, for example, Nonaka *et al*, and Becerra-Fernandez *et al*. These form the backbone of the study. Additionally, there are some books that have enhanced the discussion due to their treatment of other critical aspects of KM and organisational dynamics. Among others, Morgan (on organisations), Senge (on systems), and Weick (on sense-making). These books served to enrich the debate regarding efforts to implement KM. There are also some journal articles on case studies where KM has been implemented. They provide an update with regard to current debates on KM. In support of primary sources (official records from governments and international organisations), there are also journal articles dealing with the issue of EWS and conflict analysis. They also provide key arguments about the effective operationalisation of EWS and offer alternative solutions. Added to these are reports from research centres that augment the journal articles. These literature materials have been useful in the formulation of the key assumptions and arguments for this study. Internet sources have also been used, mainly for definition purposes and also gaining access to international sources to enrich the debate regarding KM and also EWS. Other materials that have been utilised in this study are reports and papers originating from workshops and conferences. These reports have provided valuable primary information as they are mainly the products of discussions and consultative forums, in addition to academic debates. The study has also benefited greatly from international publications including position papers, concept papers and background papers that have been generated in order to initiate debate and to influence government policy, for example the background paper from the UK ministry of foreign affairs; UN agencies' reports (UNDP, SURF) and also the AU experts workshop reports regarding conflict and early warning challenges. These have helped in terms of deepening

an understanding of the key concepts that form part of the key arguments in the study: knowledge, knowledge management, and early warning systems.

1.6.   Delimitation

A major limitation of this study is the absence of personal interviews regarding the perceptions, values, culture and believes regarding the utilisation of information and knowledge within the SADC structures as well as the perceptions regarding the operationalisation of EWS for conflict prevention. However, this is supplemented by data relating to these aspects that have been drawn from credible sources. These sources include the Institute for Security Studies (ISS), Global Partnership for the Prevention of Armed Conflict Southern Africa (GPPAC) and the Centre for Conflict Resolution (CCR) which are dedicated research centres that hold regular workshops and seminars relating to conflict analysis and resolution mechanisms. These centres engage with national governments for the purposes of searching for solutions with regard to the prevention of conflicts. In addition, they operate in collaboration with other international organisations which also work in similar environments, thus creating an opportunity to deepen understanding through an exchange of ideas and information. The workshops and seminars organised, and sometimes also sponsored by governments, are attended by delegates from the national government departments (defence, foreign affairs, police/safety and security) and they also serve in the (sub)structures of the intergovernmental bodies such as SADC.[95] Some of the delegates also serve as consultants to governments for advisory purposes. These delegates are able to bring unique insights and nuanced understanding to the discussion forums. In other words, they bring inside information (articulating the expressions and views) from the side of governments as they attend those workshops and seminars in their capacity as government functionaries. The prevailing ideas and views that have been captured in minutes and reports from those discussion forums have formed a critical component of the primary sources in this study, thus complementing the lack of personal interviews.

1.7.   Organisational structure of the study

For logical exposition and development of the argument, the study consists of five chapters. The first chapter is the "Introduction". It sets out the background and context of the study. The problems that inspired this study are elucidated. It also outlines the objectives and the research

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[95]   See for example the delegates of the Seminar held in Cape Town during June 2005, In 'Wither SADC? Southern Africa's Post-apartheid Security Agenda,' A Policy Advisory Group Seminar Report.

questions on the basis of which the argument is constructed. Furthermore, the research methods and the scope of the study are explained. The organisational structure regarding the contents of this study is also sketched out in order to illuminate the logical development of the argument.

The second chapter is titled "KM Theory in the Context of EWS – A Conceptual Argument." It focuses on theoretical debates regarding the concepts of knowledge, knowledge management and early warning systems. The main objective is to spell out the complexities and elusiveness of these terms and to develop a conceptual argument for addressing the key questions of the study. The various conceptual dimensions are analysed and interpreted in order to draw attention to their nature and impact on current thinking with regard to organisational challenges and the dynamics of organisational decision-making.

The third chapter is titled "Operationalising EWS: SADC's Bureacratic Complexities and Institutional Limitations." There is a particular focus on the institutional norms, procedures and processes for conflict prevention, specifically the conceptualisation of EWS. The purpose is to expound on the *politico-bureaucratic* complexities constraining SADC's decision making effectiveness. It reflects on the conceptualisation and consolidation of EWS thought in Africa. It also sketches out the organisational dynamics of SADC with the view to highlighting bureaucratic rigidities and systemic complexities resulting from power relations, hierarchical authority and diverse political inclinations. These impact on the ability of SADC to be adequately prepared for surprises and making swift decisions and response actions in the context of EWS. Such a scrutiny is vital for exposing the conceptual strengths and limitations with respect to SADC's institutional capacity for dealing with complex social problems like conflict situations. It also creates an opportunity to project alternative ways for the functioning of institutional platforms to ensure their efficiency in utilising the conflict prevention instruments – EWS.

The fourth chapter draws from the results of an analysis in chapter three and expounds the alternative frameworks and mechanisms for facilitating the effective operationalisation of EWS. The chapter is titled "A Path to Praxis: Advancing Knowledgeable Actions in EWS." It delineates fundamental KM structures required to surmount organisational bureaucratic rigidities, facilitate versatile interface and mutual understanding among multiple stakeholders, enable multiple perspectives development and enhance ability to take rational actions in response to conflicts. The focus of the discussion is on how KM processes can *facilitate dynamic decision making* and for the implementation of better response actions towards conflict situations. The chapter elaborates on the models reflecting organisational decision-making processes as well as how learning is integrated into the EWS cycle in order to enhance competence in executing the response options. It also maps

out the dimensions of organisational structures and processes to facilitate knowledge exchange, as well as outline organisational procedures necessary for enabling knowledge to inform judgements and initiate preventive actions.

The fifth chapter is titled "EWS for Conflict Prevention: From Concept to Action." It is an evaluation of the central features of the findings in the study. It focuses on the implications of the research and also provides recommendations with regard to how SADC can reconstruct its institutional mechanisms and integrate KM processes in its practices to ensure that EWS translates into meaningful actions to achieve sustainable peace in the subregion.

CHAPTER 2

KM THEORY IN THE CONTEXT OF EWS – A CONCEPTUAL ARGUMENT

2.1.   Introduction

The objective of this chapter is to consider the knowledge management (KM) concept and show various levels of emphasis in evolutionary context.   In the discussion, key constructs that constituted KM throughout its development will be explored as well as how they have shaped to the current understanding of the concept.   This notion of KM will then be used in the context of its applicability to early warning system (EWS) for conflict prevention.   The chapter will also elaborate on the model of EWS as a knowledge-intensive decision instrument in order to explicate its conceptual dimensions, with the view to illustrating the imperative of deploying KM interventions towards its effective operationalisation.   It is however, significant to commence with a consideration of the concept of knowledge, to reflect how it is seen by various researchers as it pertains to the concept of KM.   Apart from reflecting different fields of interest, the different epistemological orientations of the concept (knowledge) also affect the conceptual orientations of its management.   This chapter will highlight such differences and then elaborate on KM concept from its various dimensions representing the descriptive and the normative perspectives of different researchers, and also show the shifting focus in search of a consolidated framework in understanding and applying the concept to impact on organisational performance.

2.2.   The nature of knowledge as the driving force behind KM

Knowledge is regarded as a "dynamic" and "elastic" concept.[96]   Its definition has dominated philosophical discourse for many years.   Some researchers refer to it as "illusive and complex".[97]   Interest in the nature and meaning of the concept has pre-occupied earlier thinkers and theorists such as Aristotle, Plato, and Locke, followed by others later such as Karl Popper and Thomas Kuhn.[98]   The Information Society Technologies (IST) posits that "the meaning and value of knowledge" is dependent on the "context and specific task" to which it is being applied.[99]

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[96]   IST, *ROCKET, Roadmap to Communicating Knowledge Essential for the IndusTrial Environment,* p. 12.
[97]   C. V. Seng, E. Zannes and R. W. Pace, 'The Contributions of Knowledge Management to Workplace Learning,' *Journal of Workplace Learning,* Vol 14 (4), 2002, p. 139.
[98]   D. Stenmark, 'Information vs. Knowledge: The Role of Intranets in the Knowledge Management,' *Proceedings of the 35th Hawaii International Conference on System Sciences,* 2002, p. 1.
[99]   IST, *ROCKET,* p. 12.

In some instances knowledge is conceptualised in contradistinction with data and information.[100] Boisot, for example, conceptualises knowledge as contextualised information that orientates an "agent" to act in particular manner based on the prevailing circumstances, while data is the "property" of things that may have meaning to an agent based on prior knowledge.[101] Information is defined as data with meaning and forms an "intermediary between data and knowledge."[102] Boisot explains that knowledge is not discernible but a deduction from the actions of "agents" can be made to ascertain its presence.[103] Seng *et al*, in addition to data, information and knowledge, refer to "wisdom or knowledge in action" which is hailed as *useful knowledge*.[104] These distinctions reflect the importance of a human being as the main source of knowledge, in knowing and also in actions.

Becerra-Fernandez *et al* also draw a distinction between the three entities whereby data is described as consisting of "hard facts, observations" or "that which is perceived without any meaning or intent".[105] Information is regarded as a "subset of data that contain meaning, context and intent," whilst knowledge is considered to be information that is rooted in decisions and actions.[106] This is an important point. Knowledge is a human asset that derives its usefulness if it impacts on *enabling effective actions*. It is a correlation between knowing and being able to act on the basis of that knowledge. Hence Seng *et al*, is correct in arguing that knowledge in action is useful knowledge. Thus, the concept of knowledge is viewed as *action oriented*. Becerra-Fernandez *et al* is also influenced by Ikujiro Nonaka's arguments. In their view, expanding on Nonaka's definition, knowledge is regarded as "justified beliefs about relationships among concepts relevant to that area".[107] In this definition, emphasis is on a "dynamic *human process* of justifying personal beliefs" in an endeavour to seek the "truth".[108] The element of "truth" depends on what the person believes and he/she is driven to act in the manner consistent with those beliefs. In 2001, Nonaka, Toyama and Byosière, advanced an argument that an individual's "value systems underpin knowledge."[109] These beliefs thus affect individual actions. The human dimensions of knowledge are stressed in the argument. Knowledge is considered to be "dynamic, relational and context-

100	Stenmark, p. 3; Becerra-Fernandez *et al*, pp. 12-13; Seng *et al*, p. 139.
101	M. H. Boisot, *The Knowledge Assets: Securing Competitive Advantage in the Information Economy*, New York: Oxford University Press, 1998, p. 12.
102	*Ibid*.
103	Boisot, p. 12.
104	Seng *et al*, p. 138.
105	Becerra-Fernandez *et al*, p. 13.
106	*Ibid*., p. 13.
107	Becerra-Fernandez *et al*, p. 13-14; See also I. Nonaka, 'A Dynamic Theory of Organizational Knowledge Creation', *Organization Science,* Vol 5 (1), February 1994, p. 15.
108	Nonaka, p. 15. (Italics, own emphasis).
109	Nonaka *et al*. A Theory of Organizational Knowledge Creation: Understanding the Dynamic Process of Creating Knowledge. In M. Dierkes, A. Berthoin Antal, J. Child and I. Nonaka (eds.), *Handbook of Organizational Learning and Knowledge*, New York: Oxford University Press, 2001, pp. 492-493.

specific," and it is produced in human interactions in social environment.[110] The behaviour, decisions and actions of individuals are the result of their "understanding, experience and comprehension"[111] as well as their beliefs as articulated in various forms or practices. This understanding provides the framework for managing knowledge, not from a static and conventional context of "management practice"[112], but to foster its creation, integration and application to pursue *organisational imperatives*. The understanding here is that the "management of knowledge" is the province of organisations. It means as a *social collective*, by enhancing interactivity, the organisation creates an opportunity for the learning process that would facilitate knowledge creation and integration to impact on performance.

Wilson argues that knowledge is a cognitive process that includes "comprehension, understanding and learning" that take place within the minds of individuals.[113] What follows from this argument is that, *"externalised"* messages in the form of "oral, written, symbolic and gestures" represent information that can be incorporated into the individual's knowledge structures through "assimilation, understanding and comprehension", *but does not constitute knowledge.*[114] This view impacts on the issue of the management of knowledge. Wilson insists that *knowledge cannot be managed* because it resides in the heads of people and thus cannot be manipulated in the similar sense as the *"externalised"* data and information. Thus articulated knowledge, according to Wilson, is not knowledge but information, and information *can* be managed, manipulated and controlled, not knowledge.[115] This perspective disregards the dynamic nature of knowledge and its dimension of human action that does not lend itself to conventional "management" practices. This is what Nonaka *et al* refer to as a "nonhuman view of knowledge in Western epistemology."[116] From the perspective of Nonaka *et al*:

> *"Knowledge is context specific and relational. It depends on the situation. It is dynamically created in social interactions between individuals both within and across organisations. Knowledge is also human and has an active and subjective nature*

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110   *Ibid*.
111   A similar notion is expressed in the definition of *knowledge*, by the UNDP SURF Report, p. 6.
112   This observation is made by Nonaka *et al* in cautioning against Western thought about management principles where "resources" are managed. Whereas knowledge is often referred to as the new key "resource" in the place of land, labour and capital, its management should not assume the precepts of orthodox management practices that are rigid and take out the human dimension in the context of social inter-subjective interaction.
113   T. D. Wilson, 'The Nonsense of Knowledge Management', *Information Research,* Vol 8 (1*)*, October 2002, p. 4.
114   Wilson, p. 4.
115   *Ibid.* (Italics, my emphasis).
116   Nonaka *et al*, p. 493.

conveyed by … 'commitment' and 'belief', which are deeply rooted in individuals' value systems. Knowledge is essentially related to human action and emotion."[117]

The qualitative character of knowledge is recognised. Belief systems and feelings (fear, desire, anger and happiness) are attributes that play a role in terms of how individuals perceive the world and how they conceptualise their interactions with the environment. Belief systems are also critical in influencing the way an individual *acts* in a particular situation. The *action* perspective of knowledge impacts on *changes in the state of being*, e.g. problem solution or developing new insights. Thus knowledge is more than just information because it facilitates action. What Wilson regards as just information, is *actually knowledge*, i.e. "the tested, evaluated and surviving structure of information that is developed by a living system to help itself to solve problems and which may help it to adapt."[118] It is the adaptive quality that differentiates knowledge from information and it facilitates flexible decision making and acting in response to changing needs and conditions.

The point of Wilson's argument is in the differentiation of information and knowledge in terms of where it is located and also in its format. Assessing his argument, it has to be emphasised that knowledge does not cease to be knowledge when it is external to a human agent. It becomes represented in different format to enable it to be integrated and to become of utilitarian value that produces meaningful actions. It is in this light that, though knowledge is developed in the minds of individuals, its significance and value is recognised when it manifests in the real world to solve problems and also when it influences actions. Probst *et al* cover this point clearly in the following sense:

"Knowledge is the whole body of cognitions and skills which individuals use to solve problems. It includes both theories and practical, everyday rules and instructions for action. Knowledge is based on data and information, but unlike these, it always bound to persons. It is constructed by individuals, and represents their beliefs about causal relationships."[119]

The management of knowledge is about fostering creative learning, knowledge development and integration across individuals or groups in organisations to impact on performance. Nonaka,

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[117]   Nonaka *et al*, p. 493.
[118]   J. M. Firestone, 'What Knowledge is', *Prepublication Excerpt from Riskonomics: Reducing Risk by Killing Your Worst Ideas*, 2006, pp. 1-26 (accessed at www.dkms.com). This is the generalised definition of knowledge that forms the conceptual orientation of the current knowledge management (KM) generation which began in 2002.
[119]   Quoted in Ramanauskiene, *Knowledge Management*.

focusing mainly on the nature of knowledge in people, argues that there are two dimensions of knowledge - *tacit* (internal to people) and *explicit* (external to people – out there) knowledge.[120] Tacit knowledge consists of "procedures, concepts, interpretations, judgements, paradigms, beliefs, schemata, and viewpoints" that impact on an individual's perception of the world and define the way he/she interacts with it and with other individuals.[121] This dimension of knowledge manifests in "human action, rules, ideals, values, commitment and emotions."[122] It is not easy to see, observe or be expressible due to its highly personalised nature. It is embedded in experiences that constitute the reality of the individuals' environment. It derives from observations and learning from interacting with the environment and among individuals. It is the knowledge that integrates the belief systems, values and principles and it is also shaped by the feelings and interests of individuals. It is also important to note that tacit knowledge is anchored in the cultural dynamics of a particular community, thus impacting on the manner in which a person feels and acts in a particular situation. Tacit knowledge is also difficult to "communicate, formalise or share."[123] As indicated above, associated elements that constitute this dimension of knowledge include "individual values, ideals, insights and intuitions."[124] Nonaka *et al* explain that tacit knowledge can be viewed in two categories: technical and cognitive.[125] They claim the technical dimension of tacit knowledge comprise of such aspects as craftsmanship and skills that are terminologically embodied in the "know-how". For instance, people who are excellent artisans have developed wealth of experience in the course of their professions but cannot *"externalise"* what they know in technical or scientific terms.[126] While on the other side, that is the cognitive dimension, includes aspects like beliefs, paradigms, perspectives, ideals and viewpoints are imprinted in the individuals through which the world is perceived. This is the knowledge that Wilson is concerned about, that it cannot be managed because it is located in the human mind. However, he neglects the human ability to act which is an activity dimension of knowledge.

The explicit dimension of knowledge can be expressed and shared in the form of "data, numbers, language, scientific formulas, specifications, manuals and products."[127] This type of knowledge is "articulated, codified and communicated in symbols" or linguistically.[128] This is the knowledge

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[120]   Nonaka, p. 16.
[121]   Nonaka; See also M. Alavi and D. E. Leidner, 'Review: Knowledge Management and Knowledge Management Systems: Conceptual Foundations and Research Issues', *MIS Quarterly,* Vol 25 (1*)*, March 2001, p. 109.
[122]   Nonaka *et al*, pp. 492-493.
[123]   *Ibid.*
[124]   *Ibid.*
[125]   Nonaka *et al*, pp. 492-493.
[126]   *Ibid.*, p. 494.
[127]   *Ibid.*
[128]   Alavi and Leidner, p. 110.

that Wilson refers to as information which *can* be managed. However, what Nonaka *et al* stress is that the two dimensions of knowledge complement each, i.e. *they do not exist as separate and distinct dichotomous entities.*[129] Again, this is contrary to Wilson's argument. Neither of the two dimensions should be overemphasised because, for example, in case of too much focus on explicit knowledge, it might lead to "paralysis by analysis", whilst excessive emphasis on tacit knowledge might lead to "relying too heavily on past success," thus fail to be innovative.[130] It is imperative to recognise both (as important) and derive value by analytically reflecting on experience (tacit) in order to gain deeper meaning, then apply (externalise) to new encounters that will enhance the quality of knowledge, and the quality of actions[131] Nonaka summarises the above argument by emphasising that "while tacit knowledge held by individuals may lie at the heart of the knowledge creating process [knowledge conversion modes from tacit to explicit and vice versa], realizing the practical benefits of that knowledge centres on its externalization …"[132] Externalisation is about "putting knowledge to use," such as "making a decision"[133] and acting. Wilson's arguments derive primarily from the information processing paradigm where the finding, synthesising and dissemination of relevant information aided by technology was the original focus for improvement of organisational performance. Nonaka's contribution represented an alternative view of knowledge and placed a human being (based on the knowing and acting capabilities) in the centre. Thus the tacit-explicit dimensions of knowledge in the social inter-subjective context of human interaction facilitate learning and knowledge production, actualised through practical outcomes (decisions and actions), which is integral to facilitating organisational innovation.

Becerra-Fernandez *et al* allude to alternative notions of knowledge that have implications to its management. They refer to the view that knowledge can be considered from a subjective or objective viewpoint.[134] From the subjective viewpoint, knowledge is considered to exist in human experiences and social practices. It can be viewed as what Alavi and Leidner refer to as "a fact of knowing" which is considered to be a *"condition of understanding gained through experience or study,"*[135] based on what has been perceived or learned. Individuals need to be enabled to increase their personal knowledge in order to maximise the quality of their actions. Also, knowledge as a *practice* entails knowledge being held in organisational activities by a group with collective beliefs that manifest in practice and not possessed in the minds of individuals.[136]

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[129]   Nonaka *et al*, p. 494.
[130]   *Ibid.*
[131]   *Ibid.*
[132]   Nonaka (1994), p. 20.
[133]   Ramanauskiene, *Knowledge Management.*
[134]   Becerra-Fernandez *et al*, p. 16.
[135]   Alavi and Leidner, p. 110; See also UNDP, *Review of the SURF System,* p. 6.
[136]   Becerra-Fernandez, p. 17.

The alternative view is that knowledge is objective - a thing that can be stored, distributed, transferred and manipulated.[137] Added to this, is the view that knowledge is a condition of access to information – access, retrieval and utilisation of information.[138] This conception of knowledge is rooted in information and technology-based perspectives with emphasis on the availability and proliferation of "externalised knowledge", and neglects the knowledge creation dimension. It is still forms part of the original thinking in terms of how knowledge should be managed. Of primary importance in the later thinking is the linkage of *knowing and action*, i. e. possessing knowledge that enables one to act. Alavi and Leidner refer to the linkage of knowing and acting as the "application of expertise."[139] It is this linkage that is valuable to organisations in terms of decision making and taking actions. To leverage knowledge in order to impact on organisational performance, it is imperative to link it to action because it is about "making things happen." Knowledge needs to be created, harnessed and integrated effectively in order to impact on actions. In addition to these perspectives, knowledge can also be considered to be a *capability* that can be "discovered, improved upon and applied" to affect human action.[140] A significant point made by Becerra-Fernadez *et al* relates to the "location" of knowledge. Knowledge resides in "individuals or groups" (people) and is influenced by beliefs (tacit).[141] It is also located in "routines, rules, norms and practices, books, documents or electronic media," referred to as "artefacts" (explicit).[142] The third area where knowledge can be found is in "organisational entities" – knowledge not stored in minds of individuals but available in the "norms, values, practices and culture in an organisation or across units."[143] Where knowledge is located and in what format, coming back to Wilson's criticism, does not make it less knowledge. The action dimension of it makes it valuable. Hislop draws two important distinctions of knowledge epistemologies: *objectivist epistemology* that regards knowledge as objective facts capable of being disembodied from agents; and the *practice-based epistemology* that regards knowing and acting as emanating from social and cultural constructions, thus making knowledge inseparable to action.[144]

Pragmatically, it is expedient to categorise knowledge in the context of what organisations consider useful for their unique circumstances.[145] In this study, knowledge is appreciated in the context of *knowing and action*, particularly in *an organisational setting*. It is taken into account that

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137   Alavi and Leidner, p. 110.
138   Alavi and Leidner, p. 110; Becerra-Fernandez, p. 18.
139   Alavi and Leidner, p. 110.
140   Becerra-Fernandez, p. 18.
141   *Ibid.*, p. 25.
142   *Ibid.*
143   Becerra-Fernandez, p. 25.
144   Hislop, pp. 13-29.
145   Alavi and Leidner, pp. 110 and 112.

knowledge is produced in the human mind through cognitive processes, and of course, influenced by the experiences and reflections of individuals. As the IST has argued, "knowledge is a dynamic inter-subjective social quality." This notion implies interaction between individuals and groups (social dimension), in an organisational context where social interactivity can take place. The principal factor is that it should be articulated, shared and used in actions. The IST asserts that knowledge enables "capacity for action." Thus KM is, according to IST, essentially about "creating an environment that fosters the continuous creation, aggregation, use and reuse of both organisational and personal knowledge in the pursuit of organisational objectives."[146]

René Tissen *et al* argue that knowledge consists of the key building blocks: "information, intellect and interaction."[147] In this view, they assert that knowledge originates from thought processes and, through interaction between information (stimulus) and intellect (reasoning capacity), one is capable of give meaning to the world.[148] Knowledge is enhanced and developed through an "integration of ideas, experience, intuition, assertions, skills and lessons learned" that are valuable in informing decisions and influencing actions.[149] It can be fostered through *social interaction* (implying more than one individual) and enhanced through learning in order to be meaningfully applied *to the benefit of the organisation*. In a rich and broadened formulation of Karl Wiig, knowledge is regarded as consisting of:

> *"Truths and beliefs, perspectives and concepts, judgements and expectations, methodologies and know-how and is possessed by humans, agents or other active entities and is used to receive information and to recognize and identify; analyze, interpret, and evaluate; synthesize and decide; plan, implement, monitor, and adapt – i.e. act more or less intelligently. In other words, knowledge is used to determine what a specific situation means and how to handle it."* [150]

The above formulation takes account of human being as the key agent of knowledge and that he/she must be enabled to act with intelligence. He/she can draw from his/her experiences for evaluation, analysis and interpretation of the situation, acquire and utilise the appropriate information to effectively deal with that particular situation. Ultimately, knowledge must *enable action*. It must manifest in practical circumstances in order to be of benefit in a given situation. Alavi and Leidner

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[146]   *IST, ROCKET*, p. 12.
[147]   R. Tissen, D. Andriessen and F. L. Deprez, *The Knowledge Dividend: Creating High-Performance Companies through Value-based Knowledge Management,* New York: Prentice Hall, 2000, 185.
[148]   *Ibid.*
[149]   IST, *ROCKET,* p. 12.
[150]   Quoted in Becerra-Fernandez, pp. 15-16.

support the above view when arguing that "knowledge is information made actionable, authenticated and thought through" (meaning evaluated and validated) in order to "improve flexibility, improve decision-making and productivity."[151]   Even though the subjective and objective perspectives of knowledge are mutually beneficial entities that complement one another, this study places emphasis on the action perspective because, as confirmed in literature, knowledge must *have practical utility* by being translated into the "creation or improvement of observable products, services and processes," which are integral to organisational objectives.[152]   The performance capacity of an organisation is "dependent on the availability and the use of knowledge." [153]   The different conceptions of knowledge affect the treatment and approaches to knowledge management (KM) based on the orientations of the researchers.   In fact, Nonaka is among those who eschewed the information processing paradigm, and placed a human being in the interactive process of relating as the main focus in KM.   In his approach, Nonaka is more philosophical and deals more with the organisational knowledge-creation processes.   Alavi and Leidner emphasise the centrality of information technology, in particular, computer-mediated communication processes as significant elements in KM.   Becerra-Fernandez *et al* derive arguments from both analysts and elaborate more on the KM processes, KM systems, KM technologies and KM infrastructures.   Understanding the varying conception of knowledge forms the basis for the conceptualisation of KM practices as a strategic imperative for organisations.   To enhance a deeper understanding of the theoretical grounding of this study, it is vital to consider the recent evolution and convergence in KM thinking.

2.3.   The knowledge management (KM) frameworks in evolutionary perspective

The complexity of the concept of *knowledge*, as a "valuable resource"[154] led to varying approaches towards its management.   Books, papers, journal articles and other sources abounded with discussions and analysis regarding knowledge and its management with the view to impacting on performance.   This resulted in heterogeneous contributions ranging from information and technology management systems, strategic management, human resources, psychology, and other fields of interest.   Consequently, there remained a certain degree of ambiguity in terminology,

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[151]   Alavi and Leidner, Knowledge Management Systems: Issues, Challenges and Benefits. In S. Barnes (ed), *Knowledge Management Systems: Theory and Practice*, London: Thompson Learning, 2002, p. 16.

[152]   *ROCKET,* p. 14; A. Gupta and J. McDaniel, 'Creating Competitive Advantage by Effectively Managing Knowledge: A Framework for Knowledge Management,' *Journal of Knowledge Management Practice,* Vol 3, October 2002, (http://www.tlainc.com/articl139.htm).

[153]   Becerra-Fernandez, p. 2.

[154]   See A. S. Bollinger and R. D. Smith, 'Managing Organizational Knowledge as a Strategic Asset,' *Journal of Knowledge Management,* Vol 5 (1), 2001, p. 8.

which, Bollinger and Smith describe as "a fragmented dialogue on the topic."[155] The approaches and views of KM have through the years evolved into generations with associated variants.[156] Despite multiple approaches representing a wide spectrum of perspectives in the field of KM, Davenport and Prusak posit that KM projects are undertaken to pursue one of the following key objectives:

- *to create knowledge repositories to store knowledge and information, to make knowledge visible and show the role of knowledge in organisations mainly through maps, yellow pages and hypertext tools;*

- *to improve knowledge access or transfer, to develop a knowledge intensive culture by encouraging and aggregating behaviours such as knowledge sharing and proactively seeking and providing knowledge; and*

- *to enhance the knowledge environment to facilitate creation, transfer, and use of knowledge, to build a knowledge infrastructure by creating a web of connections among people [exploiting information and communication technology], given space and time, tools and encouragement to interact and collaborate.* [157]

The above aims are either pursued both as the goal of KM and as the process, depending on organisational interests.[158] Some researchers have evolved conceptual approaches to KM on the foundation of the above aims. Pasteur *et al* explain that KM draws from a wide range of theoretical positions through the years, without a unifying conceptual framework. In their view, recognition is given to the generations of KM, their transition from information processes (data and information organisation and storage), to embracing the concept of learning in the social context. [159] The information and technology based KM perspectives, encapsulated in the above aims (the last bullet), have found expression in Alavi and Leidner.[160] The key KM processes in Alavi and Leidner are that KM should be considered in the context of "major" *processes* involving a variety of

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[155]   Bollinger and Smith, p. 9.

[156]   See D. J. Snowden, 'Complex Acts of Knowing: Paradox of Descriptive Self-awareness', *Special Edition Journal of Knowledge Management*, Vol 6 (2), May 2002, pp. 1-14.; See also J. M. Firestone and M. W. McElroy, 'Generations of Knowledge Management', Executive Information Systems, Inc, 2002, pp. 1-51; and also Firestone and McElroy, 'Doing Knowledge Management', The Learning Organization, Vol 12 No 2, 2005, pp. 1-29.

[157]   T. H. Davernport and L. Prusak, *Working Knowledge,* Harvard Business School Press, 1998, as quoted in Alavi and Leidner, p. 113.

[158]   C. B. Crawford and C. S. Strohkirch, 'The Critical Role of Communication in Knowledge Organizations: Communication Apprehension as a Predictor of Knowledge Management Functions,' *Journal of Knowledge Management Practice,* Vol 7 (4), December 2006, (accessed at http://www.tlainc.com/artil122.htm).

[159]   K. Pasteur *et al*, 'Knowledge Management and Organisational Learning for Development', *KM4Dev Workshop Paper,* 10-12 July 2006, Institute of Development Studies, (www.ids.ac.uk), p. 4.

[160]   Alavi and Leidner, pp. 107-136.

activities, that is "storing/retrieving, transferring and applying knowledge."[161] They continue to point out that "these major processes can be subdivided, for example, into creating internal knowledge, acquiring external knowledge, storing knowledge in documents … routines … updating the knowledge and sharing knowledge internally and externally [all three aims]."[162] Emphasis is placed on information and communication technology (ICT), as the basis for effective KM. Alavi and Leidner's approach to KM have also evolved to infuse Nonaka's innovative knowledge creation study[163], and integrating IT as an enabler of creating knowledge (content) through creating the "virtual space" for social interaction and collaborative process.[164] Their approach is *normative* and not just *descriptive*,[165] in the sense that they offer proposals regarding how IT can facilitate knowledge creation, sharing, transfer and application. Thus, Alavi and Leidner's approach can be categorised under the computational paradigm that has its origins in the information processing orientation (which did not address the question of human thinking and knowledge creation) of the early 1990s generation of KM.

