Conflict Prognosis: The COMESA Early Warning System in Perspective

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Abstract

Peace and Security issues have taken centre stage in the institutional framework of regional organizations. Organizations that were hitherto preoccupied with the economic and political agenda have hastily infused issues of peace and security in their legal regimes. This has been given impetus by the realisation that economic and political integration will remain a mirage if issues of conflict and insecurity are not tackled. Consequently, measures to prevent conflict have been established. Early warning units have dotted every regional organisation. The Common Market for Eastern and Southern Africa (COMESA), guided by various policy organ decisions and the COMESA Treaty, has established an early warning system that seeks to address structural factors to conflict. This article therefore discusses the COMESA Early Warning System (COMWARN). It highlights the major features of the early warning model. Limitations of the model are also flagged out at the end.

Key Words: Early Warning, Structural Vulnerability, COMWARN, Conflict, COMESA

1. Introduction

Regional integration or regionalism has emerged as a promising remedy to challenges of development. With regionalism, various initiatives to foster development have emerged and they include: the creation of Free Trade Areas (FTAs), Custom Unions, Economic Communities and a diverse array of other regional institutions dealing with different sectors of the society and economy. Regionalism theorizes that communities with close proximity, inter-linkages in cultures and ways of living and possibly similar interests face fewer impediments in their development trajectory. However, experience has revealed that, glitzy as regionalism is, it has always been hampered by conflict. Proliferation of conflicts has watered down the much touted objectives of regional integration.

Thus, the proliferation of conflict has prompted regional organisations to institutionalise issues of peace and security by developing mechanisms of dealing with conflict and insecurity in their respective regions. The institutionalisation of the peace and security agenda is anchored on the realisation that Africa cannot achieve...
its economic goal of a unitary economic community if the sub-regions are afflicted by conflicts (see for example Lancaster, 1991 and Mwagiru, 2010). To achieve peace and security on the continent, a framework - Africa Peace and Security Architecture (APSA) was developed. Under the APSA framework, the African Union (AU), through the Continental Early Warning System (CEWS) has been mandated to take the lead in conflict prevention with support from the regional blocks. Within the APSA framework, regional mechanisms have been developed to compliment the Continental Early Warning System efforts in conflict prevention. These include the COMESA Early Warning System (COMWARN) of the Common Market for Eastern and Southern Africa (COMESA), the Conflict Early Warning and Response Mechanism (CEWARN) of the Intergovernmental Authority on Development (IGAD), the Early Warning and Response Network (ECOWARN) of the Economic Community of West African States (ECOWAS), the Central Early Warning System (MARAC) of the Economic Community of Central African States (ECCAS), the National Early Warning Centres (NEWCs) of the Southern African Development Cooperation (SADC), the East African Early Warning System (EACWARN) of the East African Community (EAC).

Despite the institutionalisation of regional early warning systems, it is apposite to note that studies in early warning systems in Africa (Cilliers, 2008; Cilliers, 2005; Mwaura and Schmeidl, 2002; Mwagiru, 2002; Mwagiru, 2010) with the exception of Porto (2013: 125) have largely focused on the CEWS, CEWARN and ECOWARN as units of analysis this is premised on the fact that these were the only early warning mechanisms in existence for a long time. COMWARN, has thus, been developed to compliment the earlier mechanisms. The establishment of COMWARN underscores the importance of subsidiarity, harmonisation and coordination between the AU and REC’s thus warranting scholarly interrogation. Therefore, this article stands out as a pioneer study in this area. By addressing the foregoing gap, the article contributes to both peace and security literature on the subject area. Conflict scholars have long written on early warning that primarily uses qualitative data as the ones cited but a few have analysed an early warning system that makes use of quantitative data. This article describes COMWARN as a model that relies predominantly on quantitative data. The paper begins by debunking the key concepts that relate to the subject area, it looks at the evolution of early warning systems both globally and in Africa. The paper ends by describing the COMESA Early Warning System (COMWARN).

2. Debunking the Concepts
Conflict prognosis can be understood from the prism of conflict prevention. It involves an accurate diagnosis of envisaged conflict situations with an interest of “averting the outbreak of violence and armed conflicts by pursuing a multi-stakeholder approach” (Ahmar, 2013:3). Conflict prevention has also been understood as the application of structural or diplomatic measures to keep low-level or long-fostering tensions and disputes from escalating into violent conflict, but it can also apply to efforts to limit the spread of violence if it does occur, or to avoid the reoccurrence of violence. Ideally, it should build on structured early warning, information gathering and a careful analysis of the factors driving the conflict (UN, 2008).