In answering the question of what KM is, Becerra-Fernandez *et al* argue that the concept refers to "doing what is needed to get the most out of knowledge resources."[166] Simplistically, "*doing what is needed*," they argue, means performing a variety of activities – of "discovering", "capturing", "organising" and making available "important knowledge *wherever and whenever* it is needed."[167] The purpose is to ensure that knowledge is made available to the right people to enable them *to act* effectively. This notion of KM represent a "mix" of earlier views that assumed that knowledge is "already available" and needs to be integrated across the organisation (through IT) and the latest conception of KM that human aspects of social interaction for learning and knowledge creation are imperative for sustained organisational innovativeness in improving performance. Seng *et al* refer to KM in terms of how organisations "identify, capture, organise and process information" to create knowledge that will be *used to solve problems* and improve organisational performance.[168] Becerra-Fernadez *et al* and Seng *et al*'s definitions of KM provide a broad framework that emphasises the development of management practices and tools to leverage knowledge for effective

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161	Alavi and Leidner, p. 114.
162	*Ibid.*, pp. 114-115.
163	Nonaka's widely publicized Socialization, Externalization, Combination, and Internalization (SECI) knowledge creation model in the tacit-explicit dimension.
164	*Ibid.*, p. 116.
165	M. B. Lloria, 'A Review of the Main Approaches to Knowledge Management', *Knowledge Management Research and Practice*, 6, 2008, pp. 86-87; the author distinguishes between *descriptive perspective*: focus on describing the firm as the creator of knowledge and offer no suggestion regarding what should be done for effective KM; and *normative perspective*: focus on suggestions and proposals regarding what organizations should do in order to manage knowledge effectively.
166	Becerra-Fernandez *et al*, p. 2.
167	*Ibid.*, p. 3.
168	Seng *et al*, p. 140.

actions.[169] Bollinger and Smith suggest that the goal of KM should be to harness and exploit the collective expertise, intelligence, experiences and skills; in order to secure viability and success of organisations.[170] These views recognise the centrality of people as a social collective, but focus of "managing knowledge" (already available for exploitation) and not necessarily on "creating knowledge", which is driving force behind "the new knowledge management" approach.[171] Haggie argues that KM is meant to design processes, tools, and structures in order to increase, renew, share or improve the use of knowledge in organisations.[172] It reflects an "old generation" of KM that assumes that knowledge is *already available* in organisations and should be "captured" and "shared" across organisational nodes. This notion is criticised (in the new KM thinking advocated by Firestone and McEloy since 2002) for not addressing the question of knowledge creation, and not considering the necessity of "new knowledge" in contributing to the body of knowledge required for innovation. Focusing on the "capturing, codification and distribution" side of KM needs to be balanced with "effective thinking and knowledge construction" to impact on organisational activities and practices. The new thinking has shifted towards the "production and integration [distribution]" side (the new KM), with emphasis on the learning processes in social interaction, where IT still plays the integrative role in KM initiatives (no longer as the cornerstone of KM).[173] In certain instances, researchers reflect the techno-centric approaches (computational paradigm) in KM projects, and others are more concerned with the social aspects and interactive learning in organisations (people factor) - organic paradigm.[174] Advocates on the new KM thinking emphasise the centrality human agents in continuous process of learning and knowledge creation in order to adapt to changing organisational needs.[175] Some researchers approach KM along the "supply -integration" dimension (initial thinking) and others on the "demand-production" dimension (latest thinking), also describing or normatively suggesting how organisations can manage knowledge effectively.

Clare and Detore, reflecting aspects of the "old thinking", refer to the contribution of KM in generating value from knowledge (pre-existing) by leveraging it to "reduce costs, increasing speed, enhancing quality and excellence" in organisational processes.[176] A critical question asked by Clare

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[169] M. K. Clare and A. W. Detore, *Knowledge Assets: Professional's Guide to Valuation and Financial Management*, Aspen Publishers, 2000, p. 15.

[170] Bollinger and Smith, pp. 8-10.

[171] Firestone and McElory, 'Doing Knowledge Management,' pp. 1-29.

[172] Haggie, 'Choosing Your Knowledge Management Strategy.'

[173] See I. Tuomi, 'The Future of Knowledge Management', *Lifelong Learning in Europe*, Vol VII, Issue 2, 2002, pp. 69-79. The author elaborates of the evolved role of IT, in the constructionistic and pragmatic context (facilitating human thinking).

[174] Lloria, pp. 85-86.

[175] For more detail, see J. M. Firestone's New KM papers (accessed at www.dkms.com)

[176] Clare and Detore, p. 15.

and Detore with regard to organisations is that "how to enable knowledge to impact on the future success."[177]   Seeking an answer to this question will "foster the desire to learn", based on a critical assessment of the organisational knowledge-base, "to value knowledge as an asset" that should be properly and actively "sought, generated, organised, and structured."[178]   This, argue Clare and Detore, will lead to "better reasoning," which is defined as "a process that uses the structure to access the knowledge content in order to perform some cognitive task such as making a decision, solving a problem or interpreting text."[179]   This view also fits within the framework of new KM thinking that put emphasis on learning.   Inherent in the question they posed is the normative perspective that suggests the need for organisational changes in practices for knowledge to impact on performance.

Becerra-Fernadez *et al* provide a broader framework with overlapping recognition of both the old and the new KM thinking.   KM is conceptualised in the context of interlocking processes of discovery (creation), capturing (organising), sharing and application of knowledge to impact on organisational performance.[180]   Those processes consist of various activities and sub-processes for the purpose of "getting the best out of knowledge resources."[181]   These broad processes are supported through the "integration of technologies and mechanisms", referring to the organisational "structural arrangements or social means" that facilitate KM.[182]   Technological mechanisms are the key enablers to facilitate the rapid application of knowledge.   Similarly, Barth offers the comprehensive representation of KM functions (with an assumption of pre-existing knowledge of the old KM generation) which are slanted towards a computational paradigm: a*ccessing* (search strategies, inquiry and research); *evaluating* (establishing facts, confirming information); *organising* (sifting, filing and archiving); *analysing* (critical thinking, reflection, sense-making and testing hypothesis); *conveying* (explanations, presentation and oral and written transmission); *collaborating* (sharing documents, meetings and conversations); and *securing* (awareness of threats and creating backup copies).[183]   The above elements are fused into primarily four basic processes of KM as outlined above; however, there is a caution that they are not representative of "monolithic set of activities," but are interconnected and intertwined which collectively contribute towards the

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[177]   Clare and Detore, p. 16.
[178]   *Ibid.,* p. 19.
[179]   *Ibid*., p. 123.
[180]   See Becerra-Fernandez *et al*, pp. 31-33.
[181]   *Ibid*., p. 30
[182]   *Ibid.,* p. 36.
[183]   S. Barth, A Framework for Personal Knowledge Management Tools, *KMWorld Vol 12 (1),* 2003, pp. 20-21, In Crawford and Strohkirch, 'The Critical Role of Communication in Knowledge Organizations'.

impacting of optimum organisational performance.[184]   The concerns of these processes reflect a hybrid of the KM in the context of human (social) learning and the techno-structural perspective.

Becerra-Fernandez *et al* reflect the hybrid approach when they take account of both the human (social) inter-subjective quality and the technical aspects of KM to "enhance, in a cost-effective fashion, the impact of knowledge on the unit's goal achievement."[185]   In this view, they bring to the fore Nonaka and his advocates' study of knowledge creation processes through the tacit-explicit knowledge interaction. Nonaka describes the four modes of knowledge conversion that change tacit to explicit knowledge and vice versa: socialisation, externalisation, internalisation and combination (SECI model).[186]   *Socialisation* refers to conversion of tacit knowledge to tacit knowledge in the context of social interactions and sharing of experiences in organisations (apprenticeship is used as an example whereby a novice learns from a master craftsman through observation and imitation, not in written or spoken words).[187]   *Externalisation* is the process of expressing tacit knowledge into explicit knowledge whereby new explicit concepts from tacit knowledge are created.[188]   Becerra-Fernandez *et al* elaborate on this point by explaining that the "products" of this process are "concepts, visuals, or figurative language (e.g. metaphors, analogies and narrative."[189]   Externalisation, to continue the argument of Becerra-Fernandez *et al,* can also help to "translate individuals' tacit knowledge into explicit forms that can be more easily understood by the rest of their group."[190]   *Combination* refers to the process of creating new explicit knowledge through "sorting, merging, adding, combining, reclassifying, synthesising and reconfiguration" of existing knowledge (explicit to explicit).[191]   Put differently, the combination process takes place when "explicit knowledge, data and information are reconfigured, recategorised, and recontextualised to produce new explicit knowledge."[192]   The useful techniques that could be used for combination process include "data mining" that could be used to "uncover new relationships among explicit data that may lead to predictive or categorization models that create new knowledge."[193]   Lastly, there is *internalisation*, which refers to transforming explicit knowledge into tacit knowledge through "learning and understanding" that emanate from reading, studying and discussions.[194]   Internalisation is basically an intake of external stimuli (explicit knowledge from books), for

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[184]   Alavi and Leidner, p. 116.
[185]   Becerra-Fernadez *et al*, p. 31.
[186]   See Nonaka pp. 19-20; The description is carried also in Nonaka *et al,* pp. 493-495.
[187]   *Ibid.*, p. 495.
[188]   Nonaka *et al*, pp. 495-498.
[189]   Becerra-Fernandez *et al*, p. 34.
[190]   *Ibid.*
[191]   Nonaka *et al*, p. 497.
[192]   Becerra-Fernandez *et al*, p. 33.
[193]   *Ibid.*
[194]   Nonaka *et al*, p. 497.

example, "reading manuals or stories"[195], that enable one to "learn", enhance or change their conceptions of the world.   Becerra-Fernandez *et al* explain that "explicit knowledge can be embodied in practice and action, so that an individual acquiring that knowledge can reexperience what others have gone through."[196]   This brings the emotional aspect of knowledge into the equation. By "reexperiencing", it implies sensing what others have sensed and felt, thus enriching the "texture" of the knowledge and impacting on the perceptions of that individual who is acquiring that knowledge. Nonaka's SECI processes can lead to the creation of "new knowledge through the dynamic interplay between tacit and explicit dimensions of knowledge."[197]   The emphasis of this model is creating knowledge, with people at the centre as knowledge is more than just information, but fundamentally bounded by emotions, values and intuition.   KM therefore can be seen as enabling the creation of new knowledge, however, not neglecting the question of IT architecture in improving productivity. Nonaka and his followers' studies can be placed within the framework of both categories of knowledge integration (sharing) and knowledge production (new KM thinking), since they permeate the generational dimensions of KM. The knowledge creation model accepts the necessity of engaging in various processes to produce knowledge and to integrate it across the organisation with the view to contribute to the knowledge-base and performance of that organisation. The model also reflects a normative perspective in terms of the suggestions offered to facilitate knowledge creation (concept of "ba").[198]

Nonaka *et al* insist that, of the four modes, *externalisation* is the most crucial to knowledge creation by virtue of creating new *explicit* concepts from tacit knowledge.[199]   It can be added that in organisational context (drawing from the old KM generation), it is fundamental that tacit knowledge is made explicit for integration (for *wider accessibility*) in order to have what is referred to as "organizational knowledge base … [consisting of] collective knowledge assets that the organization can use to perform its tasks."[200]   It can be emphasised that externalisation also involves putting knowledge to use.

The *knowledge capture* in KM, as put forward by Becerra-Fernadez *et al,* deals with "retrieving explicit or tacit knowledge that is in the heads of people, or artefacts or organisational entities, as well as acquiring knowledge from external sources."[201]   Because "knowledge exists within people

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[195]   Becerra-Fernadez et al, p. 34.
[196]   *Ibid.*
[197]   Nonaka *et al*, pp. 493-495.
[198]   See Nonaka *et al*, pp. 498-501; the reference here pertains to the question of *"Ba"* as the foundation of knowledge creation (space for learning, sharing, utilization).
[199]   Nonaka *et al*, p. 497.
[200]   Ramanauskiene, Knowledge Management.
[201]   Becerra-Fernandez *et al*, p. 34.

(individuals or groups); artefacts (practices, technologies or repositories) and organisational entities (organizational units or interorganizational networks),"[202] the intention is to enable its accessibility and the sharing thereof for the benefit of the wider organisational activities. Alavi and Leidner refer to this aspect of the knowledge process as storage/retrieval, not only for "codification" of knowledge content to address organisational problems of forgetting or losing track of acquired knowledge, but also to enable effective sharing.[203] The older KM thinking persists in this view.

The IST refer to "knowledge codification" which involves the process of putting knowledge into various forms for it to be *"accessed, leveraged and transferred"* regardless of whether individuals that possess that knowledge are present or absent.[204] There should be knowledge maps that provide the direction to find knowledge and to assist people in finding whatever they might need to know from other "people, place or thing."[205] In order to facilitate the availability and accessibility of knowledge, "written documentation, electronic databases, documented organisational procedures and process" should be organised appropriately as part of organisational memory, to enable future retrieval.[206] Alavi and Leidner argue that this process is imperative because memory assists in "storing and reapplying workable solutions", thus reducing wasteful expenditure of time and resources.[207] Knowledge representation, storage and access form part of the process of knowledge capture. The new KM paradigm does integrate the knowledge capture process as an important KM activity, in the framework of the knowledge cycle that includes knowledge production, knowledge transfer (shared/integrated) and knowledge use.[208] The development of "distributed organisational knowledge base" implies knowledge capture for integration and use in organisational performance.

In almost all literature material, *knowledge sharing* is consistently mentioned as an integral part of KM. It refers to the process whereby explicit or tacit knowledge is communicated to others. Becerra-Fernandez *et al* state that knowledge sharing should be considered in terms of "effective transfer", meaning that "the one who receives knowledge can be able to understand it accurately in order to act accordingly."[209] This is imperative with regard to the elimination of "misinterpretation and misunderstanding" that might lead to inappropriate *action.* The sharing or effective transfer of knowledge takes place "between individuals, from individuals to explicit sources, from individuals to groups, between groups, across groups and from the groups to organisations."[210] This is vital for

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[202]   Becerra-Fernandez *et al*, p. 34.
[203]   Alavi and Leidner, p. 118.
[204]   *IST, ROCKET*, pp. 17-18.
[205]   *Ibid.*
[206]   Alavi and Leidner, p. 118.
[207]   *Ibid.*
[208]   These are key components of Knowledge Life Cycle (KLC)
[209]   Becerra-Fernandez *et al*, p. 34.
[210]   Alavi and Leidner, p. 119.

the contribution to the organisational knowledge-base. Becerra-Fernandez *et al* also advance the concept of exchange which refers to "sharing of explicit knowledge … between individuals, groups and organisations."[211] Exchange is similar in practice to communicating knowledge in that it is essentially about integrating knowledge for use by others in an organisation. This notion concurs with the new KM thinking with regard to knowledge integration. Alavi and Leidner also argue that knowledge transfer should be aimed at making it available to "destinations" (wherever) where it is needed and can be used.[212] There should, however, be proper *systems* in place to facilitate the knowledge transfer. These systems may include personal interactions, formal or informal meetings, and also extensive networks of ICTs. Knowledge transfer (sharing) will enable people to make credible decisions and act effectively in order to achieve organisational objectives.[213] Organisational culture is also very important in fostering collaboration and co-operation in order to facilitate knowledge sharing, since, ultimately, KM involves people.[214] Organisational culture "reflects the norms and beliefs that guide the behaviour of the organizatiom's members."[215] KM should seek to encourage "appropriate culture" or behaviours in order to facilitate knowledge sharing. The most important thing is to get people to engage in the sharing of knowledge, not "hoarding" it. Becerra-Fernandez *et al*, emphasise the need for a positive organisational culture that facilitates the "encouragement for creation and sharing of knowledge."[216] There is a need to have a positive atmosphere that encourages frequent interaction, to gain an understanding of the "norms, values and belief systems" that shape people's views and behaviours. This view is shared by the IST who propose that, to eliminate the obstructive element of organisational culture, there should be a development of "a culture of openness and sharing, teamwork by motivating and engaging people."[217] This view, much as in includes the significant aspects of the new KM thinking, it is however still rooted in old generation of KM which focus on knowledge process, and not looking at ways to impact on the knowledge processing.[218]

The mechanisms for knowledge sharing or effective transfer at the knowledge processing level (old KM thinking) – depend on whether it is tacit or explicit knowledge that is created. In case of tacit knowledge, socialisation process such as "informal discussions, unscheduled meetings, informal

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211   Becerra-Fernandez *et al*, p. 35.
212   See Alavi and Leidner, p. 119 and Becerra-Fernandez *et al*, p. 5.
213   Bollinger and Smith, p. 11.
214   *Ibid.,* pp. 12-13; See also M. Gauvin *et al*, 'Understanding the State of Knowledge Management with Ontologies: The Case of the Canadian Military', *Journal of Knowledge Management Practice,* Vol 6, December 2005, (accessed at http://www.tlainc.com/articl101.htm).
215   Becerra-Fernandez *et al*, p. 40.
216   *Ibid*., p. 42.
217   *IST, ROCKET*, p. 30.
218   See Firestone and McElroy, 2003 and 2005 publications regarding the purpose of KM.

seminars and coffee-break conversations" are significant.[219]   There are also formal mechanisms through which to share/transfer knowledge such as "training sessions, apprenticeships and even transferring personnel to other units or exchange programmes."[220] Explicit knowledge can also be shared / transferred in the form of "studying documents or developing design manual for products" that can be acquired and used by someone else.[221] It is however, ultimately important to be able to *utilise that knowledge in practical* organisational circumstances.

The *application of knowledge* forms the most important aspect in KM. When knowledge is *utilised to make decisions* and *perform tasks (doing things/acting)*, it makes direct contribution to an organisation.[222] This view underpins the fundamental conceptualisation of KM in this study (which is also integral to the new KM conceptualisation). The use of knowledge, explain Becerra-Fernadez *et al*, is to "guide decisions and action."[223] They propose two sub-processes for enabling the utilisation of knowledge: *routines and direction. Direction* refers to "the process through which individuals possessing the knowledge direct the action of another individual without transferring to that person the knowledge underlying the direction," and *routines* on the other side involve "the utilization of knowledge embedded in procedures, rules and norms that guide future behaviour."[224] Figure 1 below provides a graphic representation of the four main KM processes and the associated sub-processes that are valuable in *putting knowledge to work*.

Figure 1: Knowledge Management Process with the relevant SECI elements[225]

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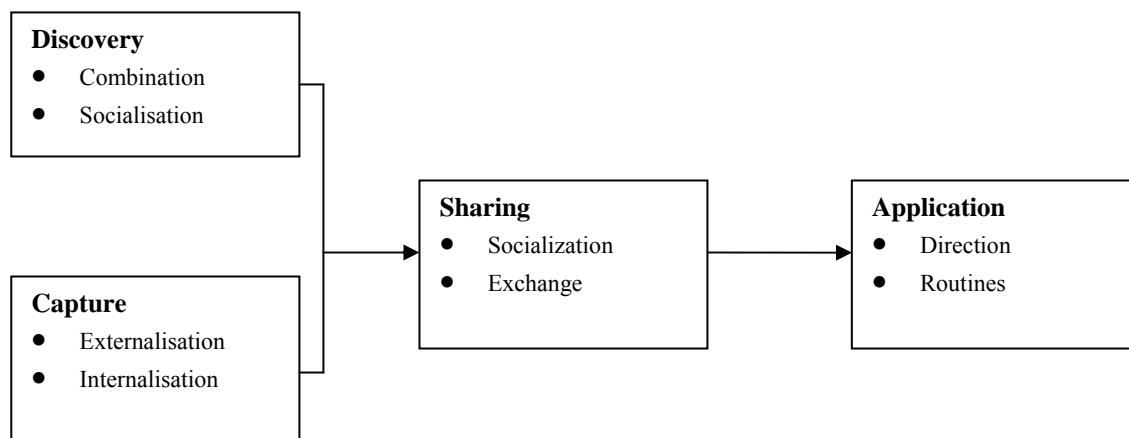
[219]   Alavi and Leidner, p. 120.
[220]   Alavi and Leidner, p. 121.
[221]   Becerra-Fernandez *et al*, p. 35.
[222]   *Ibid.*
[223]   *Ibid.*
[224]   *Ibid.*
[225]   *Ibid.,* p. 32.

Alavi and Leidner also offer alternative perspectives on the knowledge application process, though it is in the context of IT (older KM thinking). In their argument, they propose three mechanisms for the integration of knowledge in creating organisational capability; these are "directives" which refer to "rules, standards, procedures and instructions"; organisational routines which refer to the "development of task performance, process specifications and protocols of interaction"; and "self-contained task-teams" with the required expertise to engage in problem solving activities.[226] This knowledge application process, according to Alavi and Leidner, can be facilitated through technologies by providing the necessary support systems for communication and networking.[227] The IT-centred KM is more attuned to the older paradigm of managing "tested and validated facts" through technology, but does not necessarily discount the role of people. The new KM thinking brings into the equation the organic paradigm that includes people, group dynamics and culture in the social learning context to facilitate knowledge production.

Another hybrid perspective of KM is advanced by Gupta and McDaniel. Firstly, they define KM as a process that "involves a sequential framework of purposeful activity designed to produce tangible management decisions.[228] Secondly, KM, as a strategic process, consists of five components that are significant to produce effective management of knowledge: *harvesting* (from a widely quoted Nonaka *et al'* s SECI model)[229], *filtering* (assessment of relevance and importance), *configuration* (classifying, categorisation, organising and storing), *dissemination* (distribution via effective communication channels), and *application* (utilisation for realising objectives).[230] These components largely resonate with those proposed by Becerra-Fernandez *et al*. Particularly when it comes to closing the "knowing-doing gap", knowledge application is the most crucial component as it translates "knowledge in place" to "knowledge at work."[231] The processes that have been described above elaborate the logical progress of knowledge production (content development) to eventually applying it(use knowledge to solve organisational problems). This is consistent with new KM paradigm. In addition, there is also an important dimension of KM that addresses learning, which is also addressed in the old KM generation. In what is referred to as KM process cycle, Bollinger and Smith provide a model that consists of four phases.

They refer to *conceptualisation* which means the process of "identifying, representing, and classifying knowledge"; *reflection,* which involves an "analysis of strong and weak points"; *act,*

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226   Alavi and Leidner, p. 122.
227   *Ibid.*
228   Gupta and McDaniel, 'A Framework of Knowledge Management.'
229   See Nonaka *et al*, pp. 490-497.
230   *Italics* my emphasis, see Gupta and McDaniel.
231   *Ibid.*

which is the actual "consolidation, integration, development and distribution of knowledge"; and *review*, meaning evaluation of the actions taken to determine the availability and communicability of knowledge.[232] This is a cyclical process through which learning occurs in a continual loop.[233] Though this perspective still carries the assumption of pre-existing knowledge, it however adds to the new KM thinking by addressing the need for learning (implying developing new knowledge to cope with changes). Mustafa Sağsan proposes a KM life cycle that comprises of "creating (tacit and explicit), sharing (social and technical communication infrastructure), structuring (mapping, storage and retrieving), using (product, service and process) and *auditing* (knowledge assets and intellectual assets)."[234] The author reflects the approach of measuring knowledge in terms of availability and usage. The limitations of these KM approaches are that they do not explicitly emphasise learning that is derived from systematic process of reflection with the view to produce new knowledge to solve problems. It is taken for granted that knowledge is in place and what is needed is just to exploit it to enhance organisational performance. In the new KM thinking, learning is addressed in the context of continuously producing new knowledge in response to new organisational challenges. In the context of EWS, this study emphasises the need for deliberate efforts to have built-in feedback mechanisms to evaluate the decisions and actions (or the results thereof) in order to facilitate learning and contribute to new knowledge that may be necessary to address new challenges. This is in line with the decision-centred strategy that is crucial in EWS. Firestone points out that feedback is crucial since "it increases the creative learning that occurs in the decision where we introduce the feedback."[235]

Although the KM processes are mainly drawn from the business world, they are however also relevant in the non-profit organisations. A number of activities have been undertaken in various organisations attempting to integrate KM in their practices in an effort to transform those organisations into "learning or knowledge-based organisations"[236] Tom Sensky, a reader in psychological medicine at the Imperial College School of Medicine in the United Kingdom, reflected on the purpose of KM by identifying specific needs of clinicians.[237] According to him, those crucial needs are:

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[232]   Bollinger and Smith, p. 14.

[233]   *Ibid,* p. 15.

[234]   M. Sağsan, 'A New Life Cycle Model for Processing of Knowledge Management,' The Study Presented at the 2nd International Conference on Business, Management and Economics, İzmir, Turkey, 2006, (accessed at www.baskent.edu.tr/~msagsan), p. 3.

[235]   Firestone, p. 18.

[236]   D. Binney, 'The Knowledge Management Spectrum – Understanding the KM landscape', *Journal of Knowledge Management,* Vol 5 (1), 2001, p. 33.

[237]   T. Sensky, 'Knowledge Management', *The British Journal of Psychiatry,* Vol 8 (5), 2002, p. 387.

- fast, reliable and accurate information about patients in their care;

- access to knowledge to inform clinical practice; and

- access to [tested, validated and evaluated] information [body of knowledge] to underpin evaluation of clinical practice, planning and research, clinical governance and continuing professional development.

These needs are very significant in the conceptual orientation of the new KM paradigm in terms of the purpose of KM – to enhance knowledge processing so as to ultimately impact on quality decisions and effective actions. Sensky's thinking can be addressed within the new KM thinking, however, his views derive their conceptual foundations from the paradigm of the older KM generation that assumes that there is a pre-existing knowledge that "only" needs to be distributed effectively to produce decisions and actions. There is no reflection on what happens when changed conditions require new insights, thus necessitating new knowledge to be produced and integrated to cope with the new circumstances. In view of the growing complexities of organisational environments, it is imperative to operate proactively, minimise mistakes, make better decisions and swiftly produce quality solutions to problems. Therefore creative learning and the production of new knowledge are imperative to ensure sustained quality decision making and effective actions. The new KM initiatives (or second generation KM according to its advocates) seek to enhance the knowledge processes (creation/production and integration/distribution) in an effort to improve organisational problem solving capacity. In terms of what is needed to manage knowledge effectively, organisations are challenged to continuously review and change their practices in order to enable the production of new knowledge and integrating it to produce quality decisions. This is the normative dimension that is reflected in the current KM generation. The above elaborations of KM approaches provide insights into how the concept has evolved and matured in the process of seeking to address the knowledge problems in organisations. The focus of different approaches has revealed the limitations with regard to the ways knowledge should be managed in order to facilitate effective decisions making and actions. The current notions of KM have sought to change the practices that would improve knowledge processing (production and integration) and not on the various activities preached by early researchers. The radical departure came from Nonaka (1994) and his advocates (from 1995) who placed a human being at the centre of knowledge development. As such, the organisational proficiency in KM emanated from this recognition, thus allowing for more nuanced developments in conceptual orientation which appreciated inter-subjective (human) social processes for learning and knowledge construction as well as knowledge integration. This is the main goal of the current KM initiatives and it is this notion that pervades the current debate. Since proficiency in KM is imperative to organisational decisions and actions, it thus informs the

treatment of EWS, as a knowledge-intensive decision tool, in the context of the prevailing conceptualisation of managing knowledge. Before elaborating on the KM imperatives, it is necessary to gain insights into the nature of EWS and its underlying orientations.

2.4.   Understanding the nature of early warning system (EWS)

Austin points out that "EWS is a large field with various methodologies on different levels with a wide range of issues."[238] This is illustrated by numerous definitions of what constitute EWS and for what purpose. The Forum for Early Warning and Early Response (FEWER), define early warning (for conflict prevention) as a systematic collection and analysis of information from areas of crisis for the purpose of anticipating the escalation of violent conflict, the development of strategic responses and the presentation of options for decision-making and preventive action.[239] EWS is considered as a "system" with about six core mechanisms or sub-units that relate to one another in an interactive process to facilitate conflict prevention: *data collection; data analysis; assessment for warning or identification of different scenarios; formulation of action proposals; transmission of recommendations; and assessment of early response.*[240] These core mechanisms operate as individual units in EWS that mutually support and complement one another in an interactive process. They form the underlying operational principles of EWS for conflict prevention. Essentially, EWS is ultimately meant to *"obtain knowledge"*, and to *"use it"* to assist in *taking action*, in this case, in the prevention of conflicts.[241] The immediate observation from this definition is the assumption of "pre-existing" knowledge that should be exploited for quality decisions and actions. When decision-makers are confronted with changed conditions, inaction follows due to their inability to be flexible and to adapt their thinking to the new situation. In other words, the complex and ill-defined situation requires developing new knowledge (through active learning and critical thinking) to produce new solutions (knowledge outcomes).

EWS require an engagement of various people (to augment the limited mental capacity of one person) at different levels to work systematically in producing knowledge about conflict situations and different intervention strategies. It is not just a simple "mechanical system" that uses quantitative techniques to process data and reach "objective" conclusions and decisions. People's capacity for thinking, judgement and interpretation is critical and should be incorporated in the development of the system. It means that it should incorporate individuals and communities by

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[238]   Austin, p.2.
[239]   A. P. Schmid (ed), *Thesaurus and Glossary of Early Warning and Conflict Prevention Terms*, Abridged version, Forum on Early Warning and Early Response (FEWER), 1998.
[240]   Schmid (ed), *Thesaurus and Glossary of Early Warning and Conflict Prevention Terms*.
[241]   *Ibid.*

tapping into their thoughts and experiences, to contribute knowledge to enhance the ability of EWS in effecting quality solutions in terms of conflict interventions. [242] The Platform for the Promotion Early Warning (PPEW) insists on the use of local capacities and knowledge to facilitate effectiveness of the system.[243] It also emphasises that EWS should be based on the support of policy-makers, laws and regulations, institutional responsibility and also trained personnel.[244] What should be borne in mind is that as a decision-centred tool, it is imperative for EWS to have a feedback loop for effective *learning* and to guide future actions.[245] It is also obliging to consider EWS for conflict prevention by drawing from other practitioners whose business is generating knowledge for conflict prevention. This will enhance the knowledge capacity required for flexible thought dealing with complex situations.

During the GPPAC expert meeting in April 2006, it was established that the "scientific", and "objective" evidence of impending conflict is just a "myth", what is important is to achieve "good enough analysis" from diverse sources and context-specific environments in order to produce decisions.[246] In that meeting, the role and significance of civil society was emphasised as an imperative in the operational activities of EWS. KM can play a role in ensuring that knowledge is generated from civil society in order to impact on the operation of EWS. The Swiss Peace Foundation, through its EWS special project, Early Recognition of Tensions and Fact Finding (*Früh-Analyse von Spannungen und Tatsachenermittlung:* FAST), realising the horrendous effects of conflict in Rwanda during the 1990s, launched a political initiative intended to integrate early warning and conflict prevention in its own assessment capacities for supporting peace efforts.[247] The main aim is to *generate* and *use knowledge* to enhance the political decision makers' ability to initiate preventive actions in conflict situations. The FAST model follows a decentralised approach, and is inclusive of "civil society for input and analysis," and in operates within the framework of collaboration and sharing.[248] See Figure 2 below for a schematic representation of the FAST Analytical Framework for EWS.

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[242] Third International Conference on Early Warning (EWC III), 'Developing Early Warning Systems: A Checklist, International Strategy for Disaster Reduction,' Federal Foreign Office, Bonn, Germany (www.unisdr-earlywarning.org), 27-29 March 2006, p. 2.

[243] PPEW, 'International Strategy for Disaster Reduction,' (accessed at http://www.eird.org/eng/revista/No10_2005/art7.htm).

[244] PPEW, International Strategy for Disaster Reduction.

[245] Usable Science VIII, *Early Warning Systems: Do's and Don'ts,* Workshop held in Shanghaai, China, 20-23 October 2003, (accessed at http://www.ccb.ucar.edu/warning/more.html).

[246] GPPAC, 'Toolkit for Civil Society-based Conflict Early Warning and Early Response,' Part 2 Draft Report, April 2006, (www.gppac.org/documents/GPPAC/RESEARCH/ISSUE/EWER).

[247] H. Krummenacher and S. Schmeidl, 'Practical Challenges in Predicting Violent Conflict. FAST: An Example of a Comprehensive Early-Warning Methodology,' *Working Paper 34*, October 2001, Swisspeace, (www.swisspeace.ch), p. 3.

[248] *Ibid.*

Figure 2: Schematic Representation of FAST Analytical Framework for conflict EWS[249]

Root Causes	Proximate Causes	Positive Intervening Factors	ARMED CONFLICT
Used to assess background risk potential of the country	Can create conditions for armed conflict	• Decreasing the likelihood of conflict, eg. Civil society initiatives	
Necessary but not sufficient causes of conflict	Inter-play with root causes		
Mostly static-change only slowly over time	Are time-wise closer to the outbreak of conflict		
Embedded in historical/cultural context	May change over time		
Can be instrumentalised	Often linked to the (in)ability or willingness of a government to cope with the situation	Negative Intervening factors	
e.g. ethnic diversity; colonial history; economic situation	e.g. Government type; increase in poverty level	• Increasing the likelihood of conflict, e.g. arms trade	

The significance of this model is to provide a structured approach to designing EWS which will be able to assist in guiding daily monitoring and continuous updates relating to conflict situations. The FAST model can be used to learn about the manifestations of conflicts, who the stakeholders are, which factors can be used as the basis for peace and what the available options to policy makers could be.[250] It utilises annual assessments and formulate case scenarios according to the profiles of the countries.[251] However, this model should be considered just as a framework for analysis and profiling, the actual tasks are performed by a network of partners, involving FAST field monitors, media, external experts, and local information networks.[252] This approach is supplemented by tension barometers, i.e. graphical depiction of conflictive and cooperative events between actors in a particular country that is under review. The graphs are used to create summaries of information and develop them into indicators for conflicts.[253] The critical goal of the FAST's EWS model is to

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[249]   FAST, p. 9.
[250]   Cilliers, 'Conflict Early Warning Systems and Support of the Comprehensive Peace Agreement in Sudan,' Paper presented at the Conference on Early Warning Systems 'Conflicts are Preventable', Peace is Sustainable, Khartoum, 10-13 April 2006, p.2.
[251]   FAST, pp. 12-13.
[252]   *Ibid.,* pp. 13-15.
[253]   FAST, pp. 16-18.

ensure that it achieves the necessary forecasting ability. What counts at the end is the ability to turn that early warning into good decision-making and implementation of appropriate intervention strategies, according to the nature of conflict. Thus the effective EWS should enable the acquisition of information, and facilitate the evaluation, validation and transformation of information into the body of knowledge that can be utilised to support all levels of decision making.[254] As the focus of this study, the challenge is to capacitate organisational mechanisms (SADC's) to facilitate the effective operationalisation of EWS. This necessitates an assessment of the existing organisational systems of SADC in order to reveal situational dynamics that might impact on the effectiveness of EWS. It also is imperative to draw on the analytic framework of the systems perspective in order to ascertain the level of complexity and dynamic processes inherent in EWS.

2.5. A conceptual framework of EWS in the context of systems perspective and organisational complexity

The PPEW argues that EWS must be examined from a "systems thinking" approach in design and methodology. It states that EWS involves a "set of interacting component parts acting in concert to produce an outcome" - knowing and interpreting information to produce quality decisions and taking effective actions.[255] What does the systems perspective entail?

Peter Senge defines systems thinking as a "conceptual framework or a body of knowledge and tools" that represent a "set of interrelated components that operate in an integrated fashion to accomplish a goal."[256] Business and human activities are regarded as systems (emphasis on social systems).[257] Robert Flood and Michael Jackson regard a "system" as an "organising concept" consisting of "interlinked network of parts such as element, relationship, boundary, input-output, environment and feedback", that are engaged in "continuous interaction, mainly to transform input into output."[258] Systems can also be considered as closed or open systems. Closed systems are largely insulated from the environments and do not react to changes taking place external to them.[259] Open systems are regarded as interacting with their environments and are also influenced

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[254] See Strategic Leadership and Decision Making: Systems Thinking and Learning Organizations, (accessed at http://www.au.af.mil/au/awc/awcgate/ndu/str-1dr-dm/pt1ch4.html).

[255] Platform for the Promotion of Early Warning (PPEW), 'International Strategy for Disaster Reduction,' 2005, (accessed athttp://www.eird.org/eng/revista/No10_2005/art7.htm).

[256] P. M. Senge, *The Fifth Discipline: The Art and Practice Of The Learning Organization*, 1990, London: Random House Business Books, pp. 6-7.

[257] *Ibid.*

[258] R. L. Flood and M. C. Jackson, *Creative Problem Solving: Total Systems Intervention*, 1991, New York *et al*: John Wiley & Sons, pp. 5-7.

[259] See Gareth Morgan, *Images of Organizations*, Newbury Park *et al*: Sage Publications, 1986, pp. 44-76.

by changes taking place in the environment.[260]   Thus, the systems paradigm is used to view organisations in the context of "collections of human and physical capital" that are actively engaged in "the exchange and processing of information, transforming physical objects, and making decisions [and acting]" for the purpose of achieving objectives related to their external environment.[261]

The richness of the "systems thinking" perspective is in the recognition of the interrelationships of the component elements – their interactions, as non-linear (chain-like) sequential interactions that constantly give "feedback" to be able to learn about "recurrence" in order to have a better understanding of how things happen.[262]   Rubenstein-Montano *et al*, argue systems thinking "can enhance knowledge management through its ability to depict complex, dynamic processes and thus enhance understanding and the ability of knowledge management initiatives to respond to the needs of the organization."[263]   Put in another way, systems thinking facilitates the "structuring of thinking about organisations and problem situations."[264]   By depicting "complex and dynamic processes", systems thinking enables an understanding of organisational dynamics and interrelationships that impact on decision strategies.[265]   This view has implications for EWS.   Rubenstein-Montano *et al*, indicate that EWS entails interrelationships between "the people, the knowledge they have, share, need; the culture for knowledge sharing (or lack thereof); organizational strategies and the organizational infrastructure."[266]   This understanding of EWS impacts on organisation's conceptualisation and development of mechanisms for orchestrating interventions and to guide actions.   Effective EWS depends on the nature of an organisational system that facilitates its operationalisation, and the manner in which the problems (conflict threats) that should be resolved are perceived, conceptualised and made sense of through the lenses of existing organisational frameworks.   To enhance the analysis, Flood and Jackson's model of *simple-complex* systems continuum at organisational level will be utilised as an analytic framework.   This model depicts the systems dimension and locates the difficult political issues of concern inherent in organisational systems.   In addition, David Snowden's Cynefin model will be used in a simplified manner as a framework to highlight the complex processes with regard to organisational sense-making and

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[260]   See the description of *Open Systems* in Flood and Jackson, pp 3-10.
[261]   See Strategic Leadership and Decision Making: Systems Thinking and Learning Organizations, (accessed at http://www.au.af.mil/au/awc/awcgate/ndu/str-1dr-dm/pt1ch4.html).
[262]   Senge, p. 73.
[263]   Rubenstein-Montano *et al*, p. 6.
[264]   Flood and Jackson, p. 2.
[265]   *Decision strategy* is described as a system or a set of decisions and their actions undertaken to achieve a desirable end-state, See Bennet and Bennet, p. 2.
[266]   Rubenstein-Montano *et al*, p. 6.

decision making.[267]   This analytic framework will be also be applied to the SADC Organ, as an organisational system responsible for operationalising EWS, in order to reflect its dynamics and the nature of KM processes required to facilitate an improved management of knowledge in the context of EWS.

2.5.1. *Understanding organisational dynamics through simple-complex systems framework*

Flood and Jackson, asserting that organisations are "socially constructed phenomena", attempted to depict organisational dynamics in the context of *simple* or *complex* systems, based on the number of interacting elements and the nature of the relationship among participants in the system.[268]   They describe the system as *simple* if it consists of few elements with relatively few interactions between the elements, and it is closed to the environment, while on the other hand, it (system) is considered *complex* if it consists of a large number of elements with many interactions between them, and is open to the environment.[269]   Flood and Jackson refer to the relationship between the participants - organised people who characterise the system – in the context of whether the relationship reflects *unitary*, *pluralist* and *coercive* interaction.[270]   The relationship is explained in terms of the participants' degree of agreement or disagreement regarding potential gains or losses resulting from achieving a resolution.

The relationship is *unitary* if the participants share common interests, have compatible values and beliefs, participate in decision-making and act in accordance with the agreed objectives. It is considered *pluralist* if they (participants) have basic compatibility, moderately divergent values and beliefs, are likely to reach compromise and if they also participate in decision-making and act according to the objectives agreed upon. In the case of a *coercive* relationship, participants differ in terms of interests, values, beliefs, and there is divergent of thought on ends and means with the less likelihood of authentic compromise, hence force is used to coerce others to accept decisions.[271]   In order to provide the framework for understanding situation dynamics, Flood and Jackson provide representation of the nature of the system and the participants in matrix cell. See Table 3 below for a matrix format of grouping problem contexts (situation dynamics).

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[267]   Cynefin is defined as Welsh word without direct English translation and essentially meaning *a habitat or a place of multiple affiliations,* See D. J. Snowden, 'Complex Acts of Knowing: Paradox of Descriptive Self-awareness', *Special Edition Journal of Knowledge Management*, Vol 6 (2), May 2002, pp. 1-14.
[268]   Flood and Jackson, p. 10.
[269]   *Ibid*, pp. 33-34.
[270]   *Ibid*, pp. 34-35.
[271]   Flood and Jackson, pp. 34-35.

Table 2: Grouping Types of Systems Methodology[272]

	UNITARY	**PLURALIST**	**COERCIVE**
SIMPLE	Simple-Unitary	Simple-Pluralist	Simple-Coercive
COMPLEX	Complex-Unitary	Complex-Pluralist	Complex-Coercive

Each cell represents a particular grouping on problem context (situation dynamics) which will then require a particular form of strategy when orchestrating interventions. From the above framework, EWS can be understood in the context *complex-pluralist* category. This perspective reflects a considerable number of interacting agents with competing interests (monitors, analysts, organisations, state organs, political decision makers) that engage in coordinated efforts to produce an outcome (early warning and early response to conflict). Flood and Jackson explain that in the *complex-pluralist* context, there is a "loose coalition" of a group (members) having "divergent interests with the organisation as a mutual focal point."[273] In this situation, conflict is inherent and inevitable, and that power is often the medium that is used to resolve conflicting interests. However, there is a possibility of *compromise* because the organisation, as a "mutual focal point", its underlying objectives and goals direct agents to engage in mutual dialogue and "to act in accordance with agreed objectives."[274] These political activities (interest, conflict and power) and the multifarious interactions between agents amplify complexity in organisational systems and impact on the decision strategies and directions for pursuing organisational goals.[275] The *complex-pluralist* perspective is particularly relevant when conceptualising the situation dynamics in (public) political organisations which carry out missions in the interest of governments (not a usual profit-driven business organisation).

By way of recapitulation, in this study, EWS is viewed in the context of a knowledge-intensive decision support system that facilitates the development of policy options to guide the actions of political decision makers with regard to preventing conflicts. This system is operationalised within the (political) organisational framework that inherently displays the interplay of the political characteristics of interest, conflict and power (among political decision makers). In this situation, aspects of power, hierarchy, mandate and authority are predominant in vertical decision-making processes and, to some extent, also influence the political outcomes. For example, the system may perceive the emergence of food crisis as having implications for peace, thus requiring an activation

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[272]   Flood and Jackson, p. 35.
[273]   *Ibid*., p. 13-14
[274]   Flood and Jackson, p. 34.
[275]   *Ibid*., p.13.

of contingency responses. But, in a politically-charged environment, inquiries, for instance, may be affected by political power-play between political interest groups attempting to provide different interpretations, and derive decisions from hegemonic thinking of the influential (powerful) groups, leading to "blind" consensus. Consequently, some critical inputs may be neglected due to the impact of "cognitive biases on threat perceptions"[276], with the resultant effect of poor comprehension and analysis of the problem at hand, leading to inappropriate response actions (or no action), until it is too late to make a meaningful intervention. Thus, the functioning of EWS is affected by a variety of agents (with underlying preconceptions), including intergovernmental organisations that provide a fertile ground for competing interests reflecting different perceptual frameworks and (national) priorities. In the light of the above, the system (EWS) should be considered through the lens of *complex-pluralist* category. In other works, EWS is a complex system that intertwines and operates in a highly political and complex organisational framework. This necessitates a brief assessment of SADC's organisational structure and its inherent dynamics.

SADC consists of fourteen (14) countries (member states) at different levels of development and sophistication, since its restructuring from 1992.[277] Politically, all these countries have equal legitimacy and status within the SADC framework and are considered equal in decision making processes. However, in reality, there are significant differences historically, socially, culturally and economically, which have an impact on the consideration of various issues, including the management of knowledge in the operationalisation of EWS. Another significant factor is that the fourteen countries use different languages that are indigenous to specific countries, as well as the "official" English, Portuguese and French.[278] This presents communication challenges that might affect the effectiveness of EWS in conflict situations. Although there are differences among the participants in the SADC, it does not, however, constitute a form of *complex-coercive* relationship. There is a measure of commitment to work through issues in a joint effort within the existing institutional framework. It can be noted that because of some huge economic and other disparities between members of SADC (South Africa's technological advancement as a case in point), there may be an element of "political coercion" in order to advance certain goals, hence there is a potential for *complex-coercive* relationship, and most importantly, with implications for decision making. However, it will be dominated by the *complex-pluralist* relationship because of the strong commitment among SADC members to engage each other as equals and to work together in

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[276]   CISC, 'Strategic Early Warning', p. 6.
[277]   See the SADC's Restructuring Process: 'From Conference to Community' on its Website (www.sadc.int).
[278]   These are languages acquired after the European colonisation and are used in the main communication tools of SADC.

collective efforts to develop the subregion. Despite this, the nature of the SADC organisational framework impacts on the decision-making processes.

SADC is an intergovernmental organisation (one of Africa's five RECs), and by virtue of that political status, its institutions operate in a bureaucratic model. It is a formal organisation which is managed through policies, procedures and controls. Its various institutional systems function through strong decision hierarchies which are organised around a number of committees and sub-committees with different levels of authority and mandates. Bennet and Bennet describe this type of an organisation as designed to "ensure a uniform, consistent way of making decisions."[279] However, conflict situations are not simple routine issues, but are complex and have multiple causes that can change rapidly. As such they cannot be adequately dealt with through "command and control" conservative methods. Though since 2001, SADC has developed comprehensive instruments for peace and security (including the SADC Organ), the historically bureaucratic traditions of denying access to information (culture of information hoarding), lack of transparency, and the continued marginalisation of civil society, still persist and thus expose the conservative and exclusive nature of the organisation.[280] These aspects lead to an inference that effective knowledge flow to facilitate dynamic decision making is handicapped. Also, an integrated EWS that operates on the basis of the sharing and transmission of knowledge to enable problem definition and to enhance the development of strategic options is compromised. In applying KM processes to EWS, it is important to take cognisance of the bureaucratic nature of the organisation (SADC), while at the same time, it should also be considered as a *complex-pluralist* organisational system mainly due to the interplay of political activities (interest, conflict, power) that impact on decision processes. The KM strategy should empower the organisation and the stakeholders (particularly political decision makers) to effectively exchange knowledge and to develop the capacity to learn to keep an "open mind and not be prejudiced by bureaucratic traditions."[281] However, the complexity of human systems poses a set of challenges for decision makers that require a particular way of thinking about the organisational dynamics in order to facilitate effective decision making. Snowden has developed a Cynefin model to be utilised for organisational sense-making to support decision-making in dynamic contexts.[282] The model is used in the context of human communities and their interactivity. According to Snowden, Cynefin model has been used for other organisational aspects such as "strategy, innovation, culture, trust and communication."[283] In this

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[279]   Bennet and Bennet, p. 7.
[280]   These organizational dynamics are outlined in detail in chapter 3 of this study.
[281]   Bennet and Bennet, p. 9.
[282]   Snowden, p. 7.
[283]   *Ibid.*

study, it is used as an analytical framework to facilitate an understanding of organisational dynamics that impact on knowledge exchange and decision making.

2.5.2. *The Cynefin framework*

Snowden argues that the model is used to consider the dynamics of situations and perspectives so as to enable better understanding. To view the "dynamics of situations", Snowden distinguishes between three different types of systems: *complicated* (knowable and definable component parts), *complex* (many interacting and changing components/agents) and *chaotic* (no connections between components, turbulence). In order to illustrate different aspects of "community behaviour" in a system, the Cynefin model is divided into four domains, each of which represents different situational dynamics that require different managerial approaches. See Figure 3 below representing the basic Cynefin framework consisting of the domains for examining community behaviour.

Figure 3: Basic Cynefin Framework for Decision-Making[284]

Complex	**Knowable**
Cause and effect only coherent in retrospect and do not repeat	Cause and effect separated in space and time
Chaos	**Known**
No cause and effect relationships perceivable	Cause and effect relationships are clear, repeat and can be predicted

This framework (the dividing lines are not rigid in the original framework) is designed to enable the consideration of distinctive and dynamic process underpinning different organisational situations.

- *Known:* Cause and effect relations are linear, perceivable and predictable. Behaviour can be predicted and prescribed. It is the domain where best practice guides are useful in order to create order and control behaviour. Leadership is equated with the historical feudalism where power derives from ownership of the budget.
- *Knowable:* Linkages are not fully known, but over time and through resources and research, the patterns may be discovered and order may be imposed. Good practice

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[284] Snowden, p. 7.

and reliance on experts to inform decision is predominant. The problem with expert advice is the entrenchment of thinking whereby new ideas or ways of doing things cannot be embraced. Leadership is by a small minority who are given permission by the veterans in the community.

- *Complex:* The patterns in this domain emerge through various interactions between agents. When patterns emerge, the undesirable ones can be disrupted and the desirable ones can be stabilised for control purposes. It is imperative to understand patterns in order to facilitate the management of behaviour in the organisations. To facilitate understanding requires probing so as to stimulate the system response and make patterns visible. What needs to be done is to engage in detailed monitoring of those emerging patterns, gain multiple perspectives on the situation for flexible responses. Leadership derives from natural authority and respect, but not imposed, and neither is it democratic. It means it can be usurped by those with authority, resources and influence.

- *Chaos:* No cause and effect relations (no connections) between patterns are perceivable and the system is turbulent. In entails the situation of crisis management. There is no understanding that can take place and waiting for emerging patterns will not suffice. It is imperative to intervene decisively and observe the results of those interventions, thus enabling review of intervention approaches in response to developments. Leadership is about power to impose order in a decisive manner.[285]

The *complex* domain which represents an organisational context that reflects multiple agents with multifarious interactions and affiliations is relevant here. EWS operates within the framework of human organisational system (SADC) which comprises of various agents interacting and influencing one another. The interaction is driven by political dynamics that impact on the dynamic exchange of knowledge to facilitate decision making. In other words, decision processes in the organisational institutions are affected by political aspects of power and interest. This produces perceptual bias when dealing with complex and uncertain conditions such as conflict situations. The *complex* domain also contextualises conflict dynamics which are driven by human choices and actions (human behaviour). As such, early warning about the threat of conflict is bound to elicit different interpretations based on existing preconceptions, expectations and preferences.[286] This presents complex challenges to political decision makers.

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285   Snowden, pp. 8-9.
286   Schmeidl, p. 46.

What can be deduced from this analysis is that EWS (for conflict prevention) is a complex system that operates in dynamic and complex (political-bureaucratic) organisational environment where knowledge flow and decision processes are influenced by diverse agents with competing goals, concerns and preferences. For example, at times decision options are evaluated on the basis of political rewards, thus impacting on political will to act, and also blocking or stalling decision-making.[287] These are set patterns (organisational culture) in political organisations. Dynamic decision making in this (complex) system requires collaborative communities, "networks, sharing of ideas and dialogue" to enhance development of multiple perspectives.[288] Convergent thinking to develop common perception of problems can be facilitated by drawing from a comprehensive range of sources. In such a *complex organisational context* with entrenched political dynamics and institutionalised decision making processes, it is imperative to construct a *knowledge-intensive decision support system* to facilitate the production of dynamic options for decision makers.

According Courtney, social problems are complex and "require knowledge from *any* source and those knowledgeable in *any* discipline or profession."[289] Therefore this necessitates a KM perspective that is based on "effective communication, collective culture, and cooperative relationships" in order to enhance knowledge exchange and to facilitate "discourse and varied perspectives on problems"[290] Courtney proposes a *multiple perspectives approach* of KM whereby a "synthesis of broad worldviews" is brought to bear on addressing complex social problems (conflict situation for instance). This *multiple perspectives approach* requires "open, honest, effective dialogue among all relevant stakeholders in the problem involved."[291] As indicated previously, in complex organisational context (as in SADC), there is a diversity of stakeholders with overlapping interests, who are involved in complex social decisions (conflict threats). Thus a *multiple perspective approach* of KM can be effective, especially in the context of EWS of conflict prevention, to intensify knowledge exchange in decision making processes and facilitate effective production of robust options for political decision makers.

2.6. Knowledge management imperatives for EWS

As stated previously, EWS is a *knowledge-intensive system.* By *knowledge intensive*, it means that the activities carried out include generating knowledge through research and fact finding (analysing

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287   Schmeidl, p. 46.
288   Bennet and Bennet, p. 6.
289   Courtney, p. 28.
290   *Ibid*., p. 24; 28.
291   *Ibid*., pp. 29-30.

and validation) operations, generating new ideas, exploiting experience, as well as maintaining databases regarding historical facts, political stability, and socio-economic conditions. This knowledge is the integrated through the system for decision making and response actions. Concerted and effective KM processes are required to ensure that the knowledge is systematically produced, captured and integrated for the wider community to apply in driving actions. Efforts must also be undertaken to ensure that people with contextual knowledge acquired in the course of the missions or projects are involved in, participate meaningfully in contributing knowledge to EWS. For instance, it may happen that the knowledge generated remains in the head of people for as long as they operate in that field, if they leave, the knowledge is lost if it is not integrated in the system. In responding to the question why knowledge needs to be captured, Randy McCall argues that,

> *"Practitioners learn constantly on the job. They invent new solutions, refine their skills, and learn from mistakes. They receive customer feedback, experience unexpected pitfalls, and discover new opportunities. They gain a unique perspective on the work of the organisation and it's relationship with the markets. All this learning needs to be captured into refined practices that incorporate the lessons of the field."[292]*

The knowledge of practitioners including those "little problems" and solutions should be contributed into the system to form the organisational knowledge base. From the point of view of conflict situations, teams of field monitors and other humanitarian agents are despatched on regular basis to generate knowledge about the conditions and events on the ground (see FAST model). These teams are often confronted by various issues and challenges that are sometimes not part of their mandates. In these situations, their experiences should be considered in post-event reviews and analysis and also be captured and shared as nuances of knowledge that can impact on effective interventions strategies.[293]

For instance, the Joint Military Commission (JMC) of the United Nations Advance in Sudan was mandated to monitor Sudan's Ceasefire Agreement from April 2002 until February 2005 between

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[292] R. McCall, 'Creating a Knowledge Cycle: Applying Basic Knowledge Management and Communities of Practice Theory to Victim Services,' June 2006, (accessed at http://www.vaoline.org/km/ckc_rmccall.pdf).

[293] See the Joint Military Commission's (JMC) Report on Sudan's Ceasefire Agreement from April 2002 until February 2005 to monitor the ceasefire agreement between the Government of Sudan (GoS) and the Sudanese People's Liberation Army (SPLA). The JMC as part of the United Nations Advance Missions in Sudan produced a paper on the *lessons learned and best practices* that were handed over to the other United Nations officials, military observers and troops in order to facilitate the incorporation of these lessons into UN planning, training, deployment and mandate execution in the Sudan peace initiatives.

the Government of Sudan (GoS) and the Sudanese People's Liberation Army (SPLA). It encountered a number of challenges such as disseminating information to support the ceasefire agreement, low levels of literacy which led to misunderstandings, cross-party dialogue, building trust and confidence and also ensuring the exchange of information among civil society, national and international non-governmental organizations and United Nations humanitarian agencies, operating in that country.[294] According to the JMC Report, knowledge acquired included issues of *cultural sensitivity* where, through "trial and error", it became apparent to adjust to and work within the framework of local traditions and customs, particularly the *value of trust*.[295] This is an important point within the KM framework. Trust encourages and facilitates knowledge sharing without "fear" of being judged or taken for granted. The other *value of trust* is to encourage more interaction within the "system" so that vital knowledge can be shared and applied to initiate effective interventions, especially with reference to EWS for conflict prevention. For the population in Nuba Mountains of Sudan, it was serious for them if someone listens and takes their views and perceptions into account (also respected and showing patience and understanding).[296] Such experience of the JMC team ensured that *trust* was built in the process.[297] If trust is established, the people will feel valued and also be able to come forward and contribute knowledge that may be used to facilitate actions pertaining to the prevention of violent conflict. Issues of trust derive from cultural dynamics and linked to norms, values and beliefs. These influence people's actions. Hence it is imperative to take them into account when operationalising EWS. The JMC team's encounters form part of the experiences that needed to be captured for use by other persons who would be engaged in peace efforts in Sudan or they can also be used as lessons for EWS especially in countries that have emerged from conflict situations in order to act wiser regarding intervention actions pertaining the outbreak of another conflict.

The above example indicates two important points: the imperative of effective institutional infrastructures for enabling knowledge generation; and the centrality of people in facilitating the transfer and sharing of knowledge. This is what KM is required for. The latter point in particular is critical. It takes into consideration that knowledge is socially constructed and, as Courtney indicates, the focus is on "interpretation, distributed cognition, communication and social processes."[298] The complex nature of people because of their beliefs, different values and attitudes which impact of their ability to share and exchange knowledge is also taken into account. KM

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[294] P. Souverijn-Eisenber (ed), JMC Report, *Lessons Learned from the Joint Military Commission*, United Nations Peacekeeping Best Practices Section, August 2005, (www.un.org), pp. 7-8.
[295] JMC Report, p. 8.
[296] JMC Report, p. 8.
[297] *Ibid.*
[298] Courtney, p. 24.

should unpack this complexity and enable the establishment of trust (more interaction and socialisation activities), through "fostering communication between individuals, sharing and enriching interpretations, and coordinating actions."[299] Despite the importance of technology as an enabler of knowledge sharing and dissemination, it does not take away the importance of people, as the challenge of KM and EWS, is effective interpretation of information and integrating it with values, experiences and perceptions in order to act wisely. As one of the key elements in KM, people should be empowered and encouraged through the inculcation of the collective culture, trust and openness, as well as be given resources to participate fully in knowledge production, sharing and transfer activities to enhance the efficient performance of organisations in meeting the objectives, in this case, effectively implementing conflict prevention initiatives.[300]

As far as EWS is concerned, the necessity of KM cannot be over-emphasised. It should function as a knowledge system that connects individuals for interactive learning and knowledge production and to facilitate the integration of knowledge to enable effective decisions and actions. This notion of KM enriches the information acquisition and dissemination paradigm that underpins traditional practices in EWS. Schmeidl reflected on the challenges of EWS that led to failures in the past. She indicates that there are various complex factors that impact on the ability of EWS to achieve the objectives they were intended. Some of these challenges are:

- *lacking information:* too little information leading to misinterpretation or lack of understanding of the situation (Somalia);
- *inadequate analysis:* there is sufficient information but not enough analysis leading to misreading the situations (Rwanda); and
- *slow or late response:* preventive action was too slow or too late due to insufficient response options or unsure of what is appropriate (Kosovo). [301]

The problem, despite sufficient information about potential conflict, was the failure to comprehend that those early signs. In the context of KM, there is a need for fundamental shift from knowing (about the potential conflict) to knowing what to do or how to act (implement preventive actions). This is the essence of a *decision-centred* approach of EWS. Developing the knowledge production and integration processes in EWS will empower the decision makers in making better decisions and applying effective interventions based on appropriate policy options. It requires an institutionalisation of a wide spectrum of activities that should be undertaken by organisational

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[299]   Courtney, p. 24.
[300]   *Ibid*.
[301]   Schmeidl, p. 41.

structures for operating EWS. One argument is that, the availability of information and signals may come to nothing if the interpretation is flawed and resulting in inappropriate action or inaction. Early warning indicators are not able to speak for themselves but need to be analysed and interpreted in order to yield meaningful results.[302] This necessitates the integration of effective KM processes in institutions for the effective operationalisation of EWS.