According to Carment and Schnabel (2003) conflict prevention is “a medium and long-term proactive operational or structural strategy undertaken by a variety of factors, intended to identify and create the enabling conditions for a stable and more predictable international security environment.” This definition seems to be more elaborate in that it takes into cognizance the development of actionable frameworks and apportionings
responsibilities to different actors. It can be dissected into two, that is, direct prevention and structural prevention. Direct prevention involves immediate or short-term interventions that are designed to halt potential conflicts. This may involve diplomatic engagement with various actors. In most cases direct or operational prevention involves short-term, targeted mechanisms to “contain or reverse escalation” during a crisis. Strategies for direct or operational prevention include early warning and early response, preventive diplomacy, economic measures, and the use of military force (Shoemaker, 2005). Structural prevention involves deliberate and concerted efforts aimed at addressing the root causes of conflicts along with potential escalators and trigger factors (Wanström and Weissmann 2005:19). In essence, it is preoccupied with addressing the crux of the problem which, in the long run, triggers conflict. It may entail addressing issues such as exclusion, poverty, ethnicity, and electoral systems, among others. It is apt to mention that the United Nations (UN) has given priority to conflict prevention as evidenced by the UN Charter authorising the Security Council, the Secretary-General, and the General Assembly in Chapters VI and VII to “settle disputes peacefully and to prevent the outbreak of wars and other forms of armed confrontation.” Chapter VI contains a series of preventive devices such as “fact-finding, negotiation, mediation, conciliation, judicial settlement, and arbitration”(Ackermann, 2003).

Conflict early warning, on the other hand, involves the processes of gathering information, analysis and offering policy response options. According to the Forum on Early Warning and Early Response (FEWER), early warning is a systematic collection and analysis of information coming from a crisis area and the provision of policy options to influential actors. Early warning has been used to predict a wide range of phenomena, from natural disasters, to stock market crashes, famines, refugee flows, and genocide. Nathan (2013) cogently notes that models of early warning system are currently being integrated into the policies of many governments, multilateral agencies and NGOs all over the world. In addition, several early warning systems or models and networks have been developed to assist, in particular, governments to identify and address conflicts at their nascent stages.

According to Austin (2004: 129-150) an early warning system entails a process that is hitched on the systematic collection of data, its analysis and the formulation of recommendations. From the foregoing discussion, we assert that data collection is central in driving the early warning agenda. Data forms the lifeblood of an early warning system. It suffices to note that more robust early warning systems make use of both qualitative data collected from open sources (newspaper, magazines, organizational reports), and quantitative data extracted from time-series data. The United Nations through the International Strategy for Disaster Reduction (ISDR) outlines four critical components that encompass an early warning system:

I. Information gathering: this entails gathering information from various sources, preparing mitigation options;

II. Monitoring and Predicting: involves monitoring situations in different settings and offering predictions that form the basis of intervention (either short-term or long-term);

III. Disseminating information: relaying information gathered is critical for potential actions. The communication needs to be reliable and timely, and the message needs to be succinct and easy to interpret;

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IV. Response: response from actors is critical for a robust early warning system. The response needs to be swift and well-coordinated by the various actors involved in a situation (UN, 2006). The four components thus guide our description of the COMESA Early Warning System (COMWARN). The four (4) components can be summarized in figure 1.

Figure 1: Four Components of Early Warning System

3. The Emergence of Early Warning Systems
The emergence of early warning systems in the 1950s is traceable to the events leading to the growth and expansion of military science. During this epoch, the Cold War protagonists developed Early Warning Units within the military intelligence to enhance their ability and capacity to predict potential attacks (Simon and Niels, 2006). In the 1960s and 1970s, early warning was given a boost by advancements in technology and statistical analysis (Matveeva 2006: 9). Matveeva (2006) further postulates that governments during this historical era allocated large budgets to research to understand political behavior. This action according to her, gave impetus to further developments of early warning systems. With expansion of liberal democracy in the 1990s, both national and international organizations began to be fascinated by early warning information with a view of developing tailor-made programmes that were cognizant of the predicted realities. It is noteworthy that the speedy evolution of the conflict early warning discourse since its conceptualisation has been propelled by the urgent need for accurate, timely and predictive information in order to prevent conflict; the advances
made in quantitative and qualitative analytical tools; (Díaz, 2012) and the need to reduce costs of war, both human and financial.

Rupesinghe (2005) identifies three generations of early warning systems. The first generation entailed an early warning system being housed in the West, far away from the battle fields. This system predominantly relied on secondary information from newspapers and organizational reports. The second generation shifted the early warning system from the “headquarters” to the specify country/region where conflict was prevalent. This shift was brought about by international organizations that started functioning in these conflict-affected regions or countries. Despite the fact that the country or region became the epicenter for early warning systems, the analysis of field information continued to be carried out at the headquarters. A look at the African continent, the Economic Community of West African States (ECOWAS) has established an early warning system the ECOWAS Early Response Mechanism (ECOWARN) that befits the description of the second generation. They have constituted a pool of field monitors who gather information. The information is then transmitted to the headquarters for analysis. The Inter-Governmental Authority on Development (IGAD) through its early warning system – CEWARN follows a similar framework. The third generation of early warning systems are those that have been established by locals what Rupesinghe (2009:11) calls “early warning and early response system of citizens by citizens and for citizens.” This typology of early warning systems is premised on the assumption that:

Closeness to the conflict area enables one to understand the situation better and intervene rapidly and appropriately. By so doing, it intends to reduce the number of victims by preventing direct violence in community-based conflicts (micro conflict) (Rupesinghe 2009:11)

In Africa most pastoralist communities have informal early warning systems that can be classified in the third generation typology. In most cases they are not institutionalized. In Kenya the nyuma kumi concept can be construed as an early warning system that falls under the third generation. It is being championed by citizens and for citizens.