Researchers stress that KM strategies should be consistent with organisational goals and also the environment in which the organisation operates.[303] With reference to the development of EWS in SADC, it is critical to develop a KM vision within an organisation in order to solicit commitment from all stakeholders – participants in EWS.[304] It is more important to draw in the broad spectrum of the society (multiple perspectives approach), and promote transparency for free flow of information in order to deepen insights with regard to conflict prevention.[305] Following this perspective, KM processes for the development and effective operationalisation of EWS should enable the construction of knowledge through harnessing and exploiting the collective expertise, intelligence, and experiences of people, as well as to share or improve the use of knowledge to achieve organisational objectives. Similarly, EWS needs to operate within the framework of transparency, openness and sharing in a decentralised approach, relying on various sources of knowledge for inputs. The key reason for EWS to operate in that context is to *exploit the collective wisdom (knowledge, intelligence, experiences) of people,* for use in order to improve the operationalisation of the "system". Keeping these views in mind, and taking account of the primary objective of EWS, that is, to facilitate efficient delivery of high-quality anticipatory and advisory knowledge to decision makers for effective conflict prevention interventions, the following key KM strategic processes are imperative:

a. *Developing knowledge base*: KM process requires that there should be a persistent, intentional effort of developing knowledge from a diversity of sources with the view to impacting on organisational decision making.[306] This must also be informed by the reasons why that kind knowledge is relevant to the imperatives of an organisation.[307] EWS can benefit from knowledge created from diverse sources such as local communities, non-governmental organisations, community-based organisations, women, youth groups, local

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302   Schmeidl, p 49.
303   UNDP, Knowledge Management in UNDP, p. 7.
304   *Ibid.*
305   Hendricks (ed), Policy Research and Capacity Building Challenges from State Security to Human Security in Southern Africa, *ISS Monograph series No 122*, April 2006, p. 6.
306   Gupta and McDaniel, 'A Framework of Knowledge Management.'
307   *Ibid.*

committees, local authorities, civil society organisations as well as of the researchers in relation to the conflicts and the problems they have encountered in order to adequately maintain an up to date system. These would contribute towards establishing organisational knowledge base that is enhanced by multiple perspectives. The KM strategy should also integrate efficient database management for configuring a large body of knowledge from documentation and research reports relating to, for instance, country histories, political (in)stability, social and economic conditions.[308] On the other side, it should be taken into account that the conflict analysts themselves also have knowledge derived from their training background and experiences in the field that should also be exploited, especially as it relates to their own experience in execution of their responsibilities.[309] The KM processes should facilitate the development of knowledge-intensive collaborative networks as the foundation for the development of knowledge base and also fundamental to the operationalisation of EWS.

b.   *Embedding knowledge (knowledge integration)*: For EWS to operate effectively there should be an appropriate institutional infrastructure that supports the free flow of knowledge and accessibility. Collaborative systems are required to facilitate networking and creating communication channels that will allow the required accessibility and exchanging ideas. This involves the use of technology (IT) to assist in connecting people and facilitating the sharing of knowledge and learning. The internets, intranets, web pages and e-mail systems are currently key tools for ensuring that knowledge is integrated across individuals and organisations engaged in conflict prevention. Integration of knowledge can also be facilitated through better mechanisms for sorting, filtering, organising, analysing, comparing, correlating and mining knowledge in order to enable easy access and better processing.[310] KM processes should improve accessibility of knowledge and to encourage interaction and collaboration among agents in EWS.

c.   *Sharing of knowledge*: Closely associated with knowledge accessibility, is the importance of knowledge sharing which require collaboration and interaction. According to Gupta and McDaniel, managing the knowledge flow, in the framework of collaborative and productive exchange may impact on an organisation's ability to actualise knowledge and enhance decisions making. [311] It is important to create a network of linkages within organisations,

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[308]   Gupta and McDaniel; See also FAST Model in the previous sections.
[309]   See FAST Model.
[310]   Seng, pp. 143-144.
[311]   Gupta and McDaniel, A Framework of Knowledge Management.

particularly a link between decision-makers and people on the ground in order to ensure that people have access to strategic ideas as well as a shared understanding of the situation. EWS, to function optimally also need a wider network of sources of knowledge as well as a culture of constructive sharing of knowledge using various systems of communication or even face-to-face encounters.[312] Secrecy, knowledge hoarding and lack of transparency are not the desired aspects for ensuring knowledge sharing. Collaboration between qualified conflict analysts and the local communities will ensure that there is wider acceptance of interventions. Knowledge can also be shared through exchange of personnel among organisations dealing with conflict prevention, workshops, seminars, lectures and education, the media (print and electronic/radio/TV), and also sports activities.[313] This will assist in enriching the knowledge content and also in lessening misunderstandings among stakeholders in the peace processes.   Most importantly, these aspects mentioned in the discussion will facilitate organisational ability to make rapid decisions as well as executing the decisions effectively.

Dirk Sprenger makes a compelling argument for training as an imperative to ensure capacity-building and learning in the broader conflict prevention strategies. Training should not reduced to copying best practices, but it should be more involved in facilitating reflection regarding what is going on, how issues are perceived and evaluated as well as how to behave or conduct oneself in given situation.[314] This can be regarded as internalisation of knowledge (on the part of the trainee) from the KM perspective. The trainer also learns to adapt training methods due to new insights that emanate from trainees with different backgrounds and experiences. Thus training is also one of the key mechanisms to facilitate knowledge sharing, exchange and learning. Learning in particular advances the capabilities of organisations in terms of acquiring new knowledge, competencies and skills.[315] This will impact on expanding on past experiences (of those with the knowledge) and also share best practices that are critical in ensuring the successful implementation of intervention strategies in EWS.

Sense-making is one of the resultant effects of knowledge sharing. According to Ron Sanchez, sense-making refers to the process of perceiving events, gathering data and interpreting data to create information useful for formulation of a set of beliefs about important causal relationships in

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312   Gupta and McDaniel, 'A Framework of Knowledge Management.'
313   JMC Report, p. 7.
314   *Ibid.*
315   Gauvin *et al*, 'Understanding The State of Knowledge Management with Ontologies,' *Journal of Knowledge Management Practice*, (http://www.tlainc.com/articl101.htm).

the "world" or to an organisation.[316]   Through sharing of knowledge, there could be common conception, convergence of thought, and a common outlook relating to conflict trends, thus enabling coherent approaches towards implementing prevention strategies.   In another way, KM processes should enable the creation of a shared understanding of goals and situation as well as overcoming "paradigm paralysis", that is, how things have always need done.[317]

Karl Weick makes an argument about the need for increased "social contacts" because it is "crucial in the construction and perception of problems."[318]   This argument is located in the framework of sense-making.   Weick explains that sense-making is about "placement of items into frameworks, comprehending, redressing surprise, constructing meaning, interacting in pursuit of mutual understanding, and patterning." [319]   Therefore it is imperative to recognise the significance of KM in order to promote sense-making in organisation.   It means that through KM initiatives, organisations can facilitate a shared understanding and perception of problems meaningfully.   Similar frameworks could be constructed and also similar cues could be extracted from the environment to produce common understanding of situations.   EWS is essentially an interconnection of networks that interact to achieve the goal of knowing and acting to prevent conflicts.   Therefore constructing a shared perception of problems is crucial to EWS in order to produce accurate warning signals, make accurate assessments, make informed decisions and implement proper actions in order to prevent conflicts.   However, Weick cautions that sense-making does not operate on the principle of accuracy (though a nice thing to have), but is concerned with "plausibility, pragmatics, coherence, reasonableness, creation, invention, and instrumentality."[320]   Therefore KM through its encouragement of increased social interactions to enhance knowledge sharing, can serve to enable the construction of multiple frames to facilitate the reasoning quality in making decisions, as well as reducing the impact on "uncertainty" or "ambiguity" when confronted with problems.[321]   These can impact positively on SADC with regard to enabling it to develop a common perception of problems and initiate appropriate actions.   This is important from the sense-making perspective – enabling organisation to make "common" sense of the challenges and create opportunities to effect change through KM.   These are crucial aspects that must be taken into account in the application of KM strategy.

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[316]   R. Sanchez, *Knowledge Management and Organisational Competence*, New York: Oxford, 2001, pp 6-7.
[317]   Tissen *et al*, p. 127.
[318]   K. Weick, *Sensemaking in Organizations*, Thousand Oaks et al, Sage Publishers, 1995, p. 2.
[319]   Weick, p. 6.
[320]   *Ibid.*, p. 57.
[321]   See the problems of "uncertainty" and "ambiguity" in Weick, pp. 91-100.

d.   <u>Utilisation (application) of knowledge</u>: Ultimately, knowledge is useful when it is actually utilised in practical situations. In the first place the organisational norms must permit the culture of knowledge sharing. EWS should not be confused with intelligence gathering which is based on secrecy and knowledge hoarding for the purposes of state security.[322] Knowledge in EWS must be used to provide political policy-makers with strategic options for implementing interventions in conflict situations. There should be better contextual understanding of conflict dynamics leading to effective prevention and mitigation of conflict. In order to effectively use knowledge, mapping is required to determine the availability of substantive knowledge, to establish who the decision makers (political end-users) requiring that knowledge are, in what format is that knowledge, where that knowledge is located (in people and knowledge repositories across the system), and what knowledge is not available (knowledge gaps) and should be produced.[323] This requires changes in organisational culture, mindsets, methods and modalities for conducting its activities, and delivering advice and knowledge to impact on decision-making. It is important to realise that "knowledge in place" has little value than "knowledge at work".[324] KM strategy should principally be about producing and exploiting knowledge to assist decision makers with making quality decisions and taking effective actions for the advancement of organisational delivery of services.

The above strategic processes in the KM strategy can be used to enhance the effective operationalisation of EWS in SADC. For a collective organisation-wide impact on the prevention, management and resolution of conflicts, it is imperative to build institutional mechanisms and structures that are inclusive of broad-based community organisations. Of particular significance is the shedding of conservative political inclinations in decision making and to develop an integrated system that operates on the basis of interactive collaborative framework. In the context of EWS, KM processes should ensure the exploitation of multiple perspectives as the key towards facilitating "organisational cognitive flexibility"[325], and to turn the system into an effective decision-support tool. Consequently, in view KM imperatives, SADC's organisational system, and institutional mechanisms are called into question. In this context, its organisational complexities need to be examined to ascertain the dynamics that impact on EWS's effectiveness as a decision support instrument. This will also facilitate the illumination of organisational weaknesses and determine how KM interventions may strengthen the system.

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[322]   Cilliers, Towards Continental Early Warning System for Africa, p. 1.
[323]   UNDP, p. 7.
[324]   Gupta and McDaniel.
[325]   Bennet and Bennet, p. 9.

CHAPTER 3

OPERATIONALISING EWS: SADC'S BUREACRATIC COMPLEXITIES AND INSTITUTIONAL LIMITATIONS

3.1.   Introduction

Thabo Mbeki, the South African President, declared the African Union (AU) as "a miletone in Africa's quest for a dignified and equitable place in the world."[326] Its inauguration ushered in an improved security agenda on the continent and also the development of conflict prevention mechanisms,[327] in the context of co-operation and interdependence.[328] The Continental Early Warning System (CEWS) for conflict prevention is one such mechanism to give effect to AU's peace and security initiatives. This is an important step with regard developing conflict prevention consciousness, however, it is also imperative to transform paper-based commitments into practical actions. Schrodt and Gerner have identified bureaucratic and institutional constraints that obstruct the implementation of promising protocols and declarations, particularly since conflict early warning "is not a politically neutral act."[329] The major sources of early warning failure are complex bureaucratic institutions that fail to integrate early warning with (policy) response planning.[330] Inherent constraints in these complex bureaucratic institutions are "alternative political priorities, cognitive biases and bureaucratic rivalries" that produce "institutional ignorance."[331]

This chapter analyses and evaluates SADC's bureaucratic organisation and institutional modalities pertaining to EWS for conflict prevention. The purpose is to expound on the *politico-bureaucratic* complexities that constrain SADC's decision making effectiveness. The discussion will reflect on the conceptualisation and consolidation of EWS thought through the AU's PSC Protocol, and also the SADC Organ for Politics, Defence and Security (SADC Organ) as a primary unit designed to facilitate conflict "management" strategies of SADC. There will also be some reflections on the AU as a continental body co-ordinating peace efforts and providing strategic links with the world body, the UN. The chapter will conclude by reflecting on the challenges and prospects of SADC Organ's capacity to orchestrate conflict prevention through the operationalisation of EWS.

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[326]   T. Mbeki, *This is Africa's Time*. The African Union Directory, Millennium Africa Communications, South Africa, 2002.
[327]   Malan, p. 2.
[328]   Zacarias, pp. 44-45.
[329]   Schrodt and Gerner, pp. 9 and 22.
[330]   *Ibid.,* p. 9.
[331]   *Ibid*.

3.2.   Continental (OAU) institutions and mechanisms for conflict prevention

CEWS serves as an important mechanism for conflict prevention. To facilitate movement from early warning to timely reaction requires co-ordination within the properly established institutional frameworks with the required mandate and authority. The OAU, the forerunner of the current AU, established the Central Mechanism for Conflict Prevention, Management and Resolution in 1993, for purposes of anticipating, and preventing conflict.[332] This served as the main body to provide central co-ordination of conflict prevention strategies and also a foundation for the development of early warning (EW) strategies and policy options for nurturing the culture of conflict prevention on the continent. During 1994, a Division for Conflict Management was created within the OAU in order to support the mission of the Mechanism by:

- collecting, collating and disseminating information relating to current and potential conflicts;
- preparing and presenting policy options to the Secretary General of the OAU;
- undertaking or commissioning analysis and long term research; and
- supporting and managing political, civilian and military observer missions, and co-ordinating regional training policies to support peacekeeping operations.[333]

Through the Mechanism, conflict *prevention* became the focus of attention in Africa. Within the context of that Mechanism, the OAU had a mandate to co-ordinate its activities with other regional and subregional organisations such as SADC. The need for the OAU to co-operate with subregional organisations stemmed from the understanding that such organisations have access to local knowledge and are familiar with local conditions to provide accurate interpretations related to conflict situations.[334] The International Peace Academy (IPA) confirms this view, and in addition, argues that it is imperative to have an "active participation of local population" in conflict prevention programmes.[335] It is insisted that "locally conducted research, risk and early warning exercises with indigenous intergovernmental organisations (IGO) … would help toward a fuller understanding of cultural, political and economic dimensions of structural and operational prevention."[336] These are major concerns when engaging in conflict prevention programmes and

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[332]   Organisation of African Unity, Declaration of Assembly of Heads of State and Government on the establishment of a Mechanism for Conflict Prevention, Management and Resolution, 29th Ordinary Session, Cairo, 28-30 June 1993 (available at www.iss.org.za).
[333]   Cilliers, 'Toward a Continental Early Warning System for Africa,' p. 3.
[334]   Nhara, 'Early Warning and Conflict in Africa.'
[335]   International Peace Academy (IPA), p. 5.
[336]   IPA, p. 5.

are particularly relevant to the African context where the OAU and later the AU did not enjoy the confidence of all stakeholders, especially organs of civil society.

In January 1996, Dr Salim Ahmed Salim, former Secretary General of OAU, expressed the view that EWS is a major tool to promote peace, security and stability through anticipation and prevention of situations of conflicts.[337] The role of subregional organisations was also emphasised with regard to their complementary responsibilities (cooperative links with OAU). The OAU also stressed the importance of liaising and utilising the "vast reservoir of expertise and knowledge available in Africa directly from governments, universities, research institutes, the media, NGOs, civil society in general, and traditional and local authorities."[338] Recognition was given to the special privileges of the NGOs which could access information from which other organisations were barred.[339] These efforts set the agenda for the continent to advance its peace and security initiatives through preventive means. However, due to the provisions of the *OAU Charter* with respect to the *sovereignty of states* and the notion of *non-interference* in the internal affairs of any member state, the effectiveness of operationalising the EWS was therefore compromised. These reflected the complex bureacratic dynamics (mentioned previously) that constrained OAU's conflict prevention capabilities. As a result, a new entry point was required to implement the conflict prevention ideals of the OAU.

To this end, several seminars were held between 1993 and 2000, with an intention to implement the primary objective of the Mechanism – which is conflict prevention. From these seminars followed the establishment of the situation room, small library and documentation centre, regional desk officers and a "Field Operations Unit" responsible for the organisation of deployments of military observer missions, in Addis Ababa, Ethiopia.[340] The situation room of the Conflict Management Division contains workstations for interns, maps, and a few televisions to monitor the Cable News Network (CNN), the British Broadcasting Corporation (BBC) and the South African Broadcasting Corporation (SABC) in Africa.[341] The implementation phase of preventive strategies was also enhanced after the migration of the OAU to the AU in 2001. However, it should be noted, the same political and bureaucratic dynamics that created impediments to achieve political will were still carried over into the AU.

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[337]   Nhara, *Occasional Paper No 1*, Summary of the OAU Records of the Seminar for the Establishment of Early Warning System on Conflict Situations in Africa during 1996.

[338]   Part II: Ideas and Suggestions Related to the Objectives of the Seminar, Summary of the Records of the Seminar Establishment of Early Warning System.

[339]   *Ibid*.

[340]   Cilliers, *Occasional Paper No 102*, 2005, p. 4.

[341]   *Ibid*., p. 5.

3.3.   The AU's new institutional mechanisms: Peace and Security Council and Early Warning

To strengthen the continent's ability to deal effectively with conflicts, the AU, through the Department of Peace and Security, Article 12 (1) and 2 (*a* and *b*), of the PSC Protocol, articulated the ideals of the continental early warning system (CEWS).   The PSC Protocol refers to the elements that constitute the CEWN for the anticipation and prevention of conflicts:

- an observation and monitoring centre, to be known as "The Situation Room", located at the Conflict Management Directorate of the Union [AU], and responsible for data collection and analysis on the basis of an appropriate early warning indicators module; and

- observation and monitoring units of Regional Mechanisms to be linked directly through appropriate means of communications to the Situation Room, and which shall collect and process data at their level and transmit the same to the Situation Room. [342]

The PSC Protocol, articulating previous expressions of the OAU, mentions forming collaboration with the United Nations (UN), its agencies, research centres, academic institutions and NGOs, all of which would facilitate the effective functioning of EWS.   The EWS shall, continues the Protocol, "develop an early warning module based on clearly defined and accepted political, social, military and humanitarian indicators".[343]   The acquired information and knowledge would be utilised to analyse critical developments relating to the threat to peace and security within the continent and inform the Chairperson of the Commission, who in turn would advice the PSC in respect of recommending the appropriate course of action.[344]   For these ideals to be realised, it is necessary to develop effective regional EWS in support of the AU mechanisms for conflict prevention.   The important issue is to have the shared "institutions, structures and norms", however, these should be augmented by strengthening the peacebuilding networks for effective operationalisation of EWS.[345] Figure 4 below is the graphic representation of the continental early warning system (CEWS).

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[342]   African Union Peace and Security Council Protocol (entered into force in December 2003), Article 12, pp. 17-18.
[343]   AU PSC Protocol.
[344]   AU PSC Protocol.
[345]   IPA, p. 5.

Figure 4: The Broad Graphic Representation of the CEWS[346]
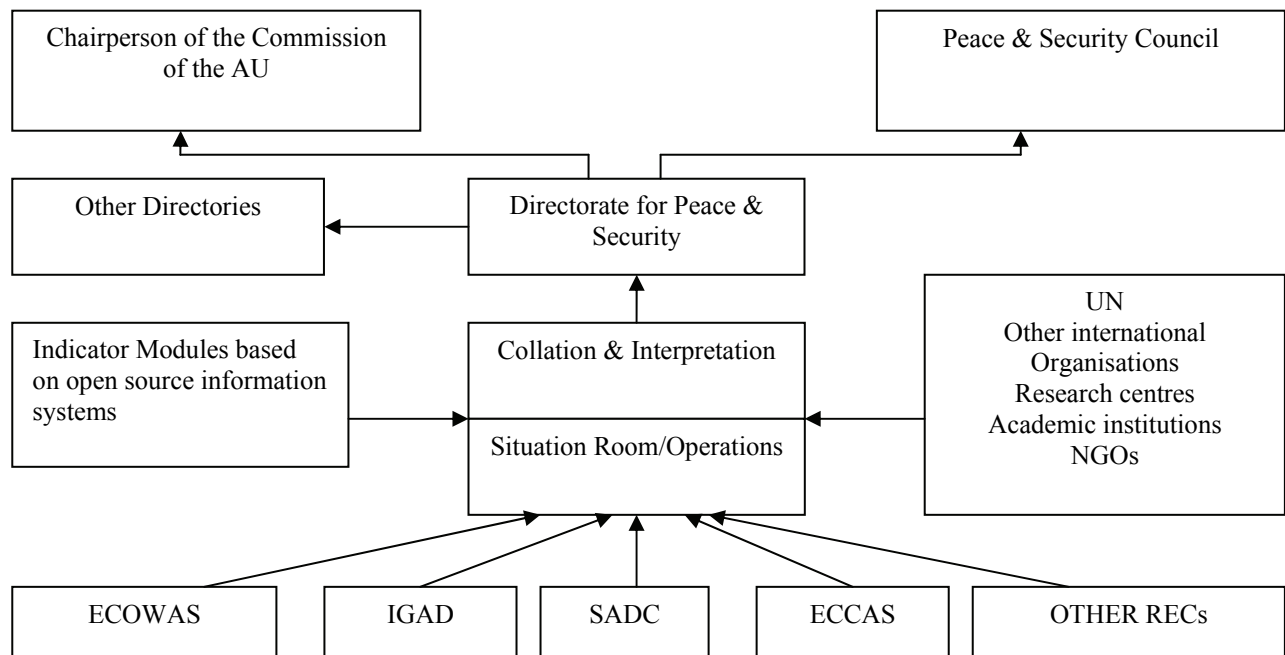
Ideally, this structure represents a wide network of interactions across the system. The subregional organisations (e.g. ECOWAS; IGAD: SADC; ECCAS), are particularly crucial in facilitating the functioning of the system. According to Cilliers, the structure represents the broad framework on how the Protocol is supposed to advance the operationalisation of EWS. Clearly, the role of RECs is imperative in this regard as well as interactions with a number of relevant bodies, including those outside of government. The challenge is that not all RECs have similar historical experiences, culture, policy frameworks, political authority and mandate, and effectively not equivalent conceptions and development of EWS to translate the obligations of AU with regard to EWS into practice.[347] Inability to share basic assumptions about conflict threats will impact on the realisation of the lofty objectives and collective action as envisaged in the AU framework.

3.4. SADC's institutional mechanisms for regional peace and security

In pursuit of the collective and co-operative security ideals, Southern African states transformed the seemingly fragmented and ineffective Southern African Development Co-Ordinating Conference (SADCC), formed in 1980, to a more focused SADC, in 1992.[348] The emphasis now included,

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346   Cilliers, p. 7.
347   ECOWAS, IGAD and SADC have different conceptions of EWS and openness to civil society participation;
       See following sections.
348   SADC, 'From a Conference to a Community,' (http://www.sadc.int/english/WhatsNew/restrucuring.htm).

among others, consolidation, defence and maintenance of democracy, peace, security and stability.[349] The notion of security co-ordination, conflict mediation and military co-operation, found tangible expression after the SADC Workshop on Democracy, Peace and Security, held in Windhoek, Namibia, on 11-16 July 1994, in the launching of the SADC Organ on Politics, Defence and Security (OPDS), to operate at the level of the Summit (consisting of Heads of States) - the supreme policy-making institution of SADC.[350] The Summit is led through the Troika system (three-person "executive") comprising of the Chairperson, Incoming Chairperson and the Outgoing Chairperson. The Organ similarly operates through the Troika system whose members are selected from among members of the Summit, with the exception that the Chairperson of the Troika cannot be the same person as the Chair of the Summit.[351] It is a highly institutionalised organisation and decision making in this framework is bureaucratic and hierarchical, which pose certain predicaments.

Although the Organ has authority, it must report to the Summit (it is under the authority of the Summit) as the ultimate authorising structure in SADC. The ideals and objectives provided for in various protocols could be compromised if there is a diversity of opinions (which are inevitable in political organisation) between the Chairpersons of the Summit and the Organ, with regard to taking decisions. In other words, opposing interests may delay the implementations of decisions. For example, if a imminent conflict (civil rebellion) is visible due to "poor governance" resulting from the actions of the Chairperson of the Summit (as a Head of State), it will be difficult for the Chairperson of the Organ to act accordingly, unless if it means military intervention to keep that leader in power (to prop up the government). This reflects the political challenges in a bureaucratic organisation that impact on political will to act (as indicated previously). The same problem applies if the Chairperson is the same in both positions. It may lead to a "one man show" if the person in charge is the head of the most powerful state (economically, politically and militarily). He/she may use the political authority and "not invite or seek intervention." The South African situation during pre-1994 political dispensation can illustrate the political dynamics that impact of decisions and courses of action. As a strong power, she could exercise it in the manner that protected her interests – state interests, not public interest per se, and no one would dare to intervene. In fact, the current institutional arrangement in SADC reflects such political weaknesses. It still reflects political diversity with potential conflicting conceptions of conflict threats (e.g. conflicting conceptions regarding the Zimbabwean crisis). The situation might improve if the Chairpersons are different,

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[349]   SADC Treaty (www.sadc.int).
[350]   See SADC History and the Restructuring Process, (www.sadc.int).
[351]   Article 10a of the SADC Treaty, (www.sadc.int).

but, the Chairperson of the Organ has complete autonomy and freedom to *decide and act* in dealing with conflict situations.

Another arrangement is that under the Organ, there is a Ministerial Committee consisting of the Ministers responsible for foreign affairs, defence, public security or state security.[352]   The Ministerial Committee has two legs: the Inter-State Politics and Diplomacy Committee (ISPDC) consisting of ministers responsible for foreign affairs, and the Inter-State Defence and Security Committee (ISDSC) which comprises of ministers responsible for defence, public security and state security.[353]   Such institutional mechanisms have been hailed as landmarks which provided a framework for the promotion of sustainable development, peace and security, as envisioned by SADC Treaty.[354]   Malan and Cilliers have equated the Organ with the Organisation for Security and Co-operation in Europe (OSCE), as "potentially" an organisation with a comprehensive approach to security and peace.[355]   Figure 5 below is a graphic representation of the organogramme of SADC structure.

Figure 5: The SADC Organisational Structure[356]

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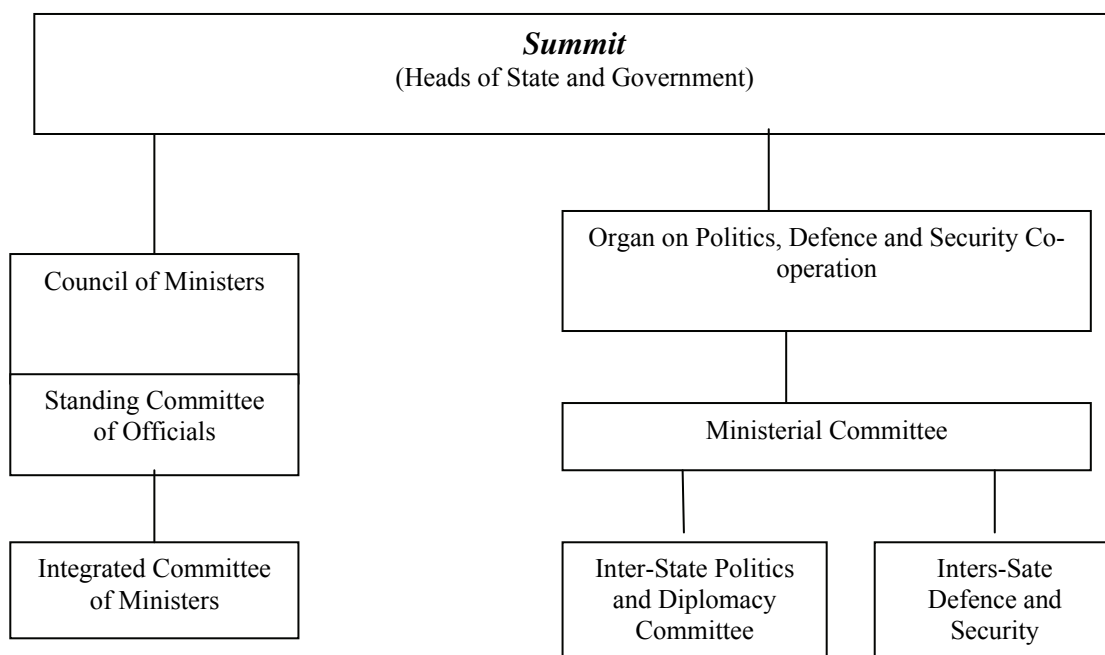
352   Article 10a of the SADC Treaty, (www.sadc.int).
353   Article 10a of the SADC Treaty; J. Isaksen and E. N. Tjønneland, *Assessing the Restructuring of SADC-Positions, Policies and Progress*, A Report Commissioned by the Norwegian Agency for Development Co-operation (NORAD), Chr Michelsen Institute, Bergen, December 2001, p. 27.
354   Van Aardt, p. 144; Dzimba, p. 1; Cilliers, 'The Evolving Security Architecture,' pp. 1-23.; Malan, pp. 1-12.
355   Malan and Cilliers, 'SADC Organ on Politics, Defence and Security: Future Development,' *Occasional Paper No 19*, March 1997, (www.iss.co.za/Pubs/PAPERS/19/Papers19.html).
356   The Structure is modeled on the SADC Treaty as captured in Isaksen and Tjønneland, p. 9.

On 14 August 2001, SADC members signed a Protocol on Politics, Defence and Security Co-operation (hereafter referred to as the Protocol), which subsequently gave it *legal* legitimacy, content and substance to the objectives of SADC, and outlined the structure, operational methods and procedures with respect to the *prevention*, and management mechanisms.[357]   Of particular importance, Article 11 (3a and 3b) of the Protocol, among others, addresses the concepts of conflict *prevention*, management and resolution, and also describes the methods of achieving these objectives: through preventive diplomacy, negotiations, conciliation, good offices, arbitration and adjudication by an international tribunal. [358]   EWS is reflected as an instrument "to facilitate timeous action to *prevent* the outbreak and escalation of conflict."[359]   This was attestation to Aziz Pahad, the Deputy Minister of Foreign Affairs in South Africa, in a speech during an international conference on peacekeeping in Africa in 1995, when he encouraged the establishment of EWS (then proposed within the framework of early warning network of the OAU), stating that its main purpose should be:

- *take stock of Africa's present early warning and communication capacity;*
- *define the anticipated capacity and need for future early warning and communication abilities;*
- *determine the implications for national sovereignty and non-interference in affairs of other states; and investigate the relationship between an OAU early warning capacity and those of the sub-regions on the one hand and between the OAU and the UN on the other.* [360]

The required tools to activate the EWS were however, not outlined. Writing in 1995, Cilliers suggested that the tools for EWS should consist of fact finding missions, small prevention or observer missions and the availability of a crisis management room which should be manned on 24 hour basis.[361]   These suggestions have begun to feature prominently in the institutional provisions of SADC in an effort to have a dedicated service to prevent conflicts.[362]   Thus, in line with international trends regarding conflict prevention, regional security as conceptualised within the

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[357]   For details on the aims and objectives, see the SADC Protocol on Politics, Defence and Security Co-Operation, signed on 14 August 2001.

[358]   SADC Protocol.

[359]   *Ibid.*

[360]   A. Pahad, 'South Africa and Preventive Diplomacy,' Paper delivered at an IDP/SAIIA Conference, South Africa and Peacekeeping in Africa, Johannesburg, 13-14 July 1995, as quoted in J. Cilliers, 'The Evolving Security Architecture in Southern Africa,' *African Security Review,* Vol 4 (5), 1995, p. 5.

[361]   Cilliers, 'Evolving Security Architecture,' p. 5.

[362]   The Inter-State Politics and Diplomacy Committee (ISPDC) consisting of Ministers responsible for Foreign Affairs, and the Inter-State Defence and Security Committee (ISDSC) responsible for Defence, Public Security and State Security, which are part of the Organ and also provided for in the Protocol.

SADC fraternity, depends on EW, which falls within the domain of the Inter-State Defence and Security Committee ISDSC. Figure 6 below shows a graphic representation of the SADC Organ.

Figure 6: SADC Organ for Politics, Defence and Security[363]
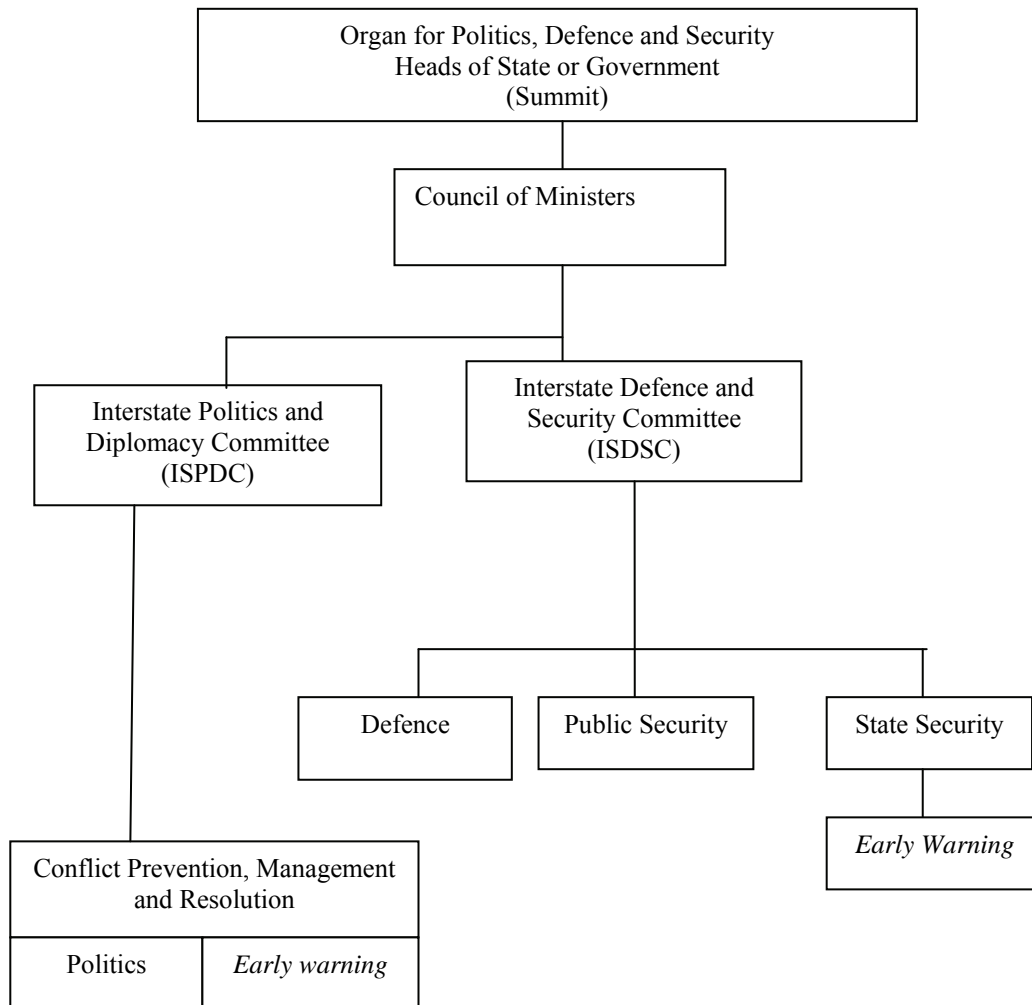
The establishment of these institutional structures for the prevention and management of conflicts have created the required framework for improved intergovernmental relations and to facilitate collective security agenda in the subregion. The adoption of the Protocol was further reinforced by the finalisation of the Strategic Indicative Plan for the Organ on Politics, Defence and Security Co-operation (SIPO), a SADC guiding instrument for the implementation of the strategies and activities of the Organ and also the completion of the Mutual Defence Pact, which is an instrument to operationalise the mechanisms of the Organ "for mutual cooperation in defence and security matters" in 2004.[364] In particular, Objective 3 of SIPO addresses the strategies and activities to

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[363] This model is based on the proposal made during the Inter-State Defence and Security Committee meeting in Malawi, October1996, see Van Aardt, p. 30.

[364] SADC Mutual Defence Pact, done at Dar es Salaam, Tanzania, August 2003.

"prevent, contain and resolve inter- or intra-state conflict by peaceful means."[365]   Activities involved in fulfilment of this objective within the state security sector of the Organ include:

- *identification of potential early warning signs of inter state and intrastate conflicts;*
- *monitor regional security situation;*
- *exchange information of interest.* [366]

These strategies and activities are of practical significance in an effort to uphold peace and security in the subregion. To realise these strategies, and particularly in terms of the operationalisation of EWS, it is imperative to operate in a collaborative framework, where an exchange of information and knowledge play a cardinal role. It could be deduced here that the establishment of the above institutional frameworks and the provisions thereof derive from the challenge to establish the platform for collaboration and co-operation within the context of deepening a security community.[367] Institutional settings, particularly with regard to where in the structural framework of the organisation is EW is located, is crucial to determining the effectiveness of information flow and decision making. This has significant impact with regard to the filtering of EW signals to the relevant decision makers who should act on them. Another critical factor is the extent to which non-state actors play a role in the organisational framework. These issues are important for two reasons. Firstly, early warning operates as a continuum where situational information, assessment, and analysis should flow into strategic policy formulations and options. Institutional fragility in the linkages through these phases will produce inappropriate actions or deference of action.[368] This is usually the case in political organisation with conflicting conceptions and predispositions with regard to dealing with complex social challenges. Secondly, vibrant civil society organisations are regarded vital sources of knowledge as they are not inhibited by bureaucratic constraints, and also crucial for multi-sectoral composition of conflict prevention tools.[369] This is a very important organisational shortcoming in SADC which, in practice, does not embrace non-state actors (CBOs and NGOs).

The participation of civil society in the broader peace and security processes is critical. Non-state actors are often free from the inhibiting constraints of the bureaucratic norms of the states.

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[365]   SADC, Strategic Indicative Plan for the Organ on Politics, Defence and Security Co-operation (SIPO), (http://www.sadc.int/content/english/key_documents/sipo/sipo_en.pdf).

[366]   SADC, SIPO.

[367]   See Van Aardt, pp 1-30; N. Ngoma, 'SADC: Towards a Security Community? *African Security Review* Vol 12 (3), 2003, pp. 17-28.

[368]   IPA, p. 11.

[369]   *Ibid.,* p. 9-11.

Although they are referred to in Chapter Seven, Article 23 (1 and 2) of the SADC Treaty, as critical role players in contributing towards pursuing the broader security objectives in the subregion, in practice they are marginalised.

The Southern African Development Community-Council of Non-governmental Organisations (SADC-CNGO) raised concerns about the continued marginalisation of civil society from the SADC structures and processes.[370] The SADC-CNGO communiqué reflected on the developments with the SADC subregion regarding the "non-adherence to the protocols and declarations by some members states, the apparent failure of mediation efforts which result in the suffering people and deterioration of economic, social and political fabric" – as observed in Zimbabwe, Lesotho, Malawi, Swaziland and Democratic Republic of Congo (DRC).[371] The communiqué attributes these developments on the nature of SADC as an exclusive and hierarchical political structure (and bureaucratically rigid) that precludes open and participatory process.[372] The SADC-CNGO also accused the SADC leadership of obstructing press freedoms and preventing *access to information*.[373] These behaviours (of political leaders) reflect the impact of political activities (power play) on the credibility of decisions and pose problems with regard to the fundamentals of EWS. The imperatives of openness, transparency and accessibility of information to inform judgements regarding conflict threats are put in jeopardy. An opportunity to facilitate trust, cooperation, confidence-building (towards actions of policy makers) and to inculcate the "habit of dialogue, building consensus and to develop the perception of interdependence and shared stakes in peace and stability",[374] is therefore not exploited. These are the results of "entrenched formal structures and hierarchies" where decisions derive from the upper echelons of the hierarchy, thus hindering creativity with respect to preventive action.[375]

Another challenge is the operation of the SADC Organ at the Summit level with the potential for closer *political control* and the subsequent marginalisation of civil society. This is typical of political organisations which seek to operate within the framework of control and predictability. Current practices in the subregion illustrate this point as all discussions take place at closely guarded government level among heads of state in the Summit of SADC. Malan and Cilliers lamented this point by indicating that there is lack of tolerance for the involvement of "non-state

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[370]   SADC-CNGO, *Communiqué of the SADC Civil Society Forum on "Ensuring Effective Civil Participation in Development and Democratic Governance"*, Lusaka, Zambia, 14-16 August 2007, p. 1.

[371]   SADC-CNGO, *Communiqué,* p. 2.

[372]   *Ibid.*

[373]   SADC-CNGO, *Communiqué,* p. 3.

[374]   IPA, p. 5.

[375]   *Ibid*., p. 6.

actors in the areas of monitoring human rights, early warning and research".[376] This view is further demonstrated in the assignment of the EWS responsibilities to national intelligence agencies of the subregion.[377] There is limited transparency and accountability which is driven by the dictates of state sovereignty. The organisation is thus insulated from exploiting the multiple perspectives and innovative ideas that could be drawn from the participation of non-state individuals or groups. In essence, the stated goals in SADC policy frameworks are not reflected in practice.

Such institutional limitations compromise valuable input that could be solicited in an open and transparent manner from civil society as required within the context of an effective operationalisation of EWS. It is therefore not surprising that the SADC- CNGO raised concerns about contradictions of protocols and declarations, whilst at the same time there is *no* political space for civil society engagement, *no* effective participation of civil society at SADC national and regional committees, and instead, there is a continued trend to stifle the work of NGOs by legislating against them (as in Zambia and Zimbabwe).[378] To enable creative exchange of ideas, particularly as it relates to security concerns, it is imperative to create networks to facilitate mutual interaction between governments and civil society. It is imperative for SADC to integrate civil society structures in its institutional frameworks to enable creative engagement, dialogue, and the continual flow of knowledge in order to deepen "comprehensive preventive thinking" and to attain "goal complementarity" across the organisational system.[379]

Apart from these institutional limitations, an analysis of the ability of the SADC's structures to meet the challenges of delivery requires the necessary scrutiny of the principles and objectives in the context of ensuring sustained impact of peace and security imperatives. Since the institutional configurations provide the platform, and the provisions in various protocols provide the legal authority, the principles and objectives reflect SADC's goals and perceptions as contextualised within the broader framework of compliance with the demands of conflict prevention and management.

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[376]   Malan and Cilliers, 'SADC Organ,' (www.iss.co.za/Pubs/PAPERS/19/Papers19.html).

[377]   See Van Schalkwyk, 'Challenges Facing the Newly Restructured SADC Organ for Politics, Defence and Security,' *Africa Insight* Vol 32 (4), 2002, p. 66; Malan and Cilliers, SADC Organ; See also the *SADC Summit Final Communiqués*, with regard to how political events and developments are interpreted, with particular reference to the areas of volatility such as in the Democratic Republic of Congo and Zimbabwe.

[378]   SADC-CNGO, *Communiqué,* p.3.

[379]   IPA, p. 11.

3.5. SADC Organ: Conceptualisation and objectives of conflict prevention system - EWS

The challenges of threats to subregional peace and security have recently been defined according to the general trends and prominent characteristics in terms of refugee flows, crime, the trafficking of small arms, and the disruption of trade.[380] Conflict and instability, particularly in Africa, emanate from weak and dysfunctional states; poor political and economic governance; the politicisation of ethnicity; the marginalisation of groups within a state; armed competition over scarce and strategic resources (land, water, energy and maritime resources); the involvement of the military in inappropriate political and economic roles; and also unconstitutional changes of governments.[381] These aspects have dominated the subregional agenda for peace and security, and also informed the conceptualisation and objectives of SADC's strategic response system for conflict prevention.

The security dimension of the SADC Organ's mandate has broadened to include factors of disarmament and demobilisation, democracy and the rule of law, human rights, foreign policy, military and defence co-operation as well as the prevention of cross-border crime.[382] Table 3 below outlines the objectives of the SADC Organ. It highlights the categorisation of roles and responsibilities in realising the strategic imperatives of SADC Treaty, and also affirm the desire towards the process of institutionalising regional security co-operation. It should be noted that in the category of *crime prevention* and *intelligence*, there are no further activities mentioned except the first two roles, reflecting the priority objectives that SADC is concerned with.

Table 3: Principles and objectives of SADC Organ[383]

Military/Defence	Crime Prevention	Intelligence	Foreign Policy	Human Rights
• Protect against instability	• Close co-operation to deal with cross-border crime	• Close co-operation	• Promote co-operation and common political value systems and institutions to deal with cross-border crime	• Develop democratic institutions and practices

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[380]   South African Department of Defence (Hereafter DoD). 2005. 'White Paper on Defence and Defence Review,' Defence Update Edited Report 1, 15 August, p. 2.

[381]   DoD. Defence Update Report, p. 5.

[382]   J. G. Siccama, *Conflict Prevention and Early Warning in the Political Practice of International Organizations*, Nertherlands Institute of International Relations, Clingendael, February 1996, pp. 54-57; L. M. Fisher and N. Ngoma, 'The SADC Organ: Challenges in the New Millenium,' *ISS Occasional Paper no 114*, August 2005.

[383]   SADC Treaty; An elaborate table is provided in Malan and Cilliers, 'The SADC Treaty: Building Security in Southern Africa, An Update on the Evolving Architecture,' *Monograph no 43*, 1999, (Italics in the table, own emphasis).

• Develop a collective security capacity	• Promote community-based approach	• *Early warning*	• Develop common foreign policy	• Encourage observance of universal human rights
• Conclude a mutual defence Pact	N/A	N/A	• Conflict prevention, management and resolution	• Encourage and monitor international human rights conventions and treaties
• Develop a regional peacekeeping capacity	N/A	N/A	• Mediate in inter- and intra-state disputes • Preventive diplomacy • *Early warning* • Encourage and monitor international arms control, disarmament conventions and treaties • Co-ordinate participation in peacekeeping operations • Address extra-regional conflicts which affect the region	• *Early warning*

The above objectives resonate with the guiding principles of the SADC Treaty: recognition and respect for sovereign equality of all member states; emphasis on peace and security; promotion of socio-economic integration and development; commitment to a peaceful resolution of conflicts; human rights, democracy and the rule of law as well as using military intervention as the last resort.[384] Implicit in the objectives is an enhanced definition of security, which, given the current dynamics relating to dysfunctional and weak states, incorporate the fostering of democratic institutions and practices on the continent. These objectives, however, should be translated into practice in order to fulfil the mandate of the Organ. As such, an assessment of SADC's conceptualised operational dynamics of EWS in the context of the PSC Protocol for conflict

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[384] Chapter Three, Article 4 (from paragraph *a* to paragraph *e*), Principles, Objectives and General Undertakings, SADC Treaty.

prevention is therefore necessary. However, as shown in the previous section, bureaucratic politics in decision making within the organisation will render the achievement of these objectives difficult.

3.6. Assessing the conceptual framework of operationalising EWS in SADC

At glance, through the SADC Organ's committees, i.e. the Interstate Defence and Security Committee (ISDSC), the Interstate Politics and Diplomacy Committee (ISPDC) and the Committee of Chiefs of Defence Staffs, SADC appropriated itself the necessary institutional infrastructure to deal with the subregional challenges appertaining to peace and security. The concept of EW has featured recurrently, not only in official documents and protocols, but also in speeches of SADC leaders and other government functionaries at various forums. The question is whether the SADC Organ *can* realise the stated objectives through practical implementation because it is in that role that its effectiveness would be demonstrated. Of interest to this study, is the critical factor of EWS as conceptualised to operate in three categories of the Organ's objectives: *intelligence, foreign affairs and human rights*. The key problem in this conceptual framework is the subordination of EWS to intelligence communities which are known to be state-centric, secretive and operate mainly in bilateral, not multilateral terms.[385]

Contrary to having access to sophisticated systems by intelligence networks, bureaucratic rivalry (emanating from competing state agencies) can inhibit appropriate knowledge sharing. For example, intelligence agencies' source of power is knowledge and the *trust* of the decision makers with regard to that knowledge is paramount. Due to bureaucratic rivalries and potential agency competition, no identical (EW) analysis will be tolerated since it might undermine the effectiveness of the agencies.[386] Analysis emanating from sources outside the agencies (or outside governmental structures) could be discredited, especially if it seems to be conflicting with the agencies' conclusions or political priorities of the nation state. This has often been the case with regard to the UN.[387] Therefore these bureaucratic politics reveal the limitations of the Organ which utilises the intelligence agencies in EW exercises, instead of a broader interactive network of organisations collaborating in conflict prevention efforts.

The IPA emphatically states that "conflict prevention is a mindset, not a template."[388] It means that different situations require different approaches, thus multiple perspectives and flexibility are

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[385]   Van Aardt, p. 19.
[386]   Schrodt and Gerner, p. 20.
[387]   *Ibid.*
[388]   IPA, p. 12.

principal. EWS, to be effective, require an interactive, multi-sectoral approaches and multi-lateral systems that would facilitate co-operation of multiple agencies and groups such as church-related bodies, media, academic and research institutions and other sub-regional organisations, which are collectively referred to as "focal points".[389] It should *not* be an exclusive preserve of bureaucratic institutions, but a communal and collective responsibility. In fact, EWS for conflict prevention requires an extensively shared responsibility, not confined to a single body (state intelligence agencies as in SADC). The "focal points", argues Nhara, are crucial to EWS as they represent the people on the ground and are closer to the events themselves.[390] However, SADC, including South Africa, have elected to approach EWS through the intelligence networks. Their system, called Regional Early Warning Centre (REWC) in Gaborone, Botswana, is connected to National Early Warning Centres (NEWC) established in SADC member states, and operates as an integrated system in the intelligence community and, it is also based on classified information.[391]

Intelligence networks are in service of the national or state interest where *secrecy* (thus knowledge hoarding) is important. EWS on the other hand, notes Cilliers, operates in the form of a "disinterested intelligence system" which relies on "open sources of information, transparency, sharing of information" and also the input and analysis of information from some sections of civil society.[392] In this instance, *collaboration and information sharing* are central in the context of co-operative interactions at local, national, sub-regional, continental and international levels. The situation in SADC is contrary to this. The OAU/AU, in several expressions, established that there is a need *to cast the net as wide as possible* with regard to sufficiently obtaining knowledge about situations with potential eruption of conflicts. It is therefore not ideal to have state-centric monopoly over EWS. This is a fundamental conceptual flaw with regard to the effective operationalisation of EWS within SADC.

Van Aardt also noted that, instead of approaching EW through the notion of the "absence of war" whereby the intelligence services are the main sources of information and knowledge, efforts should be directed at entrenching EW through the "provision of basic needs and a secure climate for development and progress."[393] In so doing, the activities of intelligence networks with their

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[389]   Nhara, *ISS Occasional Paper No 1*.
[390]   *Ibid.*
[391]   African Union, *Meeting the Challenge of Conflict Prevention in Africa-Towards the Operationalization of the Continental Early Warning System,* Report of the Meeting of Governmental Experts on Early Warning and Conflict Prevention, Kempton Park, South Africa, 17-19 December 2006, p. 5.
[392]   Cilliers, p. 1.
[393]   Van Aardt, pp. 154-155.

inherent weaknesses of exclusivity, should be broadened to include the contributions of "non-governmental organisations (NGOs) which function in the civil sphere", remarked Van Aardt.[394] Inherent in this perspetive is the advantage of wider contribution of expertise and skills from the civilian groups (youth, women, academic, research bodies and other social groupings), as well as increasing preventive capacity by providing for the exchange of knowledge throughout the region. Thus, the successful operationalisation of EWS requires more than just conceptual principles and objectives as mentioned in the above SADC Organ categorisations. It requires a rigorous interface of all stakeholders and disentanglement from the intelligence networks as in the current case, in order to facilitate the abstraction of shared values and beliefs as well as the mutual commitment to preventing conflicts.[395] The apparent lack of civil society involvement in a coherent and integrated conflict prevention system undermines the peace initiatives.[396]

Fisher and Ngoma, though, support the role of intelligence systems because of their "verification for accuracy" approach with the support of technical equipment for analysis, but also asserted the significance of civil society input in the subregional dynamics of EWS in order to enhance its effectiveness.[397] In a clear summation regarding SADC and its institutional limitations, Adekeye Adebajo observed that "the SADC Secretariat has kept something of a distance from civil society, with the ironic result that a sub-region with world-class security institutions does not reap the full benefits of this readily available knowledge."[398] The EW indicators can only be useful if they applied in concert with "professional and local expertise … to capture the complexities of conflict situations."[399] To reinforce EWS as knowledge-intensive decision support tool, it is critical to exploit the abundant human capital (CBOs; NGOs; other non-state actors), link them with policy makers, and engage in a dynamic interactive-collaborative response planning for the formulation of "quality" contingency measures. Decision making should therefore be democratised from "bottom-up or top-down."[400] There should be institutionalisation of debate, discussion, dialogue, and challenging of preconceptions to enhance the quality of knowledge exchange in order to facilitate sustainable conflict prevention strategies.[401]

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[394]   Van Aardt, pp. 154-155.
[395]   Each member state, according to SIPO provisions (p. 19), should establish an early warning centre and South Africa is currently using the National Intelligence Coordination Committee (NICOC) for EW purposes. See Cilliers, pp. 16-18.
[396]   Fisher and Ngoma noted the government functionaries' suspicions of NGOs and other external forces as trying to set the agenda for the regional states.
[397]   Fisher and Ngoma, 'SADC Organ: Challenges for the New Millennium.'
[398]   Adekeye Adebajo, 'ECOWAS and the SADC: A Tale of Two Invalids? *City Press*, 22 May 2005, p. 26, as quoted in Fisher and Ngoma, 'SADC Organ: Challenges for the New Millennium.'
[399]   IPA, p. 8.
[400]   *Ibid.*
[401]   *Ibid.*, pp. 11-12.

In spite of these shortcomings, SADC has developed ambitious objective strategies in respect of collective security. In short, particularly as it pertains to conflict prevention, management and resolution, SADC strategies include:

- *preventive diplomacy;*

- *negotiation;*

- *conciliation;*

- *mediation;*

- *arbitration; and*

- *adjudication by an international tribunal.*[402]

John Dzimba has raised concerns about the implementation of these strategies due to the manifest problems of overlap and divergent perceptions on what is supposed to be done during conflict situations.[403] As a matter of priority, SADC Organ embarked on clarifying conceptual principles for implementing EWS to facilitate the realisation of the above strategies. According to Cilliers, during July 2004, the ISDSC gave mandate to a team of experts to initiate the establishment of regional EWS.[404] Since then, subsequent meetings which were "shrouded in secrecy", have been held in South Africa, in preparations for the operationalisation of EWS in the subregion.

The REWC, based on linkages with the national intelligence agencies of SADC member states, operates in the form of exchanging information [in SADC intelligence systems] and the dissemination of reports to the AU through the office of the incumbent President who chairs the Organ at that time, and not directly engaging in communication, sharing and exchange of information and analysis with the African Union itself.[405] Thus the SADC system, argues Cilliers, operates in contrast with the framework of open systems of information as prescribed for the continental EWS, and it is also different to the other systems operated by ECOWAS and IGAD.[406] See Table 4 below for a comparative overview of RECs with regard to the state of EWS and mechanisms for conflict prevention.

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[402]   SADC Organ.

[403]   Dzimba, p. 6.

[404]   Cilliers, p. 18.

[405]   *Ibid.*

[406]   See the Conflict Early Warning and Response Mechanism for the IGAD Region, Addis Ababa, Ethiopia, July 2003, pp. 7-12.

Table 4: Comparative overview of RECs' EWS and Conflict prevention mechanisms[407]

Name of REC	Mandate	Conflict Prevention Activities	Institutional Unit (s)
1. ECCAS	Created Council for Peace and Security in Central Africa (COPAX)-Protocol	• One of the four priority fields is to develop capacities to maintain peace, security and stability.	• Central African early-warning system (MRAC): collect/analyse data for early detection and prevention of crisis
2. ECOWAS	Protocol relating to the Mechanisms for Conflict Prevention, Management, Resolution, Peacekeeping and Security	• Ad hoc • Good offices • Special envoys • Mediation • Regular Council meetings to discuss security situation in the area.	• Mediation & Security Council: 10 Member States; decision-making in crisis • ECOWARN: network of information bureaus & CSOs (WANEP); monitoring & EWS.
3. IGAD	Protocol establishing a Conflict Early-Warning and Response Network (CEWARN)	• Ad hoc • Good offices • Mediation • Facilitation • Special envoys	• CEWARN: system for sharing of information, via data collection & analysis, pertaining to potential conflict and the promotion of coordinated response; formulation of/communication of response options to CEWARN response units
4. SADC	Protocol on Politics, Defence and Security	• Ad hoc • Good offices • Facilitation • Adjudication • Arbitration	• Organ for Politics, Defence and Security Cooperation (a troika) • Interstate Politics, Diplomacy Committee: prevetive diplomacy, conflict management and EW, assistance oreited • Regional EW Centre and Strategic Analysis Unit: to manage the Situation Room, *agreed but not yet operational.* • *Tribunal:* adjudicate disputes

The above comparison illustrates an earlier concern regarding the lack of uniform conception (and operationalisation) of EWS in the continental RECs. It impacts on developing common analytic frameworks on circumstances of conflict for the accurate estimation of emerging instabilities and threat assessments. For instance, in meeting the challenges of conflict prevention through REWC, the subregion seems to be caught up in the issues of the centrality of state security rather than widening its focus to the human dimension of the concept – security. This is informed by the apparent domination of the Organ structures by a number of departments related to defence and

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[407]   See detailed overview of the regional and sub-regional institutions in the world by C. Collins, E. Friberg and J. Packer, *Overview of Conflict Prevention Capacities in Regional, Sub-regional and Other Intergovernmental Organisations,* European Centre for Conflict Prevention, (www.gppac.net), October 2006.

intelligence, and not mainly through the foreign ministers, which effectively implies that government interests take precedence over the people in the states.[408] Dzimba commented on the necessity of creating a culture of democracy and tolerance which effectively entails the involvement of civil society in EWS, and, for the realisation of the peaceful and constructive settlement of conflicts, governments should create enabling environment in which civil society could effectively operate.[409] Failure to create an environment that is conducive for enhancing EW of potential conflict at subregional level will impact on the continental ability to undertake proactive and effective action (e.g. in Darfur and Somalia in the current situation.

In the short term, given the emerging nature of the EW concept on the continent, most of the RECs, including SADC are still at the developmental stages of the system. Part of the reasons is that each subregion is affected by its own historical context. Southern Africa has evolved from the situation of the 1970s to 1990s where the Frontline States contested subregional security landscape with the then hegemonic power, South Africa, with the result of having a cautious approach towards EWS.[410] Of critical significance is the non-interventionist tone of the Organ Protocol which precludes member states from taking enforcement action to avert conflict without the consent of the government of the state experiencing a crisis, as reflected in the provision that response shall only take place at the "invitation by a member country" for the purpose of mediating in a conflict.[411] The legal provisions have a greater influence on matters pertaining to the practical operationalisation of EWS within the subregion as far as key role players, capacity-building as well as creating awareness and mobilising resources as required by the system. The fact that in the SADC's case, there is a greater tendency of government involvement pursuance of conflict prevention mechanisms, constant ideological debates and diplomatic manoeuvring impact on the effective operationalisation of EWS and response as well as causing delays in soliciting key donor support.[412]

Another drawback, as identified during a workshop on enhancing the capacity of early warning mechanisms in Africa, held in Johannesburg, South Africa, on 15-16 Deccember 2006, there is a tendency of governments to spend financial resources on physical infrastructure and elaborate warning databases, at the expense on enhancing human expertise.[413] Conflict-monitoring and

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[408]   Cilliers, p.118.
[409]   Dzimba, p. 6.
[410]   Levitt, p. 66.
[411]   See SADC Organ Protocol.
[412]   G. M. Yekelo, Personal Experiences of a Member of the South African National Defence Force (SANDF), 'Continental Early Warning and Information Sharing: A Military Perspective for Deterring and Resolving Complex Emergencies,' (http://www.oss.net/dynamaster/file/_archive/SouthAfrica/ppt).
[413]   T. Ekiyor and J. Enoh-Eben, *Enhancing Conflict Early Warning Capacity and Training Methodologies in*

analysis, knowledge, skills and techniques of the ordinary people should be developed in order to have an enlarged network of expertise to carry out the responsibilities of EW. Given the current focus on state agencies like the intelligence communities, technical training and the development of and management of databases is limited in scope. It is imperative to have qualitative input in EW efforts. Therefore knowledge of social, political, economic and cultural conditions of the communities, mainly possessed by individuals outside of the agencies, such as local authorities, civil society, youth, and women, would remain *unexploited* within the current SADC security framework, thus compromising qualitative input.

According to Mzwandile Yekelo, these constraints could be overcome if the *state-centred* approach, wherein EW operates within the framework of state organs (as the SADC approach), is broadened to incorporate the civil society organisations and NGOs, based on the co-operative and collaborative arrangement, "not an *either/or* scenario".[414] The recommendations offered by Yekelo for an effective operationalisation of EWS, from the perspective of what the RECs need in support of the continent, include the following basic provisions:

- *resources such as equipment, information and communications technologies;*
- *funding for the operational costs of the system;*
- *training to enhance the capacity of role players;*
- *simplicity; and*
- *utilisation of available resources such as SMS warning and response planning.* [415]

These recommendations are significant in adding content and relevance to the requirements of EWS in Southern Africa. In terms of the resources, the SADC subregion is regarded in many quarters as sufficiently available especially as far as technological infrastructure is concerned. Their problem is with the technical approach to EWS through the agency of state functionaries to the marginalisation of civil society from contributing in strategic analysis and policy formulation. Currently, the Situation Room in Botswana, has been equipped with computers and furniture, with the manpower seconded from South Africa and Namibia, but these developments fall short of meeting the challenges of expertise and qualified analysts.[416] It is imperative for SADC to learn from other EWS currently operating in other RECs on the continent and even in Europe in order to successfully

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Africa, Workshop Report, The Centre for Conflict Resolution (CCR), Economic Community of Central African States (ECCAS), IGAD, and the University for Peace (UPEACE) Africa Programme, Johannesburg, South Africa, 15-16 December 2006, p. 3.

414   Yekelo, Personal Experiences of a Member of SANDF.
415   Yekelo, Personal Experiences.
416   Ekiyor and Enoh-Eben, p. 4.

operationalise its own. The challenges that have the potential of hampering the effective functioning of the subregional mechanisms for conflict prevention should be collectively shared across the RECs in order to learn from one another in remedying the deficiencies. The benefits of sharing include the development of common conception of emergencies and the required responses to various types of conflicts. Funmi Olonisakin, writing in 2000, noted that it is also fundamental to increase the levels of communication among subregional organisations (RECS) and the continental body (current AU) as well as civil society as the key to ensuring well functioning EW and prevention systems.[417]

3.7. Way forward for improving SADC's capacity for operationalising EWS

This chapter has highlighted the bureaucratic complexities and institutional limitations of SADC with regard to the operationalisation of EWS in the subregion. The picture points out to the key issues that could impede the subregion's capacity for implementing conflict prevention strategies. Developing the tools for preparedness and to create a coherent capacity for developing strategic options for conflict prevention require quality EW input from diverse sources in the sub-region. Monitoring and knowledge acquisition regarding the potential signs of conflict require a decentralised approach that draws from even the remote population groups who possess the requisite knowledge, expertise and local understanding to detect subtle indications representing the potential for the eruption of violence. Their knowledge and experiences can be useful in providing the required insights relating to potential conflicts. This forms the main assumptions regarding the necessity of KM strategies to facilitate the impact of knowledge in enabling SADC to improve the operational effectiveness of EWS. The key motivation is to transform the organisational frameworks and culture of SADC in order to facilitate the impact of KM processes.

The prevention and management of conflicts should not be restricted to the province of state agencies. In fact, according to the United Nations Security Council Report in 2004, in order to enhance the capacity for handling conflicts, there is a greater need for interaction between the world body (UN), political, peacekeeping and humanitarian departments with external sources of EW, academia, and international organisations dealing with conflict studies as well as bringing on board local sources of knowledge, in a collective endeavour to bring about an end to the scourge of

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[417]   F. Olonisakin, 'Conflict Management in Africa: The Role of the OAU and Sub-Regional Organisations,' *Monograph 46*, February 2000.

conflicts in the world.[418]   Such a comprehensive outlook from the UN should serve as framework that could be adopted by the SADC subregion in a revamped approach to EWS.

The main challenges emanate from the bureaucratic politics that limit the SADC's institutional capacity to effectively engage in constructive conflict prevention initiatives. KM processes should be exploited to facilitate sharing of information, exploiting knowledge from diverse sources including civil society organisations, NGOs, research institutes and other groups, as well as creating best practices infrastructure, in order to impact on effective construction of contingency responses and development of policy options. Through these mechanisms, EWS would then be strengthened as a decision support system that will guide response actions. To reinforce SADC's strategic response to violent conflicts, it requires a multiple perspective approach from a range of sources in a networked interaction to derive knowledge about "where, when and how to engage" in preventive action. In other words, KM processes should be utilised to ensure that EWS integrates the conflict analysis and indicators with multiple policy response options for a dynamic programme of conflict prevention.

The next chapter seeks to provide an analysis of the KM processes required in SADC's organisational and institutional frameworks to facilitate the realisation and effective operationalisation of its EWS. More specifically, for EWS to be an effective conflict diagnostic facility, its knowledge capacity to enhance the decision support efficacy is paramount. The system must infuse conflict threat assessments with the solution set. Attaining these objectives requires institutional support, especially the support of political decision makers to overcome bureaucratic politics, mistrust, interagency competition and institutional ignorance. Through the strengthening of communication channels and ensuring the active participation of non-state actors in EWS, SADC can benefit from the mutual exchange of knowledge and the development of congruence with regard to the implementation of contingency measures. The political decision makers must also be open to critical challenge of their decisions so as to consider whether those decisions derive from conceptual errors or cognitive biases. In the context of KM, this is referred to as decision execution cycle (DEC) interruption approach which facilitates creative learning through feedback loops prior the implementation of that decision so as to enable "problem seeking, recognition and formulation."[419]   This is consistent with KM processes to enhance the development of new insights and multiple perspectives through learning, and to enable EWS to become an effective knowledge-intensive decision support system, and also to transform SADC into a learning organisation.

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[418]   United Nations Security Council, Report to the 59th Session of the General Assembly, 'Towards a New Security Consensus,' A/59/565, 2 December 2004, p. 37.

[419]   Firestone, p. 18.

CHAPTER 4

A PATH TO PRAXIS: ADVANCING 'KNOWLEDGEABLE' ACTIONS IN EWS

4.1.   Introduction

Dynamic proactive response to conflict situations needs knowledge and democratisation of decisions making. A crucial element of facilitating the decision making processes is interactive-collaborative response planning and working towards consensus to maximise the impact of actions. The "system" must be dynamic – all interrelated actors in EWS, from the desk officer to the policy maker, depending on the level where action is to be initiated, should actively participate in mutual knowledge exchanges for creativity and qualitative conflict prognosis. Effective generation of quality estimates and knowing where the risks of conflicts are in order to effect appropriate actions is imperative. Such a task is integral to EWS as a decision support facility. Therefore developing EWS requires a construction of communication infrastructure in order to maximise the opportunities for mutual exchange and knowledge sharing so as to make the system an effective decision support facility.   This is a fundamental requirement for effectively operationalising Africa's and similarly, SADC Organ's early warning system (EWS).

EWS should continually monitor and identify conflict risks in the nation states, translate those risks and assessments into knowledge, then apply that knowledge in creative intervention strategies for political decision makers to coordinate actions. But, to operate EWS requires well developed and uniform analytic frameworks and shared abstractions of what the system entails, especially at subregional levels.   In Africa, there is an *uneven* development of EWS in various subregional organisations. Unlike the West and East African counterparts (ECOWAS and IGAD respectively), in Southern Africa, in particular, although there is an existing institutional framework providing for the establishment of EWS, there is a serious deficiency in its operationalisation. Part of the problem is the state-centric approach used by SADC Organ.   Another problem is the conceptual inconsistency with regard to the definition of EWS. Each subregion appears to have framed its own version of EWS on the basis of their conception of local conditions.[420] In addition, what it means to "know" about risks is also unclear. And this is the point of this study, to integrate KM framework in EWS so as to facilitate the creation of a "common knowledge base" and shared understanding regarding what the "risks" are and to coordinate common actions with regard to interventions.

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[420]   On the unique historical experiences that explains the nature of sub-regional EWS, see Yekelo, Personal Experiences of a Member of the SANDF.

To make sense of the problems, KM processes are critical to ensure that a *common platform* is created to facilitate a *common outlook* consistent with the vision and goal of the organisation. For example, dynamic individuals or groups with the requisite expertise and knowledge can be integrated into EWS in order to be able to leverage that knowledge for the benefit of "everybody" involved conflict prevention. Although some of the organisational challenges are more political in nature, other challenges such as the development of monitoring capacities, as well as building and applying professional expertise and analytical skills critically require KM processes. For instance, common challenges confronting the EW mechanisms on the continent relate to problems of *access* to information, weak *communication* systems, poor co-ordination of *information flow*, limited resources in addressing conflicts and also *weak linkages* with other subregional economic communities.[421] KM initiatives can have strategic impact in addressing some of these deficiencies. Key areas where capabilities are sought to be enhanced is the improvement of knowledge generating and analytic capacity, information collection systems and advancing contextual knowledge (area/situational and historical data) vital for reliable analysis and developing *action-oriented* contingency measures. [422] However, this is not adequate though. The critical role of KM is to create a framework of (human) interaction for effective exchange of knowledge in decision making processes so as to produce "shared perspectives" and uniform interpretations for the role players in EWS so as to ensure qualitative impact of decisions and actions.

Given that EWS rely on context-specific qualitative methods, the notion of tapping into the knowledge base of local communities is therefore reinforced.[423] Building monitoring capacities for enabling effective functioning of EWS require institutional strengthening of the collaborative networks, including local communities, for an expanded source of knowledge. Because CSOs and CBOs possess by far extensive knowledge of issues in their surroundings, peace initiatives should be synchronised with the background histories of communities as well as understanding the full complexity of the people's problems. These would enhance the instruments of conflict prevention and management.[424]

Against this background, this chapter attempts to outline the useful mechanisms to embed KM processes in operationalising EWS in the SADC subregion. The main idea is to ensure that there is

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[421]   Ekiyor and Enoh-Eben, p. 5, (Italicised words are my emphasis).
[422]   *Ibid.*
[423]   S. Schmeidl and F. Ismail, 'Implementing the United Nations Security Council Resolution on Women, Peace and Security: Integrating Gender into Early Warning Systems,' *Report on the 1st Expert Consultative Meeting*, Nairobi, Kenya, 7 May 2001, p. 3.
[424]   Anan, *Report of the Secretary General of the United Nations*, 52nd Session of the General Assembly, A/52/871 – S/1998/318, 13 April 1998, p. 6.

quality decision making and response actions to conflict situations. As explained in the previous sections, it takes a multiple perspectives *decision-centred approach*. It means a KM framework that would facilitate creative decision making through the development of varied perspectives in relation to conflict risks and response actions. In other words, it also means the dynamic cyclical flow of knowledge from *knowing* about the potential conflict in a specific area to the provision of the relevant response *actions*. Put differently, it can be emphasised that there should be creative correlation between *knowing about the conflict* and *knowing what to do* or *how to act* in specific circumstances. Added to this, is the question of constructing feedback loops to facilitate learning from the effect of the actions taken and integrating those lessons into new knowledge to improve future decisions and actions. In essence, this is the role of KM in the context of EWS. It is about using knowledge to enhance the quality of decision making and actions. The focus of the discussion is on establishing information and knowledge acquisition, sharing, transmission and dissemination frameworks for informed decision making and to facilitate the formulation of better response actions towards conflict threats. The discussion will also make occasional references to EWS in other subregional organisations such the IGAD, in order to draw comparisons on how SADC can effectively improve its own in the subregion.

4.2. EWS and decision-centred support model

Knowledge about the possibility of an eruption of conflict is not sufficient in the context of EWS. After the root causes of the conflict have been exposed and analysed, the situation understood in its complexities, then the warning signals must be sent out to political decision makers, and they, on the basis of that knowledge, coordinate actions.[425] Van der Goor and Verstegen insist that the provision of knowledge should be extended to include a *response-oriented analysis* whereby anticipation should be accompanied by *response options* to the decision-makers (as alluded to in the previous sections).[426] The main argument of Van der Goor and Verstegen involves the challenge of "unwillingness" of political decision makers to engage effectively in dealing with conflicts due to, among others, political feasibility and desirability, as well as conflicting priorities and goals.[427] To address such challenges, it is envisaged that the EWS should function with the political decision makers as end-users in mind.

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[425] L. Van der Goor and S. Verstegen, *Conflict Prognosis: A Conflict and Policy Framework Part Two*, Netherlands Institute of International Relations, Conflict Research Unit, June 2000, p. 4.

[426] *Ibid.*

[427] *Ibid.*, p. 5.

Schmeidl is of the opinion that EW analysis should translate into meaningful policy related results.[428] It implies that analysis should reduce ambiguities and provide options for political decision makers through the creation of worst or best case scenarios. Role players in the system should engage in meaningful exchange of ideas, narratives and scenario-building exercises involving a wide variety of participants. The advantages with regard to the decision-centred model are to optimise the production of multiple perspectives for the political decision makers and the relative impact of alternatives (effects of actions) in the context of the prevailing circumstances. This must form part of EWS management cycle.

The EWS management cycle involves the determination of factors that should be monitored. According to the FAST[429] project, the core products – knowledge products - consist of the annual baseline study, risk assessment, policy options and supportive data; quarterly up-dates and event data analysis.[430] The baseline study focuses on the root causes (background factors) of the conflict, proximate and intervening factors that, since peace and conflict are regarded as a continuum, in pre-conflict situations, intervening factors focus on the likelihood of armed conflict and in post-conflict situations, they (intervening) measure indicators that increase or decrease the likelihood of peace-building.[431] These measures are used in EWS management cycle to determine *where and when* will conflict erupt, and also *where, when and how* to implement intervention strategies. This forms the basis to initiate early action at the appropriate level, particularly in areas where conflicts have taken place before. However, the lack of action or late action signifies the failure of the EWS. Hence the question of actions, particularly previous intervention activities (failed or succeeded) should form part of the lessons learned or best practices. Throughout this decision making and implementation cycle, constant evaluation of decisions and actions, as well as the effectiveness of those actions should be undertaken so as to update contingency measures and to consistently learn and innovate for continuous improvement. Firestone elaborates that "interventions should be modelled with reference to their anticipated effects."[432] In other words, knowledge must be used to enhance decisions and actions, those actions must be monitored in the context of addressing organisational objectives so as to determine the effectiveness of those actions. The outcomes of the actions should form part of lessons for continuous learning and creation of new insights. This systematic approach operates organically and at multi-lateral layers of EWS through the process of *decision-action-reflection* continuum to enhance political decision makers' intellectual agility.

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[428]   Schmeidl, p. 48.
[429]   See Chapter 2 of this study for the definition and operational principles of *FAST* project.
[430]   See Krummenacher and Schmeidl, *FAST*, p.7.
[431]   See Schmeidl, p.59.
[432]   Firestone, p. 20.

Eric Brahm lists about twelve of the variables that constitute indicators for prompting early response. Among the most common activities include:

- *sudden demographic changes and population displacements;*
- *an influx of refugees;*
- *destruction or desecration of religious sites;*
- *discrimination or legislation favouring one group over another;*
- *government "clampdowns"; and*
- *destabilizing referenda or elections.* [433]

When these indicators occur, it is in the operational context of EWS to send signals indicating the need to intervene before they accrue and escalate into "crisis" point at which time it will be too late. Relevant response actions must also be constituted along these indicators to accelerate the implementation of appropriate actions. In the African context, there are other indicators that manifest in subtle manner and from which, particularly local communities, can spot emergent conflict patterns and also elicit meaning. Some of the examples, (different from region to region), include:

- *the absence of young men in traditional sports;*
- *reduced frequency to cultural and traditional activities like dancing, singing and ceremonies;*
- *women regrouping less often at water-wells;*
- *women and children arriving to fetch water unusually early or visiting the farmstead less often;*
- *the thriving or rumour-mongering or "bush radio";*
- *indigenous intelligence or indigenous information-sharing increases;*
- *an increase in initiation ceremonies, especially for boys (potential warriors), or the performance of pre-war traditional norms (in some rural African regions);*
- *the suspicious absence of community public figures to attend or participate in public assemblies; and extreme polarisation amongst communities, especially during election.* [434]

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[433]   E. Brahm, 'Early Warning, Beyond Intractability: Knowledge Base on More Constructive Approaches to Destructive Conflict,' (accessed at http://www.beyondintractability.org/essay/early_warning/?).

[434]   Ekiyor and Enoh-Eben, pp. 9-10.

The local communities are well placed to recognise these conditions and, based on their "deeply embedded local experience and historical reality"[435], are able to know that something (conflict) is about to happen. These are subtle ways of "sensing" the likelihood of conflict, and KM is critical in ensuring that such knowledge from the local communities is integrated into the EWS framework in order to exploit such nuances to enable early interventions. These indicators should be integrated into the KM framework in order to be of value to EWS.

Once the indicators have been established, the "conflict prevention and management" centre should analyse the information in order to determine relative propensity to armed conflict and then send out early warning to the political decision makers to take adequate action. The purpose of EW can be understood in terms of assisting in addressing the "root causes of the conflict, their development, conditions for resolution and guidance to better settlement … forestalling or alleviating the worst effects, including early intervention to transform or resolve conflict."[436] Nhara proposes the methodology for EW information and activities, as defined in terms of EWS requirements, which must be stored in databases, according to the profiles of the countries, particularly those at the brink of conflict or those that have recently just emerged from conflicts:

- *historical surveys and analyses of events;*
- *analyses of the content of documents and reports;*
- *comparative analyses of relevant information;*
- *physical inspections and field visits [fact finding];*
- *statistical sampling and inference;*
- *operations research techniques;*
- *economic and econometric analysis; and*
- *modelling and remote sensing.* [437]

These are the parameters that should constitute EWS, notes Nhara. They should constitute the bulk of the conflict indicators that, once incorporated into the EWS framework as part of the knowledge network, also contribute to contingency and response planning, with associated prioritisations in terms of mobilising operational resources. The decision support model should integrate these variables in order to enhance conceptual clarity, reduce ambiguity and facilitate quality decisions for effective response actions. In addition, it should also build-in multiple alternatives for action

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[435]   Environmental Emergencies News, p. 2.
[436]   Nhara, *ISS Occasional Paper No 1*.
[437]   Nhara, *ISS Occasional Paper No 1*.

and feedback loops for reflection to enhance learning capability. Figure 7 below represents the dimensions of the decision support processes. It features an assessment of instability, generating options, decision and implementation as well as feedback to determine the effectiveness of the intervention and learning for continuous improvement.

Figure 7: Dimensions of decision making-execution process[438]
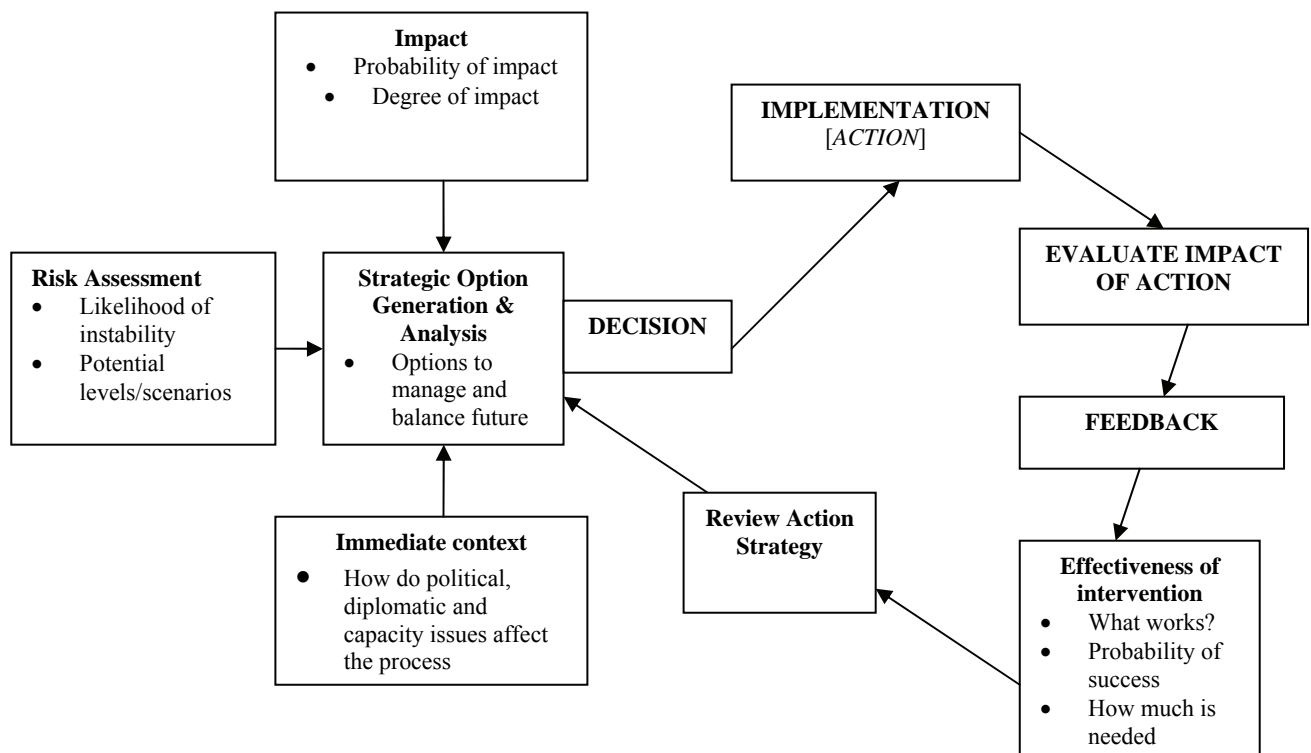
The model presented here reflects key processes involved in a decision support framework. At first, as stated previously, the idea is to extract knowledge about countries' situations and make estimates of the potential for armed conflict. Countries need to be profiled according to their relative vulnerability and risks of instability. Political decision makers should understand the multi-causal nature of conflicts and contextual factors of political, social, economic, cultural and institutional dynamics within the context of the profiled countries in accordance with their (the countries) capacity to resolve the conflict, make decision and act – then evaluate the outcomes. Using the "causes-effect" relationship, an assessment of the potential impact on the strategic interests could be ascertained, as well an assessment of the relative impact of policy interventions through feedback sessions and after-action review processes, in order to learn and continue to improve.[439]

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[438]   This useful model has been adapted from C. Yiu and N. Mabey, 'Countries at Risk of Instability: Practical Risk Assessment, Early Warning and Knowledge Management,' Prime Minister's Strategy Unit (PMSU) Background Paper, United Kingdom (authors caution that the paper does not represent agreed UK policy), February 2005, p. 5.

[439]   See Van der Goor and Verstegen, Conflict Prognosis, pp. 7-10.

The Netherlands Institute of International Relations, on the basis of its extensive research, has developed a cluster of what it calls "problem areas" which should be considered in monitoring process. These clusters take into account the multi-causal nature of conflicts as well as contextual factors as outlined above, which impact on the dynamics of interventions. Common elements of the conflict clusters that lead to vulnerabilities include poor governance, institutional degeneration, endemic corruption and destructive leadership. [440] Box 1 below identifies the "problem areas" in the framework of conflict analysis.

Box 1: Conflict "problem areas"[441]

1. Governance
2. Justice and human rights
3. Socio-economic setting
4. Politico-cultural setting
5. Internal security setting
6. Resource management
7. Regional security setting
8. International political-economic setting

These clusters are broadly representative of the EW indicators mentioned above. They constitute the crucial components of the decision support process. If they are sufficiently analysed and understood on the basis of the given indicators in the countries under scrutiny, they would go along way in generating better decisions for preventive interventions. After systematic monitoring and development of policy options, response planning and political decisions can then be set in motion. However, decision makers should take cognisance of the prevailing circumstances such as existing military commitments, resources, regional groupings and the attitudes of the public before embarking on implementation of interventions.[442] Early deployment of personnel, envoys, diplomatic efforts, mediators, special representatives, and experienced and knowledgeable persons, who can make an important contribution towards conflict prevention, will be the culminating part of

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[440]   Van der Goor and Verstegen, Conflict Prognosis, pp. 7-10.
[441]   Broad clusters of EWS indicators adapted from Van de Goor and Verstegen.
[442]   Yiu and Mabey,p. 4.

the decision support model.[443]   After the implementation phase, the process should go through a review and evaluation phase, based on the feedback, to determine success of those actions.   During this phase, lessons will be drawn, assumptions re-evaluated, contingency measures be updated and strategies revised in order to come up with better refined outputs to meet expectations and challenges.   The role of EWS is more critical when it has presented an accurate assessment of the likelihood of conflict, and associated contingency measures, followed by the implementation of appropriate intervention strategies.   Whatever the outcomes, EWS should be revitalised through engagement in critical discussions and up-dating of observations on regular basis as the in-conflict situations also require significant monitoring of signals of intervening factors that may hold the potential for the de-escalation of the conflict.[444]

Cilliers points out that the conflict indicators should not be universally applied as each [sub] region's context is peculiar to that area, hence, in Africa, ECOWAS, IGAD and SADC have their particular EWS tailored to suit their needs.[445]   Each system is designed to accommodate particular needs, resources, organisational culture as well as response mechanism.[446]   For example, the Protocol on the Establishment of a Conflict Early Warning and Response Mechanism (CEWARN) for IGAD Member States is more focused on the following aspects that must be monitored and should also form part of what the "system" should know:

- *livestock rustling;*
- *conflicts over grazing and water points;*
- *smuggling and illegal trade;*
- *nomadic movements;*
- *refugees;*
- *landmines; and*
- *banditry (and piracy).* [447]

From a KM perspective, the elements mentioned above constitute the "known" issues that are and have been responsible for previous conflicts.   In addition, they are regarded as key issues that the communities in that subregion feel strongly about and can easily lead to situations of conflict.

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[443]   See United Nations Security Council Report, 2004, A/59/565, pp. 36-37.
[444]   See Krummenacher and Schmeidl, *FAST*, pp.7-8.
[445]   Cilliers, 'Conflict Early Warning Systems and Support of the Comprehensive Peace Agreement in Sudan,' p.7.
[446]   *Ibid*.
[447]   These have been identified as relevant key knowledge areas associated with armed conflicts in the Horn of Africa sub-region as referred to in the Protocol on the Establishment of a Conflict Early Warning and Response Mechanism for IGAD Member States, Part II, Information, August 2003.

When Becerra-Fernandez *et al* refer to knowledge capture, the above elements can be regarded as the "knowledge products" that should be captured for the benefit of EWS to be able to "react early" when any of these start to "flash" signals of trouble. However, they should be integrated into the knowledge infrastructure as part of enhancing the development of multiple perspectives because of the dynamic and complex nature of conflict systems. In SADC subregion, the knowledge areas that form part of the EWS are based on the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA)'s clusters with respect to EW indicators and methodology.

The UNOCHA clusters include:

- *socio-economic conditions-structural pre-conditions for conflict (background or root causes);*
- *state and institutions (structural and proximate factors) affecting the capacity of a society to deal with the conflict in a peaceful manner and to deliver necessary services to citizens;*
- *international/regional structural and proximate factors with respect to the potential spill-over effects of the crisis and the impact of external factors in influencing the crisis;*
- *security cluster which focuses exclusively on the security levels of the sub-region;*
- *public discourse, ideological factors; and the behaviour of elite;*
- *the level human rights and civil liberties; and*
- *actors that seek or are capable of mobilising support.* [448]

These are a mixed bag of "knowledge products" for EWS in SADC. These knowledge clusters impact on the nature of the policy options and form the basis upon which political judgements would drive decisions and actions in response to conflicts. Their differences, however, remarks Cilliers, should not detract from the key operational objectives of the EWS which are:

- *an independent and objective decision support instrument that provides knowledge on the state of security and implementation of the peace processes; and*
- *the need for subsequent implementation of prevention strategies or to inform judgement with regard to prevention action at local, national and sub-regional levels [operating within the continental framework-AU Peace and Security Council).* [449]

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[448]   These factors have adapted from Cilliers, *ISS Occasional Paper No 102*.
[449]   Cilliers, 'Conflict Early Warning Systems for Sudan,' p. 7.

For better co-ordination of effort among RECs and between regional organisations (AU & EU as examples) and the UN, there should be a development of common indicators for EW as well as establishing body of knowledge for best practices and lessons learned.[450] This will foster common perceptions of problems albeit with slight discrepancies (given the idiosyncrasy and bureaucratic politics of nations-states) in the decision making process for conflict prevention. The EWS management cycle should foster these practices in order to support the decision-centred approach required for the prevention of conflicts.

From the 1996 OAU seminar on the establishment of EWS, the multidimensional nature and complexity of conflicts, as well as the critical personnel requirements emerged strongly.[451] Priority should also go to establishment of the human resource capacity for the collection and analysis of information. The vast reservoir of expertise and knowledge about African conflicts from different sources such as governments, academia, research institutes, civil society organisations (CSOs) and NGOs as well traditional and local authorities should be harnessed and given a platform for exchange in order to fulfil the primary functions of EWS – providing early warning for preventing the outbreak of conflicts. In essence, with regard to mechanisms for influencing complex situations, institutional or social, it is imperative to develop "multiple frames of reference" in order to "observe and interpret the system from differing perspectives, providing the opportunity to find the best interpretations and explanations of the complex situation."[452] This is the basic requirement for the multiple perspectives model that could be enhanced through establishing a human resource capacity for the development of critical mass of knowledge and expertise for effective operationalisation of EWS.

It is not only sufficient to mobilise local expertise for the purposes of their knowledge about local events, but to also build their capacity in gathering, processing, interpreting and using their knowledge for conflict prevention.[453] This is the point of KM, which aims to facilitate the use of knowledge in early warning for conflict prevention. Evidently, the design and implementation of effective EWS requires training and capacity building of the participants. Thus, empowering communities in information-gathering, analysis and interpretation is one of the essential elements for getting the most out of EWS. The skills required incorporate the ability to identify early warning indicators, monitoring, producing knowledge that provides early warning as well as using information and communication technologies for disseminating that knowledge in the broader

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450   Collins, Friberg and Packer, *Overview of Prevention Capacities*, p. 36.
451   See Nhara.
452   Bennet and Bennet, p. 10.
453   Ekiyor and Enoh-Eben, pp. 6-7.

framework of preventing conflicts. While subregional organisations are essential for coordinating actions, they should also enhance the platforms for connecting people with knowledge and expertise for dynamic mutual exchanges and also to enhance the development of perceptual frameworks and intellectual dexterity for comprehensive operationalisation of EWS.

4.3.   Multiple perspectives KM paradigm for sustainable operationalisation of EWS

In EWS, the human mind is powerful for analysing complex situations. Not only is it about the size, range and scope of the role players and their activities, or exploiting their experiences and expertise, but also enhancing their knowledge and skills base. As pointed out by Ruddy Doom and Koen Vlassenroot, lack of knowledge to process and translate information facilitate anticipation of conflicts and action, presents challenges for EWS.[454] Also, if there is lack of knowledge regarding how the prevention mechanisms work or making a choice about the appropriate means to be employed in relevant situations, poor decisions could be taken, resulting in inappropriate use of resources or the actual outbreak of violence.[455]

Compounding these issues is the availability of information that has neither been gathered nor centralised in a systematic way, hence its underutilisation or over-reliance of information gathered on *ad hoc* basis.[456] Collins *et al,* notes this tendency and remarks that the practice of creating *ad hoc* reaction mechanisms produces incoherence in operational responses.[457] This is not necessarily a unique problem for Africa and, by extension in the SADC subregion, but a wider phenomenon in developing countries confronted with the risks of armed conflicts. Given that EWS comprise of information gathering, processing and analysis (detection), translation and signalling (making prognoses),[458] it is therefore imperative to develop capacities in these areas to enable action.

This section engages firstly, with explaining the necessity of establishing *knowledge infrastructure*[459] in the SADC subregion, i.e. creating a web of connections among people to facilitate interaction, collaboration and co-operation for effective leveraging of knowledge for construction of multiple perspectives in order to achieve the goals of EWS. This will include the integration of civil society and community organisations in the knowledge infrastructure for

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[454]   R. Doom and K. Vlassenroot, 'Early Warning and Conflict Prevention: Minerva's Wisdom,' *Journal for Humanitarian Assistance,* Brussels Ministry of Co-operation in Development Research Project, 19 October 2006, p. 11.
[455]   *Ibid*., p. 12.
[456]   *Ibid*., p. 11.
[457]   Collins, Friberg and Packer, p. 35.
[458]   *Ibid*., p. 13.
[459]   Alavi and Leidner, p. 114.

contributing towards the objectives of EWS. Secondly, with reference to the development of human resource capacity for conflict prevention, the 1996 OAU Seminar pointed out that it is imperative to pay attention to the development of knowledge and skills through appropriate training of the role players (at local community level), to supplement the electronic systems with human expertise.[460] These activities play a critical role in facilitating qualitative assessments and interpretation to complement other instruments of conflict prevention throughout EWS. The third point is an analysis of the framework for coordinating activities in disseminating knowledge to facilitate the generation of response options, with special emphasis on the role of ICTs in facilitating connections and interfacing with the political decision makers for effective coordination of actions.

4.3.1. *Integrating CSOs, NGOs and Local Communities in the knowledge infrastructure*

EWS is knowledge-intensive and the integration of information to impact on judgements and action is critical. Knowledge is key, as much as having an extensive network of knowledge sources, to make a sustained contribution towards better decision making and acting. This is the essence of KM framework in this context. Concerted efforts should be on the creation of the knowledge infrastructure through which knowledge will be created, shared and distributed according to the imperatives of EWS for conflict prevention. Inter-organisational co-operation and collaboration is therefore central to institute effective EW mechanisms. As Becerra-Fernandez *et al* indicated, knowledge is also located in organisational entities. Communities of practice, non-governmental organisations and other groupings of local communities constitute those "organisational entities".[461] From a KM perspective, the processes of discovering and capturing knowledge through socialisation and combination "sub-processes" should be applied through facilitating interaction of CSOs, NGOs and local grouping within EWS in order to learn from one another. The key idea is to exploit the knowledge from these "organisational entities" and use it in the development of insights and multiple perspectives with regard to conflict prevention mechanisms. Table 5 below shows a representation of various stakeholders and their relative position with reference to their areas of contribution in the knowledge infrastructure in the framework of EWS.

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[460]   See Nhara.
[461]   See KM solutions in Becerra-Fernandez *et al,* chapter 3.

Table 5: Key role players in the knowledge infrastructure[462]

Community	Civil Society	Government/ Intra-governmental	Private Sector	International Organisations
Local	Local NGOs	Municipal/ departmental	Local shop owner	N/A
National	National NGOs	Ministry	National company	N/A
Regional	Regional NGOs	ECOWAS/ SADC/IGAD AU	Regional company	ECOWAS/ SADC/IGAD AU/EU
International	International NGOs	United Nations	Trans-national corporations	United Nations

These participants do not only represent the spectrum of key role players in knowledge infrastructure but they also serve as part of an integrated *knowledge-intensive system* whose potential expertise (their knowledge) and contributions (at the right levels) should be exploited through Nonaka's socialisation and externalisation process in order to impact on the realisation of the ideals of an effective EWS. Engaging in open discussions and dialogue at various levels of the knowledge infrastructure enables the institutional systems coordinating the action of conflict prevention to create platforms for the active participation in conflict response strategies.

But, fundamental to this knowledge infrastructural framework, is the role of CSOs, NGOs and local communities in the effective functioning of EWS. Becerra-Fernandez *et al.* refer to contextually specific knowledge which is defined as the "knowledge of particular circumstance of time and place in which work is to be performed".[463] In relation to EWS, local communities have peculiar knowledge about specific areas, particularly with reference to incidents of conflict that they have accumulated through time and have valuable inputs to contribute to the realisation of conflict prevention ideals. The establishment of collaborative partnerships in EWS is imperative. The participants in the "system", from a KM perspective, should jointly work together, and recognise one another as joint partners in various taskings as well as regard each member in the team as a partner in the "system" that is seeking solutions to complex problems. Knowledge diffusion across the knowledge infrastructures can impact on learning and development of new perspectives, new ways of thinking and acting or looking at the problem, as well as facilitate in permeating intellectual (and institutional) barriers and perceptual blindness produced by bureaucratic politics. This is more

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[462]   Adapted from FEWS NET, 'Improving Decision Making and Response Planning: A Framework for Contingency and Response Planning,' (accessed at http://www.fews.net/resources/gcontent/pdf/1000752.pdf).

[463]   Becerra-Fernandez *et al*, pp. 20-21.

important with regard to political decision makers whose mindset requires to be subjected to critical challenge in order to continuously review assumptions for the maturity of decision making and the production of robust alternative strategies.

Phillip Hall, in the conceptualisation of EWS, offers interesting insights regarding the significance of the local communities.[464] He uses the term "capability" in the place of "system" in EW. In defining what he calls "early warning capability", the emphasis is on the management integration of *local expert knowledge* with the specialised systems and processes provided by science and technology, in order to provide for "preparedness, response, and mitigating mechanisms" in dealing with emergency needs.[465] Hall's views are also useful in dealing with EW mechanisms for averting conflicts. Much as the community has the right and responsibility to be informed about the disaster risks on which they should base their actions and reactions, it is equally important to for them to be *actively* involved in constructing response mechanisms, at the same time ensuring that local knowledge of events and history, are used to contextualise scientific information, remarks Hall.[466] The same applies to efforts of prevention, management and resolution of armed conflicts, where participation of local communities and building networks is imperative because they are the source of contextual knowledge. What Hall also stresses is the role of the community who, through their "vigilance and participation", should "augment and confirm" the information from the scientific and technical systems, with their local knowledge and observation.[467] Yiu and Mabey emphasised this point. They insist that "a human mind is a formidable tool for analysing complex situations" and provide a critical "complement to other assessments"[468] as well as possessing the capacity to reflect and learn for future actions.

When using scientific means of analysing conflict trends, such as graphical depictions of conflictive events between actors in the countries or areas under review (event data analysis as quantitative means used by various organisations such as FAST, FEWS NET and PPEW)[469], local community networks provide the required context to the knowledge acquired (qualitative assessment). FAST analysts often undertake frequent visits (fact finding missions) to countries under their spotlight, to acquire first-hand knowledge about events on the ground and to improve local networks and contacts.[470] To create synergy between "local understanding and outside expertise" in order to

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[464] P. Hall, Early Warning Systems: reframing the discussions, *The Australian Journal of Emergency Management Vol 22 (2),* May 2007, pp. 32-36.
[465] *Ibid*., p. 33.
[466] Hall, EWS, pp. 33-35.
[467] Hall, EWS, p. 33.
[468] Yiu and Mabey, pp. 8-9.
[469] Schmeidl, p. 61.
[470] *Ibid*., p. 62.

arrive at nuanced analysis, FAST also enlists the support of experts on conflict prevention strategies.[471] This can be considered as the "inter-community knowledge process" where knowledge is created and diffused through the community through interactive collaboration in the course of their activities.[472]

In another role, local community networks can facilitate coverage of areas that do not have access to electronic or print media (television, Internet and newspapers).[473] They play complementary role to the field monitors in acquiring knowledge about events as well as interpretations of meanings thereof. KM process of socialisation implies frequent interaction across community networks which is crucial to the sharing of ideas that could be critical for EWS. Consequently, this provides an opportunity not to overlook even slight events that ultimately result in the eruption of conflicts. Field missions also learn from quality inputs emanating from the communities to validate their own findings. Therefore SADC's approach with regard to operationalising EWS through the use of intelligence networks has the potential of depriving communities of making effective knowledge contributions towards preventing conflicts.

In his analysis, Hall explains that communities should collaborate with what he refers to as strategic service providers, meaning skilled people such as scientists, infrastructure providers, public officials, community emergency services and the media.[474] These people must collaborate in the development of EW capability and should ensure its sustenance through review, assessments and improvement activities. Most importantly, the role of the community is to maintain diligent observations and monitoring because they can assist the technologists in interpretations derived from scientific systems due to the wisdom they possess regarding prevailing local conditions.[475]

Brahm also observes that integrating local expertise and wisdom can facilitate the "sensing" and identification of warning signs for potential conflict.[476] Notwithstanding the fact that, although intergovernmental organisations like SADC are important in mobilising financial resources and performing coordinating functions, CSOs and NGOs are crucial in the process of acquiring knowledge via monitoring conditions on the ground. Tom Quiggin and Kumar Ramakrishna, commenting on the requirements for good strategic EW, claim that the extent to which EW assessments add informational and analytical (information that has been processed – knowledge)

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[471]   Schmeidl, p. 61.
[472]   D. Hislop, *Knowledge Management in Organizations: A Critical Introduction*, pp. 73-74.

[473]   Schmeidl, p. 62.
[474]   *Ibid*, p. 34.
[475]   Hall, p. 35.
[476]   Brahm, Early Warning, Beyond Intractability.

value to the decision making process require qualitative judgement, not quantitative reports and milestones.[477] In fact, Quiggin and Ramakrishna accuse the intelligence community of being hamstrung by "artificially-imposed and unresponsive bureaucratic norms" (bureaucratic politics) in order to be meaningfully effective given the complexities of the current security challenges.[478] They argue that the expertise and knowledge needed for effective EW analysis lie external to the government institutions: extra-governmental expertise should be "tapped and systematically engaged."[479] Brahm indicates that humanitarian relief, human rights or development oriented NGOs are attune to the local conditions and can serve as the only "eyes and ears" for the international community.[480] These can be helpful as extra-governmental experts to support EW efforts in the broader knowledge infrastructure. To eliminate the obstructive impact of these "bureaucratic politics" in government structures, knowledge is crucial. From the KM perspective, SADC as an intergovernmental structure needs to recognise that it is not the sole custodian of wisdom in the subregion. It has to create formal structures that would facilitate interaction between itself and the CSOs/NGOs.

Becerra-Fernandez *et al*, for example, indicate that in the business environment, it is important to form close ties with suppliers and customers (as the key providers of production goods and consumers of finished goods respectively), in order to "know the strengths and weaknesses of the products (decisions), learn from the experiences [of the customers regarding the goods they used], and learn about how these [products] can be improved."[481] Forming ties and close relationships with these groups (CSOs and NGOs) can help to eliminate mistrust and create a platform to learn from one another in order to come up with innovative ways of dealing with conflicts. The leadership structures of SADC can go "down" to the CSOs, NGOs, local churches, social events and other gatherings where they can "experience" and be able to know what goes on at that level and to ascertain the impact and outcomes of the decisions and actions.

Such interactions could be mutually beneficial as the CSOs and NGOs would seek to influence policy, e.g. to be granted special privileges to operate freely across the borders in the SADC areas for the benefit of getting useful information that may be necessary to help in alleviation of tensions that might result in conflict. The SADC leadership can be able to *build trust* with the communities

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[477]   T. Quiggin and K. Ramakrishna, 'The Future of Strategic Early Warning, International Relations and Security Network-Managing Information, Sharing Knowledge,' (http://www.isn.ethz.ch/news/sw/details.cfm), 26 October 2006, p. 1.
[478]   *Ibid.*
[479]   *Ibid.*, p. 2.
[480]   *Ibid.*
[481]   Becerra-Fernandez *et al*, p. 26.

in order to be able to gain access to first hand information through personal interactions without waiting for official reports. In addition, the leadership can be able to know how their decisions and actions impact on the people on the ground, and also learn of the "alternative" ways that could be suggested by the "victims of the decisions and actions" on how the situation could have been handled differently. These lessons would then affect their perspectives and also be integrated in decision making processes for improved actions. These are fundamental concerns of KM - creating an environment that fosters interaction (socialisation) to enable the sharing and exchange of knowledge. Therefore knowledge, for the benefit of early warning for conflict prevention, should be sought through interaction of SADC and the "external CSOs and NGOs" which outside the bureaucratic constraints of governments.

The key advantage of NGOs is their flatter organisational structures as compared to hierarchical organisations like SADC for instance. Government control and limited information flows through the "appropriate" channels of communication following specific procedures related to protocol matters, have an impact on the distribution of EW and subsequently delays in response may follow – Rwanda is a case in point.[482] The NGOs can easily gain access to remote areas, can interact freely with the local communities who in turn are willing to share their knowledge and experiences (because of trust that exist among them) regarding conflict situations, and can facilitate transmission of information rapidly as they (NGOs) have direct access to their headquarters.[483] It is also significant to diversify knowledge sources for checks and balances to official reports and briefings that are often tainted by ideological considerations. Hence, the African Union Meeting of Governmental Experts on Early Warning and Conflict Prevention held Kempton Park, South Africa, on 17-19 December 2006, produced a Concept Paper in which engagement with civil society was recognised as a necessity in order to raise critical points which might otherwise not be voiced in official structures because of their "sensitive" nature, in order to enhance the knowledge base of decision makers with respect to impacting on EWS.[484] The Concept Paper encouraged greater interaction of RECs, AU, UN institutions, universities, and research institutions, CSOs and NGOs, for strategic partnerships in ensuring facilitating knowledge exchange support initiatives to compliment CEWS. This notion confirms KM practices required in SADC to facilitate the "exchanges" mentioned above.

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[482] See Schmeidl, p. 38.

[483] Brahm, Beyond Intractability.

[484] African Union Meeting of Government Experts on Early Warning and Conflict Prevention, *Meeting the Challenge of Conflict Prevetion in Africa - Towards the Operationalisation of the Continental Early Warning System, Concept Paper (hereafter just Concept Paper)*, PSD/EW/ESP/2 (I) Kempton Park, South Africa, 17-19 December 2006, (http://www.africa-union.org/root/UA/Conference/decembre/PDC/17-19dec/Concept), p. 6.

In developing a policy framework for post-conflict reconstruction, the Nepad Secretariat stressed the integral role of civil society in undertaking research for understanding the root causes of conflicts, triggers and consequences.[485] Civil society, asserts the Nepad Secretariat, should also provide assistance in setting up and feeding into EWS in order to impact on the identification of possible outbreaks of armed conflict as well playing a significant role in conflict prevention at all levels of society.[486] Regular and direct engagement and interactions between the NGOs and state institutions, *trust* can be developed and each structure can be able to gain an understanding of what the situation is on the "other side of the fence." Also, by initiating joint workshops and seminars where "experts" from the governments and from the NGOs can engage in discussions and joint problem solving activities will facilitate creative thinking and the democratisation of decision making as well as sensitising actors with regard to the effectiveness of their actions. This can also go a long way in establishing trust by understanding what each other's views are in certain matters. Through building trust, suspicions, both from the states and from the NGOs can be reduced or eliminated as both will begin to realise that they have shared stakes each in the solutions of conflict problems. It may be added that the state and NGOs can collaborate on the basis of the principle of "unity of purpose."

Another important role of civil society is undertaking capacity building programmes through training and education interventions in the peace efforts. Becerra-Fernandez *et al* regard such initiatives as knowledge capture systems that "support the process of retrieving either explicit or tacit knowledge."[487] These systems, explain Becerra-Fernandez *et al*, can be used "to capture knowledge that resides within or outside organizational boundaries."[488] Establishing networks of civil society organisations and encouraging participation in their peace initiatives should be undertaken by intergovernmental organisation (SADC) in order to create platforms for exchanging information, knowledge and relevant experience at regional, national and local levels.[489] The Beijing Declaration also encourages the establishment of platforms and mechanisms for sharing information, knowledge and experience, and stresses the significance of integrating local experience and traditional knowledge in EWS.[490] Victor Orindi particularly makes reference to the utilisation

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[485]   See New Partnership for Africa's Development (Nepad), 'Africa Post-Conflict Reconstruction Policy Framework,' Nepad Secretariat, Governance, Peace and Security Programme, June 2005, pp. 26-27.

[486]   Nepad Secretariat, p. 27.

[487]   Becerra-Fernandez *et al*, p. 38.

[488]   *Ibid.*

[489]   Beijing Declaration on The 2005 World Conference on Disaster Reduction, International Conference on Disaster Reduction, Beijing, People`s Republic of China, 27 May 2004, p. 3.

[490]   Beijing Declaration, p. 4.

of indigenous knowledge generated by communities which has been accumulated through time, specifically in dealing with their conditions after years of interactions with their surroundings. [491]

Building on these observations, according to the report on implementing the United Nations Security Council Resolution on *Women, Peace and Security*, organised as the 1st Experts Consultative Meeting in Nairobi, Kenya, during 2001, the role of local communities in conflict prevention strategies was critically considered.[492] Because EWS utilise context-specific qualitative methods, generating knowledge and developing appropriate response options requires a joint effort in analysis together with the communities and other role players. Traditional authorities, local communities, youth and women, local administrators and civil society as a whole were regarded as significant actors. Theses groups are significant because, as mentioned in several documents; they possess good contextual knowledge of the conditions of their respective societies.[493]

According to the report of the 1st Expert Meeting, operationalising EW at community level should target women. The reasons given are that women have several platforms, such as religious gatherings, markets, self-help groups, merry-go-rounds and micro-credit schemes which they use to exchange information and ideas.[494] In circumstances where there are likely signs of trouble, women would be less inclined to visit the markets. Therefore it is necessary to incorporate them in knowledge-sharing processes and utilise the said platforms to implement responses.[495] The church is another environment that is also a place of religious gathering and could be utilised for facilitating knowledge exchange and also as a vehicle for transmitting information. Since the key idea of KM is about establishing trust, by drawing on the church leaders and giving them platforms in various official structures may produce gains in terms of having that connection. Information can be acquired through the church leaders (because of their standing in the community, therefore are likely to be trusted with sensitive information). Women's knowledge and experience of conflict, according to the 1st Expert Report on enhancing EW knowledge capacity in Africa, needs to be integrated in the holistic approach towards improving information collection, conflict analysis and the formulation of response options.[496] The essence of involving various groups in EWS is to tap

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[491]   V. Orindi, *Experiences with Indigenous Knowledge for Early Warning and Nature Conservation*, Workshop on Indigenous Knowledge for Nature Conservation and Disaster Management in Kenya, African Centre for Technology Studies, Nairobi, (accessed at http://www.acts.o.ke/publications/climate-change-experiences).

[492]   S. Schmeidl and F. Ismail, *Report on 1ˢᵗ Expert Consultative Meeting, Implementing the United Nations Security Council Resolution on Women, Peace and Security: Integrating Gender into Early Warning Systems,* 7 May 2007, Organised by International Alert, Swiss Peace Foundation, Forum on Early Warning and Early Response and Africa Peace Forum, pp. 1-6.

[493]   See Ekiyor and Enoh-Eben, p. 6.

[494]   Schmeidl and Ismail, p. 4.

[495]   *Ibid*.,

[496]   Ekiyor and Enoh-Eben, p. 8.

into their resourcefulness, knowledge and expertise, whilst also ensuring sustainability of conflict prevention efforts by building and strengthening local ownership of the processes.

Nhara refers to CSOs, NGOs, research institutes, church congregations and other members of the community groups as "focal points", similar to Hall`s "strategic service providers."[497] These focal points are the sources of knowledge because they, in most cases are in a better position to observe developments and even elicit meaning from those signs with respect to the ascertaining the potential for armed conflict. As EW knowledge sources, they increase the strategic value of EWS, and thus should not be marginalised and be dominated by intergovernmental organisation - like the SADC Organ through focusing on intelligence services which, as stated previously, use official channels and classified documents. This undermines the principles of EWS which depend on open systems of information and rely on qualitative knowledge in order to effect judgement about conflict situations for undertaking appropriate actions.

To address the above issues, it is imperative to strengthening the initiatives and capacities of local communities, especially women, by assisting them in taking responsibilities for developing response options to conflicts. According to Nhara, the focal points should be trained in order to be aware of the significance of their activities and also in terms of the relevant indicators that represent EW.[498] The benefits are that, according to the 1st Expert Report, practical and effective EWS operating in a transparent process facilitate learning whereby those who collect information benefit from imparting their knowledge to the respondents.[499] Thus KM activities will be at work here. In addition, learning from local efforts and skills can materialise through the involvement of local communities, inclusive of women, in the processes of scenario-building for action as well as the formulation and implementation of response options.[500] Schmeidl concludes by asserting that local knowledge has the potential of drawing the attention of policy-makers to what could be done, i.e. providing case scenarios and alternative policy options due to their intimate contextual knowledge of local circumstances.[501] Then they should also engage the communities in after-action reviews to assess the outcomes of the actions for future improvements.

The above views serve to demonstrate the relevance and appropriateness of the suggestions made during the 1996 OAU Seminar with reference to the role of communities in the effective functioning of EWS. Apart from the knowledge infrastructure of which CSOs and NGOs are

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[497] See Nhara; Hall, p. 33.
[498] See Nhara.
[499] 1st Expert Report, p. 3.
[500] *Ibid.*
[501] Schmeidl, p. 49.

fundamental elements, individuals and local communities' experience and expertise need to be capacitated by providing appropriate contextualised training in order to nurture an understanding of the complexities of conflicts, and deepen their perspectives with regard to undertaking actions.

4.3.2. *Capacity building, information-gathering and knowledge exchange*

In building capacities for information analysis and interpretation, it was noted in the workshop for enhancing early warning capacity that, African analysts should develop the skills in understanding and differentiating issues, interests, power balances and currencies, the key role players (actors in the conflicts), and the nature of existing relationships.[502] According to this Workshop, interpretations of these within given contexts such as historical, social, political, economic, cultural and religious, require advanced competencies. Added to these training requirements is the knowledge and skills required to clearly understand various ramifications of conflicts for purposes of projecting possible outcomes.[503] Training and capacity develoment are essential knowledge transfer mechanisms crucial for the development of appropriate analytic and interpretive skills in EWS.

Within the broader framework of conflict prevention and peace-building, there should be targeted training regarding knowledge and understanding the role of variables such as water, diamonds, oil and minerals in the eruption of conflicts.[504] In this regard, building capacity involves a range of activities that collectively generate a broader understanding of the dimensions of conflict. What is key to all training elements is the issue of "information collection, analysis and generating response options, which should constitute the fundamental components of the modules dealing with EWS. In gathering information, the trainees must be aware of some essential characteristics of information which should be stressed in training sessions include:

- *clarity: information should be clear, unambiguous and reliable;*
- *accuracy: the information must clearly describe the true picture of events and phenomena, and the sources of that information must be credible and reliable;*
- *meaningful: the information must be able to assist in understanding the situation;*
- *recent: information needs to be up-to-date so as to enable anticipation of situations. In cases of the inability to gather recent information, indications of any trends or changes to*

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[502]   Ekiyor and Enoh-Eben, p. 6.
[503]   *Ibid.*
[504]   Ekiyor and Enoh-Eben, p. 7.

the prevailing conditions should be sought on the basis of the previously gathered information;

- *adequacy: complete information is the hallmark of the true reflection of the situation and the facilitation of anticipation; and*

- *validity: information must be directly concerned with what is being measured.*[505]

Trainees must also be skilled in accessing and using of different sources of information. Some of the sources include books, magazines, and databanks of different organisations or universities.[506] It is important to create awareness of other existing sources of knowledge such as research institutes, government services, different UN agencies, some independent data banks, the media (electronic & press), fact-finding missions, as additional sources to the NGOs.[507] While the development of capacity for information gathering and analysis as well as developing skills for identifying knowledge sources in EW for conflict prevention, it is also necessary to consider the nature of the training methods. Some training methods identified in the Workshop Report, include the use of role-plays, group work, theatre and other forms in order to develop conceptual frameworks for coherence and co-ordination of activities in executing EW.[508] These are qualitative nuances produced through KM processes.

Through contextualisation, information that has been gathered can be transformed into knowledge for effective actions in the successful operationalisation of EWS.[509] Therefore tapping into the African practices, experiences, cultures and traditions, as part of building capacity, has the potential to impact on enhancing knowledge and enabling better functioning of the EWS. However, infusing the so called Afro-centric[510] tools in EW and early response impose significant challenges. Among the most important building blocks for the development of African-centred approaches in EW efforts include transparency and accountability, tolerance (building trust) and acceptance as well mutual respect.[511] These are also political dynamics that negatively impair effective judgement and actions. However, they should, according to the Workshop Report, be integrated into the capacity-building initiatives in the efforts to have African led peace initiatives.

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[505]   Doom and Vlassenroot, p. 13.
[506]   *Ibid.*
[507]   *Ibid.,* p. 14.
[508]   Ekiyor and Enoh-Eben, p. 7.
[509]   S. Hattotuwa, 'ICTs Creating Hope: Excerpt of an Interview Regarding the Role of Information and Communication Technologies in Peace Process, Peace IT: Using ICTs to Prevent, Manage and Resolve Crisis,' 1/2006 (www.itcm.org).
[510]   *Afro-centric* concept is defined as a shifting of focus from European-centred history to Africa-centred history, which means grounding understanding of African achievements on their own, not including European and Asian influences, see Wikipedia (http://en.wikipedia.org/wiki/Afrocentrism).
[511]   See Ekiyor and Enoh-Eben, p. 9.

Building capacity also requires the drawing of lessons and "good practices" with those involved in the same endeavours. In Africa, SADC can learn and share experiences in training activities together with ECOWAS and IGAD. The IGAD CEWARN is better developed and focused, as well as working in collaboration with civil society and local communities (something that SADC has neglected). IGAD can impart its knowledge and experiences regarding the utilisation of civil society in EWS and other mechanisms of information gathering. More wisdom can be developed through constant reflection and review in best practices forums whereby ideas for improvement of EWS could be exchanged. This is the key for the closing of the loop in the context of KM processes.

A conscious effort should be undertaken to provide a complete understanding of local issues and interpretation of events. This can be achieved through contextual extrapolations of the local histories, traditions and customs of various communities (or creating awareness of the relevance of socio-political and cultural context of the communities under scrutiny). The Concept Paper recommended that the RECs should, in addition to country reports, generate reports on security situations in other regions to expand awareness of security situation that might otherwise not be visible in order to generate generic list of policy options. This can be achieved through regular meetings among the RECs EW units.[512] A further recommendation in the Concept Paper is that joint trainings / capacity building for RECs /AU personnel should be initiated in order to exchange knowledge, ideas and also build confidence and trust among the different stakeholders in EWS.[513]

Nhara claims that for those who utilise the EWS it can be a useful management tool that can provide an ongoing learning opportunity in the context of data collection on social, economic, political, religious, cultural, educational, resources utilisation and military situations.[514] By way of interpretation, EWS can empower role players and political decision makers with a wealth of knowledge that can be exchanged in dialogue forums and meetings, thus impacting on confidence-building measures for successful intervention actions in conflict prevention. According to a Statement on Best Practices in Humanitarian Information Management and Exchange in Africa, one of the effective pillars of implementing EWS is an integrated network for sharing best practices.[515] This is based on the notion that EWS is *multi-actor and multi-sector partnership intensive* for a holistic and comprehensive capacity for "prevention, preparedness, mitigation and response to

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[512]   AU, *Concept Paper*, p. 6.
[513]   AU, *Concept Paper*, p. 6.
[514]   Nhara, p. 1.
[515]   A. Haggarty, 'Statement on Best Practices in Humanitarian Information Management and Exchange in Africa,' Advocacy and Information Management Branch, Office for the Coordination of Humanitarian Affairs, Nairobi, 29-31 May 2006, (accessed at ReliefWeb.int/hin or SAHIMS.net), p.4.

African crisis".[516] In addition to various confidence-building measures, multilateral dialogue, staff exchanges and developing collaborative networks in EWS, are all significant elements in facilitating social communication that is critical within the KM framework. However, the information processing capacity of the ICTs should not be downplayed. In the context of response-oriented analysis, ICTs can facilitate the rapid transmission of knowledge about conflict threats across the system and also response options in order to enable the activation of contingency response actions. Hence the role and impact of technology should be taken into account in order to enhance the effectiveness of EWS.

4.3.3. Role of information and communication technologies (ICTs)

Alavi and Leidner assert that computer-mediated communication has the potential of increasing the quality of knowledge creation because in creates a forum for constructing and sharing believes.[517] This specifically refers to the role of communication and information technologies (ICTs). EWS require that role players arrive at a common understanding of situations from which uniform response initiative could be undertaken. Alavi and Leidner argue that information systems, apart from assisting in the connecting of people who are geographically dispersed, members of an organisation can share ideas, establish dialogue and enable the generation of new insights.[518] This is important to the operationalisation of EWS where innovative ways of thinking and of solving problems are always sought.

Becerra-Fernandez *et al* concur with this notion by asserting that technologies can "support the process through which explicit and implicit knowledge is communicated to other individuals."[519] In addition, technologies can facilitate externalisation, internalisation and also socialisation processes in KM.[520] Knowledge can be externalised by placing it in the Web pages and another individual can learn from that knowledge by internalising it, thus resulting in the acquisition of new insights (for example, new way of dealing with a particular problem). Other "virtual spaces" such as discussion groups or chat rooms can connect many people spanning extensive geographical boundaries, and enable socialisation in which people can share and exchange ideas.[521] Therefore ICTs are critical to the advancement of KM initiatives. Hence they are regarded as important to the effective operationalisation of EWS.

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[516]   Haggarty, pp. 3-5.
[517]   Alavi and Leidner, p. 118.
[518]   Alavi and Leidner, p. 118.
[519]   Becerra-Fernandez *et al*, p. 39.
[520]   *Ibid.*
[521]   *Ibid.*

Information systems also assist in supporting collaboration, coordination and communication processes for rapid dissemination of information and knowledge. The Sri Lankan Foundation for Co-Existence runs a pioneering EW and ER system in that country. There are field monitors on bikes with hand-phones with a computerised system for data input, analysis and dissemination.[522] The same can be done in Africa, especially with the current level of technology such as mobile phones which can be programmed with the main languages used in the SADC area and then transmit messages across the "system". In another example, mobile phones can have the capability of simultaneous translation to a different language that is used by the recipient or have a body of common concepts that could have similar meaning understood by participants in EWS (e.g. militaries use common phrases to refer to alphabets: A= alpha; B= bravo; and Z= Zulu).

The Sri-Lankan EWS communication network connects *community-based networks* consisting of peace committees, religious leaders, women, youth organisations and zonal committees; about twenty *field monitors* equipped with mobile phones as well as decision-makers who receive information via the FAST system[523] In addition, information is disseminated via advocacy programmes cosnsisting of the production of daily, weekly and monthly reports as well as exchanging ideas during monthly roundtable discussions with multi-lateral agencies.[524] The above example illustrates the centrality of ICTs for an effective operationalisation of EWS. It should also be noted that in Sri Lanka, conflict EW is a collective effort including a range of actors. SADC can draw lessons from the mobilisation and ideological commitments of Sri Lanka (which is more committed to the problem of dealing with perpetual civil war for the survival of that nation). It can mobilise the commitment of the inhabitants of the sub-region around problematic issues of small arms proliferation, drug trafficking, escalating crime and the influx of refugees which create tensions in the area, for example, crime situations can lead to the creation of "fronts" for terrorists in some countries which can pose international security challenges). By conscientising people around suchs issues can contribute towards mobilising the communities behind the actions of SADC. Hence, in the context of getting the commitment and the buy-in from civil society, SADC can learn from the Sri Lankan example as an important case.

ICTs can also assist in the dissemination of best practices and lessons learned. Creative insights with regard to dealing with conflicts can be leveraged by evolving best practices into lessons which can be stored in the technology-enabled knowledge repositories for future usage. Walter Baets refer

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[522]   *Peace IT*, Crisis Management Initiative, p. 2.
[523]   *Ibid.*
[524]   *Peace IT*, Crisis Management Initiative, p. 2.

to case-based reasoning systems (CBRs).[525] These could be used as case libraries or knowledge repositories containing case studies, prior cases, justification of certain actions and decisions as well as explanations for failures.[526] IGAD has the most developed data-based regional EWS[527] in Africa from which best practices and lessons learned for SADC Organ can be drawn. Since KM requires the fostering of communities of practice, these can be enhanced through the use of technological advances available today. By having an integrated ICT architecture, explicit knowledge can be shared among geographically dispersed people who share common interest, issues, and challenges.[528] For instance, different conflict indicators can be arranged in themes around which various role players can build relationships and intensify analysis if there is sufficient level of connectivity. According to the United Nations Knowledge Management Report of July 2000, collaborative networks are essential in connecting people and also enable the accumulation and documentation of explicit knowledge emanating from the "dialogues" in that system.[529] But, despite such advances in technology, it should be borne in mind that *not* all areas in Africa and Southern Africa enjoy coverage. It might still be necessary to engage in exchange of knowledge via traditional means of meeting face-to-face in physical interactions in the knowledge generation processes. In KM processes this is regarded as socialisation. ICTs can enable "virtual socialisation", thus contributing towards exchange of idea and learning from one another in order to improve competencies.

With regard to the value of technology, the Concept Paper suggested a more "efficient use of IT to foster the development of compressed knowledge products: briefs and reports".[530] It was emphasised that through technology, work on EWS can be rationalised and diversified to focus of different issues such as conflict prevention and food security, thus minimising duplication.[531] As far as SADC is concerned, it would be helpful, in terms of *interoperability*, to have language translation facilities embedded in ICTs since the sub region has basically three "official" languages: English, French and Portuguese. However, the indigenous languages will be marginalised. Through fostering ties between the SADC institutional structures and the local community networks, this challenge of the language barrier can be overcome. Therefore the availability of technologies does not necessarily replace the "human capital" in EWS because ultimately it is the

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[525]   W. Baets (ed), *Knowledge Management and Management Learning: Extending the Horisons of Knowledge-based Management,* New York: Springer Science and Business Media, 2005, p. 75.
[526]   Baets, p. 75.
[527]   See IGAD CEWARN.
[528]   See Becerra-Fernandez *et al,* p. 53.
[529]   Weidner and Rahman, p. 36.
[530]   AU, Concept Report, p. 5.
[531]   *Ibid.*

human capacity for judgement and decision making that will lead to the appropriate action, with technology as an enabling device.

In summation, technology allows for distributed learning as well as wider accessibility of knowledge in open systems. In the interest of EWS, the SADC Organ should exploit technological developments to facilitate connectivity and linkages across the system to optimise mutual exchanges and knowledge sharing and to expand the pool of knowledge base required for the effective execution of EW obligations in the subregion. Apart from maximum data processing capacity of software systems, ICTs can lend support by expanding communication across system networks and enhance constructive engagements and relationship building to facilitate the exchange of knowledge and expertise. Stakeholders in EWS can also exploit the storage capacity of IT systems for the preservation of lessons for future use in the context of case-based reasoning imperatives. Through ICTs, political decision makers can create an open and collaborative environment that would facilitate connection with stakeholders in EWS and become more dynamic in strategic planning processes as they would be more informed about the impact of their actions. Therefore SADC's communication medium of using communiqués and putting a blanket on classified information deprives SADC of the wisdom that could be shared, for instance, from the CSOs and other local community networks. The existing SADC website has key documents relating to protocols and treaties, but nothing on EWS for conflict prevention, something that can be attributed to the secretive nature of the intelligence networks. SADC does not provide space for interaction with civil society and this is a serious shortcoming on its part within the frameworks of KM to enable the sharing of knowledge in EWS for conflict prevention.

The principal requirement for integrating KM processes in EWS is to empower role players and decision makers in terms of learning from one another and from other sources to enhance flexibility and innovativeness. KM offers various processes such as the knowledge conversion modes of externalisation and socialisation, which are particularly useful in facilitating learning and drawing lessons for use the particular set of circumstances. Communities of practice can also be fostered through the KM framework, thereby increasing the chances of wider accessibility of solutions that might be relevant in the operationalisation of EWS. In addition, as Becerra-Fernandez *et al* emphasise, institutional processes can be improved to become more efficient and effective.[532] It means that through KM strategy, the most appropriate processes can be performed as well as making the best possible decisions and taking effective actions.[533] Becerra-Fernandez *et al* stress

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[532]   Becerra-Fernandez *et al*, p. 55.
[533]   *Ibid.*

the fact that KM strategic processes can help in ensuring that appropriate knowledge is imparted among individuals (stakeholders in EWS) through exchange and socialisations, as well as through the provision of workable solutions via directions and routines.[534]   In the final analysis, EWS depends on knowledge to make quality decisions and facilitate effective actions.   KM is fundamental in maximising the impact of knowledge for constructive decision making and innovative thinking as well as to optimise creativity in implementation of actions. Creative insights are also optimised through extraction and integration of lessons from the outcomes of actions in an interactive process of reflection and learning.   It is therefore imperative to institutionalise the multiple perspective approach of KM in order enhance EWS as a knowledge-intensive decision support tool that produces qualitative decisions and enables 'knowledgeable' actions with regard to expediting mission critical interventions.

5.   Maximising the impact of the multiple perspectives KM paradigm

To these ends, it is imperative to maximise the impact of the multiple perspectives paradigm of KM by encouraging dialectic engagement among various stakeholders across EWS. This should operate within SADC's organisational framework in order to coordinate action. The value of this approach is to enable an "integration of perspectives" through an effective dialogue among the role players.[535] There should be dynamic collaboration for effective sharing of ideas in order for the political decision makers to develop a synthesised worldview and to produce the informed decisions. This KM approach facilitates the intellectual development and enhancement of mental models with regard to stakeholders and particularly the policy makers. Issues of political preferences should be subjected to rigorous engagement in order to expose assumptions to enable more consensus based decisions and coordinated actions. As indicated previously, Courtney argues that the development of multiple perspectives "provide much greater insight into the nature of the problem and its possible solutions than heavy reliance on technical perspective."[536] He explains that if there is group of people involved in developing "cognitive maps", it leads to "the surfacing of differences in assumptions about variables and relationships in a problem and more effective communication during the decision-making process."[537] This is an important consideration of KM strategy in complex-pluralist organisational system where bureaucratic politics often prejudice analysis and lead to ill-considered decisions and actions. Hence the imperative of dialectical engagement and

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[534]   Becerra-Fernandez *et al*, p. 55.
[535]   Courtney, p. 29.
[536]   *Ibid*., p. 31
[537]   *Ibid*.

the consideration of the "mutual impact and interdependencies"[538] of perspectives in order derive plausible aspects in decision processes to impact on actions. This view also implies an organisational environment that supports and encourages people to think autonomously and challenge existing preconceptions for the development of new insights. It places emphasis on cooperative organisational environment. The key requirement is a paradigm shift with regard to viewing organisations a "communities in which people learn from each order."[539] Based on this view, organisational emphasis should be on fostering community and collaboration as well as strengthening relations among people as it is in this framework that learning can be facilitated. Therefore one can say that organisational approach to EWS, as a *knowledge-intensive* decision support tool, needs to integrate KM principles of collaboration, cooperation, consultative mechanism, sharing and consistent learning. The critical impact of the multiple perspectives KM paradigm is to support political decision makers' perceptual process and intellectual agility so as to advance the acquisition of new insights and the development new frame of references to deal creatively with complex social problems. In the long run, it will also promote a greater degree of awareness and policy acceptance in the conflict prevention environment and also for political decision makers and governments.

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[538]   Courtney, p. 35.
[539]   *Ibid*.

CHAPTER 5

EWS FOR CONFLICT PREVENTION: FROM CONCEPTION TO ACTION

5.1.   Conceptualisation and legitimisation of EWS in SADC

This study has started off by providing the context of Africa's conflict dynamics and attempts of the continental leaders to devise creative strategies in ensuring that conflicts are prevented. The key imperative envisaged by the continental leadership was to establish continental early warning systems (CEWS) that would be located within the African Union Peace and Security Council. It was seen as an imperative to provide authoritative early warning information that was focused on African conflicts to assist leaders in making decisions and implementing conflict prevention strategies.

The existing institutional frameworks that pursue constructive and sustainable responses to conflict prevention on the continent resort within the domain of the African Union (AU), and supported by subregional organisations, like the Southern African Development Community (SADC). Legislatively, the African Union Constitutive Act, various protocols and subsequent declarations, provide the AU with the mandate and authority to co-ordinate conflict prevention activities in collaboration with the subregional organisations. These brought about an improved security agenda for Africa, consistent with the emerging ideas regarding collective security,[540] co-operation and interdependence, and building a security society.[541]   Subregional organisations were seen as vehicles to implement the conflict preventions strategies, particularly with respect to the operationalisation of EWS, which featured prominently of the Africa agenda for peace.

To this end, Southern Africa revamped its own institutional structures in order to align itself with the objectives of the AU's conflict prevention strategies. SADC launched the Organ on Politics, Defence and Security, mainly referred as just the Organ. The Organ provided a framework for the promotion of sustainable development, peace and security, as elaborated in the SADC Treaty on which it derives its legislative authority.[542]   In addition, SADC members signed a Protocol on Politics, Defence and Security Co-operation to provide legitimacy, and substance to the objectives of SADC. The Protocol, envisaged EWS as a conflict prevention instrument could to facilitate timeous response actions in crisis situations. In essence, within the SADC security paradigm, it was

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[540]   See Malan, 1999.
[541]   See Zacarias, 1998.
[542]   See SADC Treaty.

recognised that it is imperative to engage *proactively* with regard to preventing conflicts and promoting sustainable peace. To ensure understanding of the dynamics of prevention, the Protocol identified and outlined three key dimensions in conflict maintenance system: *conflict prevention; conflict management and conflict resolution.* These formed the basis for determining intervention strategies in conflict situations.

The *raison d' être* for SADC is to secure peace and security as well as economic and social development through regional integration.[543] The complexity of conflict dynamics in Africa such as such as war economies warlordism, ethno-rebellion and genocide, unstable civil-military relations, proliferation of small arms, and state fragility/collapse/absence of effective governance, produced various debates and theoretical approaches to address the situation. The UNDP's Report of 1994 propagated a *human security* concept, shifting the emphasis from the traditional state security paradigm, to a people-centred approach which incorporated factors that threaten sustainable development such as economic, food, health, environment, personal, community and political security.[544] Hence an integrated approach for engaging in conflict prevention strategies dominated strategic debates in various institutional settings.

To provide the normative and policy framework for peace and development, SADC, in line with the rest of the continent, set out policies, principles and programmes in pursuit of its objectives. The challenges that were considered fertile grounds for violence and insecurity such as the prevalence of electoral irregularities, small arms, human rights abuses and increase of refugees developed into strategic policy formulation programmes. Thus it was deemed indisputable to look towards fostering intergovernmental co-operation in instituting multilateral and multidimensional approaches to secure the strategic imperative of preventing conflicts and achieving sustainable peace. The instrument to pursue the *prevention* of conflicts was conceptualised as early warning system (EWS) - *to avert the eruption of conflicts and to save on costs of its management and resolution.* This was considered an integrated conflict prevention system to support policy makers in making informed decisions with regard to anticipating the emergence of conflicts and to assist in implementing appropriate and effective actions. However, these objectives could be hampered by the complex-pluralist nature of SADC as a political organisation responsible for coordinating actions relating to conflict prevention. It is a formal, highly bureaucratic and political organisation with hierarchical decision making processes. Thus, to ensure the operational effectiveness of EWS for conflict prevention, depends on the fostering a common outlook and shared context in view of

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[543]   Hentricks, p. 5.
[544]   See Hendricks (ed), 'Introduction.'

the complex nature of conflict situations. In fact, bureaucratic politics could produce institutional ignorance, perceptual blindness and also impair judgement and constructive decision making which could attenuate the effective operationalisation of EWS. To alleviate the impact of these political dynamics, it is imperative to operationalise EWS in an environment of collaboration, openness and communication as well as honest mutual exchanges and dialogue complemented by a free flow of information. EWS should be designed as a *knowledge-intensive* decision support instrument that facilitates the application of knowledge to impact on the prevention and mitigation of conflicts. This view thus justifies the integration of KM processes in EWS to ensure that knowledge is managed in order to impact on decision strategies and enables effective actions. To reinforce the system, it is necessary to create a framework for knowledge generation in order to leverage it for system-wide impact and innovative actions.

5.2.   EWS: Knowledge in place

Austin, an exponent of EWS provided an insightful elucidation of the objective of the system, that is, it is meant to *"obtain knowledge and ... use that knowledge* to assist in the mitigation of conflict."[545] In a broad framework, EWS is considered in terms of those initiatives that focus on the systematic collection, analysis and assessment of risks and also information sharing with the view of anticipating an eruption of conflict and instituting contingency measures. Its value is on the collection of sufficient, timely and relevant information; on timely analysis of this information; and on timely formulation of feasible policy options leading to *early action*. This is the primary goal of EWS. It is a system that relies on the cooperation of intergovernmental organisations, national and local actors in the production and communication of knowledge for the implementation of conflict prevention initiatives. In particular, the subregional intergovernmental organisation are the primary drivers because of their superior knowledge of local conditions deriving from their historical, political and cultural links to the environment, and are well placed to contribute meaningfully in ensuring an effective operationalisation of EWS. EWS hold the potential for proactive engagement through the acquisition of knowledge about conflicts and being able to deploy that knowledge in making decisions and implementing appropriate actions.

This conceptualisation of EWS merited its consideration as a *knowledge-intensive* instrument in decision making processes. It operates on the basis of the knowledge availability in dealing with conflict prevention. The system functions as a *decision support tool, in the framework of <u>pre-decision</u>, decision making, then active implementation.* It requires knowledge inputs and

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[545]   Austin, p.1.

distribution via multiple networks and channels to be effective. For that knowledge, it depends on the collaborative network of linkages among individuals and groups in an effort to exchange and distribute knowledge to impact on decision making and *action*. In this context, the knowledge in the system is not static (as an *object* to be used sometimes), but *flows* across the network of the system through a high degree of interaction. If one person for example leaves the system, it does not collapse because through KM, it should have embedded knowledge in its entire operational framework.

To enhance the capacity the SADC Organ to adequately and effectively fulfil their mandate of dealing with conflict challenges, it is essential to implement EWS with an understanding that research, sharing of experiences and knowledge of the practice and implementation of the conflict prevention mechanisms are imperative. In addition, it is necessary to ensure that government departments, intergovernmental organisations, civil society organisations and researchers function in collaboration and partnership with one another and not in *silos* for meaningful interaction. The establishment of mutual trust and confidence-building measures to pursue a common subregional security agenda in the context of promoting knowledge sharing is thus imperative. Hence the need for a systematic management of knowledge in EWS to pursue a strategic conflict prevention agenda.

5.3   EWS: Knowledge in action

One of the institutions that recognised the KM imperatives in EWS, the Global Partnership for the Prevention of Armed Conflict, developed a Workplan 2006-2010, which outlined the value of KM in the prevention of violent conflict.[546] Among other activities is the reference to engaging in research, collection and sharing of experiences and knowledge of practice and implementation of the prevention strategies. The urgency of preventing conflicts through EWS drew attention to the necessity of inter-regional interaction for facilitating knowledge-sharing on EW-ER. This is important to ensure the institutionalisation of EWS for conflict prevention in Southern Africa. The appropriate KM activities include holding inclusive working meetings on methodologies of EW-ER, presentations and debates at subregional meetings; document development, data management, translation and report sharing networks; engaging in subregional training interventions on creating national frameworks for EW-ER and organising seminars involving civil society organisations, international, regional and local officials.[547] These are critical KM endeavours that could enhance

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[546]   GPPAC, Workplan 2006-2010.
[547]   GPPAC Workplan.

the efficiency of SADC Organ to operationalise EWS. Below is a summary illustrating the appropriate KM objectives and *activities* that contribute towards an effective EWS in support of decision making and action for the SADC Organ:

a. Objectives

- *Research and document sources of conflict in the [sub]region*
- *Dissemination of knowledge within higher levels of society*
- *Peace education*

b. Activities

- *Production of research products-electronic and printed*
- *Visits to and briefings to target groups*
- *Involvement of network partners in popularising and conceptualising peace education as part of their work*
- *Development of methodology/guidelines for research*
- *Production of analysis of conflict to date*
- *Exchange of documents and dissemination of knowledge (newsletter)*
- *Task force visits to governments, [sub]regional bodies like SADC and Pan African Parliament)*
- *Make recommendations drawn from research, dissemination to region and global network*
- *Set-extracurricular activities (debates, sporting events, drama -plays) facilitates social interaction*
- *Using local media to promote peace education activities (screening videos)*
- *Create toolkit for peace-education in schools*
- *Utilise IT as resource for knowledge dissemination (develop Web page)- network building (e.g. discussion forums*
- *Use existing structures within network to disseminate knowledge[548]*

These indicators and activities as envisaged in GPPAC Workplan provide a meaningful basis for understanding the imperative of KM strategy in EWS with regard to conflict prevention. In justifying this point, EWS is about knowledge. The organisational and strategic aims emanate from that recognition. The driving factor is mainly about how to effect change in pursuit of organisational objectives. On this basis, KM can facilitate the change in the standard operating procedures in SADC to produce new cultural dynamics, for example, to integrate the CSOs and

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[548] GPPAC Workplan.

NGOs in the strategic positions of the organisational structure to optimise mutual interaction and knowledge sharing. In addition, to transform and improve the structures of EWS that impact on the transmission of knowledge to the relevant destinations, integration of systems thinking approach could be used to view the problems in systemic way, to change the relationships in the system in order to accelerate the knowledge flow to impact on decision making processes in SADC.

The other important factor related to KM is the creation of an environment that promotes the positive culture of sharing across the organisation. This view gains credence when considering the significance of values, norms and belief systems that should be embedded in organisational practices to enable the culture of trust. If there is trust, then there could be a cross pollination of diverse of ideas to enhance the development of multiple perspectives and new insights in an organisation to enhance progressive changes. Thus recognising the value of KM in effecting change and improvement, it is fundamental for SADC to engage in concerted efforts to transform its current practices and develop new strategic aims with regard to enhancing the effectiveness of EWS. The argument is that KM narrows the gap between early warning and early response in through enhancing effective knowledge production and integration processes to impact on EWS. The principal research questions addressed in this study derived from of the assumption that the appropriate integration of KM strategy in EWS will enhance SADC Organ's ability in making quality decisions and response actions with reference to conflict prevention.

The study drew from Becerra-Fernandez *et al*'s description of the function of KM: generating (producing) organising and integrating knowledge for use when it is needed.[549] In order to achieve the required organisational imperatives, KM strategic processes can be pursuit through a variety of interconnected and intertwined activities which collectively contribute towards impacting on optimum organisational performance. Taking into consideration the complex-pluralist and bureaucratic nature of SADC Organ, this study contends that it is imperative to foster learning through multiple perspective approach of KM where there is meaningful interaction and active communication in a collaborative organisational environment. This will facilitate creativity and flexibility with regard to organisational decision making and taking actions. SADC Organ's operationalisation of EWS thus requires an exploitation of KM processes.

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[549]   See Becerra-Fernandez *et al.*

5.4   Rescuing SADC's EWS through KM interventions

The question asked was, in order to effectively utilise EWS as a decision support tool in conflict prevention strategy*, how can KM strategy be applied to EWS to ensure that the system has strategic impact in decision making process and response actions regarding conflict prevention in the context of SADC's institutional framework?* In answering the question, it was necessary to identify the existing SADC's organisational shortcomings that constrain the effective operationalisation of EWS.

Despite the legislative frameworks, protocols and declarations, SADC was found wanting in terms of *effectively operationalising* EWS, from the perspective of KM strategy. The first shortcoming was found to be an institutional-bureaucratic aspect operationalising EWS *within the intelligence systems*. The key problems in the subordination of EW to intelligence communities are *bureaucratic politics*, *lack of transparency* and *general secrecy*, i.e. doing business for nation-states interests or across governments. This has the disadvantage of singing the tune of the political executive, not subjected to critical interpretations from other sources, and also not informed by objective considerations, focusing on national interests of security than inter-regional imperatives of addressing instabilities.

EWS for conflict prevention requires an extensively shared responsibility, not confined to a single body. As noted by Cilliers, EWS relies on "open sources of information, transparency, sharing of information" and also the "input and analysis of information from sections of civil society."[550] In this instance, collaboration and information sharing are central in the context of cooperation at local, national, subregional, continental and international levels. The situation in SADC is contrary to this aspect as intelligence networks will only "share knowledge" among themselves (or undercut each other) but effectively compromise the wider benefits that could be derived from an open, inclusive and transparent system.

From a KM perspective, the process of knowledge creation is greatly compromised, due to an inherent weakness of the loss of an opportunity for wider contribution of expertise and skills from the civilian groups (youth, women, academic, research bodies and other social groupings), as well as increasing preventive capacity by providing for the acquisition, transfer and exchange of information and knowledge throughout the region. EWS needs knowledge from a variety of sources, including overlapping reportage, for instance, SADC receiving reports about the events in

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[550]   See chapter 3.

Zimbabwe through IGAD in order to have multiple perspectives. The views contained mainly in intelligence networks should be supplemented by alternative views from independent sources such as research institutions, academia and other UN relief and humanitarian agencies. This is a multiple perspectives approach of KM. In this framework, this can be fostered through a concerted effort to have discussion forums and exchanges with others on regular basis. The apparent lack of civil society involvement in a coherent and integrated conflict prevention system undermines SADC attempts at implementing EWS in their conflict prevention efforts.[551]

Another shortcoming is SADC's use of linkages with the national intelligence agencies operating in the form of exchanging information [in SADC intelligence systems] and the dissemination of *reports* to the AU through the office of the incumbent President who chairs the Organ at that time. They are not directly engaging in communication, sharing and exchange of information and analysis with the African Union itself, thus placing sever limitations on the level of influence to decision makers.[552] As such the SADC system operates in contrast with the framework of open systems of information as prescribed for the continental EWS, and as required in the KM processes.

Another drawback as identified in the study, apart from the dominance of state-centric security interest and the prominence of intelligence networks to operate EWS, is the question of financial resources spent on the technical aspects of early warning, at the expense on enhancing human expertise.[553] Conflict-monitoring and analysis, knowledge, skills and techniques of the ordinary people should be developed in order to have an enlarged network of expertise to carry out the responsibilities of EWS. Given the current focus on state agencies like the intelligence communities, technical training and the development of and management of databases is limited in scope. Therefore knowledge of social, political, economic and cultural conditions of the communities mainly possessed by individuals outside of the agencies, such as local authorities, civil society, youth, and women, *remain unexploited* within the current SADC's institutional framework. Therefore the existing institutional structures of SADC do no support the generation, organisation and dissemination of knowledge as required by the knowledge-intensive EWS. In other words, there are no avenues to engage a broad spectrum of actors in the interest of conflict prevention initiatives. The problem is that SADC's approach to EWS through the agency of state functionaries effectively leads to the marginalisation of civil society. These constraints, argued Yekelo, could be

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[551]   See Fisher and Ngoma, with regard to assertions on the suspicions of state functionaries towards CSO roles.
[552]   Cilliers, p. 18
[553]   See Ekiyor and Enoh-Eben, in chapter 3.

overcome if the <u>*state-centred*</u> approach is broadened to incorporate the civil society organisations and NGOs, based on the cooperative and collaborative arrangement.[554]

Since Regional EWS are fundamental to the realisation of the foundational objectives of the AU, concerted efforts must be spent by subregional organisations to implement their EWS and to share knowledge in a collaborative spirit – they should basically be aligned in proper synergy to allow proper knowledge flow across the systems. The challenges that have the potential of hampering the effective functioning of the subregional mechanisms for conflict prevention should be collectively shared across the RECs in order to learn from one another in remedying the deficiencies. In terms of KM, genuine collaboration and sharing will lead to the development of common conception of emergencies and the required responses to various types of conflicts.

The picture points out to the necessity to facilitate the subregions's capacity for implementing conflict prevention strategies in the context of reconfiguring its institutional framework to incorporate several actors, lessen the bureaucratic restrictions to intergovernmental agencies and insist of collaborative functioning at all times. The main points such as sharing of experiences regarding the implementation of EWS in other RECs across the continent, or exploiting knowledge from diverse sources including civil society organisations, NGOs, research institutes and other groups, as well as creating best practices infrastructure, *all* are crucial elements of the KM challenges in the subregion. A comprehensive approach to conflict prevention on the African continent is based on the effectiveness of the regional EWS. As stated earlier, knowledge production regarding conflict prevention initiatives require a decentralised approach that draws from even the remote population groups who possess the requisite knowledge, expertise and local understanding to detect "sometimes invisible" indications representing the potential for the eruption of violence. Their knowledge and experiences can be useful in providing the required insights relating to potential conflicts.

The prevention and management of conflicts should therefore not be restricted to the province of state agencies. In fact, according to the United Nations Security Council Report in 2004, in order to enhance the capacity for handling conflicts, there is a greater need for interaction between the world body (UN), political, peacekeeping and humanitarian departments with external sources of EW, academia, and international organisations dealing with conflict studies as well as bringing on board local sources of knowledge, in a collective endeavour to bring about an end to the scourge of

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[554]   Yekelo, *Personal Experiences*.

conflicts in the world.[555]   Such a comprehensive outlook from the UN should serve as framework that could be adopted by the SADC subregion in a revamped approach to EWS.

The framework which could be used in SADC for effective operationalisation of EWS was considered in chapter 4, specifically the multiple perspectives approach of KM processes. In order to improve the proactive response to conflict situations, knowledge development should derive from critical inquiry and integration of perspectives to conceive of various interactions so as to enable 'knowledgeable' actions with regard to conflict prevention. A crucial element is the ability of the "system" to *know in advance* where the risks of conflicts are in order to effect timely response actions.

What needs to be done is to promote the development of capacities, as well as building and applying professional expertise and analytical skills through embedding KM processes. For instance, the promotion of *access* to information, improved *communication* systems, and the co-ordination of *information flow* through broader participation and transparency can be able to contribute to the knowledge base of SADC, thereby strengthen its capacities in terms of effective EWS. These require that SADC must relinquish the statist approach, and incorporate other sectors of the population at subregional, national and local levels in the decision making structures where ideas can be exchanges freely. SADC also need to strengthen collaborative networks with broader communities, for an expanded source of knowledge.

There is also the need in SADC to engage in training and capacity-building in order to augment local expertise in gathering, processing, interpreting and using their knowledge for conflict prevention. The operationalisation of effective EWS requires training and capacity building of the participants. As mentioned earlier, empowering communities in information-gathering and analysis is one of the essential elements for getting the most out of EWS. The skills required here incorporate the ability to identify early warning indicators, monitoring, producing knowledge that provides early warning as well as being able to use ICTs for the purpose of disseminating that knowledge in the broader framework of preventing conflicts. While subregional organisations are essential for the collection, collation and transmission of information in support of well informed judgements, they should also enhance the platforms for connecting people with the relevant information and expertise, and also facilitate the development of knowledge and skills for comprehensive operationalisation of EWS. This can be facilitated through establishment of the *knowledge infrastructure* in the SADC subregion, i.e. creating a web of connections among people

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[555]   United Nations Security Council, Report to the 59th Session of the General Assembly, see chapter 3.

to facilitate interaction, collaboration and co-operation for effective leveraging of knowledge to achieve the goals of EWS for conflict prevention. The formation of partnerships based on local community networks is vital in the knowledge infrastructure. Frequent interaction with community networks is crucial in EWS so as not to overlook even slight events that ultimately result in the eruption of conflicts. CSOs and NGOs are the key ingredients in the field of EWS. They should be integrated in setting up and feeding into EWS in order to impact on the identification of possible outbreaks of armed conflict as well playing a significant role in conflict prevention at all levels of society.

The establishment of platforms and mechanisms for sharing knowledge and experience is a vital undertaking that should incorporate CSOs and NGOs. SADC can learn and share experiences in training activities together with ECOWAS and IGAD. The IGAD CEWARN is better developed and focused, as well as working in collaboration with civil society and local communities, which SADC has marginalised. For instance, IGAD can impart its knowledge and experiences regarding the utilisation of civil society in EWS and other mechanisms of information gathering. More wisdom can be developed through constant reflection and review in best practices forums whereby ideas for improvement of EWS could be exchanged. Regular meetings hosted in different regions, exchange of personnel programmes, and sharing of strategies can lead to standardisation of practices in the whole continent and contribute towards the convergence of perceptions with regard to interventions. The ICTs can also assist in supporting collaboration, coordination and communication processes for rapid integration of knowledge. They can facilitate distributed learning as well as wider accessibility of knowledge in open systems. In terms of the United Nations Knowledge Management Report of July 2000, collaborative networks are essential in connecting people and also enable the accumulation and documentation of explicit knowledge emanating from the dialogues in that system.[556] Such advances in technology can improve the current status in exchanging of knowledge and expertise to impact on decision making processes.

Therefore SADC and its Organ's medium of communicating only via communiqués does not offer much opportunities for insightful analysis since only the heads of state participate in SADC and no genuine interpretation and analysis is reflected in those documents. This deprives SADC of the wisdom from peer reviews and independent insights that could be shared from the CSOs and other local community networks which at present are excluded from discussions that take place among heads of states. The existing SADC website has key documents relating to protocols and treaties, but nothing on EWS for conflict prevention, something that can be attributed to the secretive nature

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[556]   See chapter 4, UNDP, *Way Forward for Knowledge Management.*

of the intelligence networks. SADC does not provide space for interaction with civil society and this is a serious shortcoming on its part within the frameworks of KM to enable the sharing of knowledge in EWS for conflict prevention.

Based on the above analysis, it can be concluded that SADC Organ should integrate KM strategic process in order to effectively operationalise its EWS. As noted in chapter 4, KM and EWS operate along the same fundamental principles: collaboration, co-operation, accountability, consultation and sharing. Therefore the following KM initiatives are imperative for effectively operationalising EWS as a knowledge-intensive decision-support tool within SADC's mindset and institutional framework:

- *Creating the knowledge infrastructural network*: Given that organising is about building relationships, it is significant to foster community and collaboration through forming a broad network of actors as knowledge sources. These include CSOs, NGOs, UN agencies, universities, research institutions, local communities, local authorities, church leaders, youth, women, and other intergovernmental agencies. The knowledge infrastructures are key sources of knowledge that should be encouraged to interact regularly in the context on socialisation for learning and knowledge production regarding strategic options for EWS. They are significant in the context of making a meaningful contribution towards contributing to the required organisational knowledge to assist in decision making processes. This has the potential of eradicating misconceptions that are often associated with the political authorities and to help the organisation in making better decisions. Added to these is the advantage of having multiple perspectives that can impact on reliability, veracity and validity of knowledge that will be integrated throughout the system for continuous learning and knowledge development regarding conflict prevention interventions.

- *Embedding knowledge in the system*: This focuses on data capturing, management, and hosting documentation related to experiences of fact-finding missions, mediation, facilitation, negotiation and reconciliation efforts. It is significant to capture knowledge of role players in EWS for their experiences in the execution of their responsibilities and to enable the retention of institutional memory. The hosting of records, lessons learned and best practices documentation from other EWS operating in other areas (both internal and external to Africa, for example, Sri Lanka) provide an opportunity for learning and better reuse of knowledge. The case library is also useful to draw from past experiences and previous cases in order to gain wisdom for future activities. In this case, both tacit and

explicit knowledge as the content of EWS should be consistently captured and organised into embedded knowledge. This might help to secure the integrity of EWS as well as its viability as a knowledge intensive decision support system. The most important value of embedding knowledge is to facilitate knowledge mapping and provide routines and directions regarding how activities were performed and the justification of decisions.

- *Create platforms for discussions and exchange of ideas*: Internalization of tacit knowledge can be served through the creation of platforms for discussions, meetings and exchange of ideas. Innovativeness has been associated with knowledge-sharing via socialisation process. Thus it is necessary to create platforms for knowledge exchange and learning through facilitating regular interactions, holding briefings, having feedback reports and holding joint training, in order to provide the space for mutual understanding and collective commitment towards achieving goals. Encouraging public participation in debates will require the establishment of an environment that is conducive to foster interrogation of issues and assumptions as well as engaging decision makers in order to enhance greater convergence of ideas and also producing people-centred policy initiatives with regard to conflict prevention imperatives. These will increase consistency with regard to early warning and also form the basis shared beliefs, values and understanding of the situations, thus successfully operating EWS as a knowledge-intensive decision support tool.

- *Ensure availability of ICT infrastructure*: It order to enhance sharing, the development of communities of practice, efficient speedy access to knowledge possessed by others and contained in the knowledge repositories, in is imperative to utilise ICT. The use of internets, intranets, e-mails, chat rooms, browsers, data warehouse will expedite and systematise organisation-wide knowledge. These are resources that facilitate knowledge capturing, communication, dissemination, database management and enabling network building (e.g. discussion forums), for impacting on decision making process. ICT support improves availability, accessibility (organisation, storage/retrieval) of knowledge in decision support capacity. It is therefore significant for SADC to undertake measures (beyond what they have currently) to utilise ICT for facilitating collaborative networks that will foster knowledge sharing and exchange for the benefit of EWS.

Ultimately, SADC should be able to strengthen EWS as an effective knowledge-intensive decision support tool by entrenching the above KM strategic imperatives in its institutional framework and practices. This will empower the system by integrating the principles of generating, organising,

disseminating and leveraging knowledge to enhance qualitative judgement and improved policy options regarding conflict prevention in the subregion. Put in another format, KM strategy can enable EWS to maximise the impact of knowledge for making appropriate decisions in fulfilling organisational imperatives – qualitative and effective early response actions.

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