How then has the concept of an early warning system emerged in Africa? To answer this question, it is paramount to interrogate the conflict situation on the continent. Africa has been described as a hotbed of conflict for many decades. In the immediate post-independence era, interstate conflicts took centre stage. Arbitrary boundaries superimposed by the outgoing colonial masters became a source of contention among the newly independent states. The international and regional call for the respect of sovereignty and territorial integrity led to the decline of border disputes between and among states. With the end of the Cold War and emergence of globalisation, new threats to state security have emerged threatening the well-being of the Westphalia state. Generally, the Hobbesian syndrome forming the basis for the abuse of power, tribal politics, economic and socio-political marginalisation, mal-electoral practices, and bad governance has brewed discontent among the populace and also fermented a plethora of security threats ranging from riots and strikes, insurgency and insurrection, coups and attempted coups, and election-related violence. In addition, religious extremism has been at the forefront of most terrorist activities. This has prompted continental, regional and national shifts in terms of policy planning and actions. The emerging security challenges have triggered
interest in the establishment of early warning systems that are designed to deal with latent or manifest conflict before it escalates into crisis or full-blown war.

At the continent level, the African Union (AU) has taken into cognizance the emerging security challenges. The AU adopted a protocol in 2002 that established the fifteen-member Peace and Security Council (PSC) as “a collective security and early warning arrangement to facilitate timely and efficient response to conflict and crisis situations in Africa” (International Peace Institute, 2012). The AU has established the Africa Peace and Security Architecture (APSA) which is modelled around “structures, objectives, principles and values, as well as decision-making processes relating to the prevention, management and resolution of crises and conflicts, post-conflict reconstruction and development” on the African continent. The main pillar of APSA is the PSC, a “standing decision-making organ for the prevention, management and resolution of conflicts”. It is established according to Article 2 of the PSC Protocol and in line with Article 5(2) of the Constitutive Act. The PSC is supported in the discharge of its mandate by various structures namely: the Commission, The Panel of the Wise (PANWISE), the Continental Early Warning System (CEWS), the African Standby Force (ASF) and the Peace Fund. Regional Economic Communities (RECs) and/or Regional Mechanisms (RMs) in Africa followed suit by developing early warning systems to prop the early warning pillar of the CEWS. This is in tandem with the CEWS legal regimes.

4. COMESA Early Warning System (COMWARN)
Regional Economic Communities (REC) have become invaluable vehicles for African countries to propel integration. The logic is that the RECs can incrementally promote integration and in the long run pave way for one integrated political unit (read African Economic Community (AEC)). However, there has been realisation that conflicts have been a hindrance towards achieving this goal. Due to the proliferation of conflicts on the continent, the debate on the role of regional blocks in conflict prevention and management has gained much momentum in the recent past. Under the principle of subsidiarity, RECs are becoming critical actors in resolving conflicts in member states. A cursory look at the existing treaties of the RECs indicates that issues of peace and security have been given prominence.

In the COMESA region, policy organs and other decision makers have realized that conflict, especially in the Great Lakes Region (GLR) has significantly negated the pace of regional integration. To ameliorate the problem, COMESA member states have made a deliberate decision to include matters of peace and security in the integration master plan. In 2005 for instance COMESA member states made a decision to allow the Secretariat to establish an early warning system that would complement the CEWs. Drawing from the Treaty and other council decisions, an early warning system (COMWARN) has been established to track structural factors to conflict. Structural factors are defined as the existing systemic variables conditioned by decades and centuries of interactions with regard to external, regional and internal power relations (global and local governance). In this paper, we conceive structural factors as the prevailing situations that form the pre-conditions for conflict. In other words they are the root causes to a conflict situation. The structural factors are characterized as (1) they are mostly static – they change slowly over time; (2) they are embedded (linked) to the historical/cultural context e.g. colonialism, globalisation, capitalism and (3) they are intertwined with other factors for them to cause conflict.
The COMESA Early Warning System (COMWARN) is primarily hinged on structural factors\(^2\) (the structural layer). It utilizes a database model that thrives on statistical indicators whilst at the same time infusing dynamic data (the dynamic layer) to enrich the analysis and early response to conflict. Specifically, the structural layer of COMWARN employs the Structural Vulnerability Assessment (SVA) methodology to identify drivers (explanatory structural factors) with a potential of sustaining or improving the target variable (the COMESA Peace and Prosperity Index - CPPI) both at regional and country-specific levels. The lucidity behind dealing with structural factors or root causes to conflict is to try and “stem the conflict in the bud”. The dynamic layer benefits from periodic peace and security reports created primarily from dynamic data collected from credible open sources including from media, international humanitarian organizations, research institutions and think tanks, among others. It basically adds credibility to the structural interpretation by giving more accurate and detailed meaning in line with the evolving dynamics.

The 14\(^{th}\) meeting of the COMESA Ministers of Foreign Affairs (MOFAs) adopted an index which is a composite of four variables namely: Peace, Health, Wealth and Trade openness. Due to lack of appropriate measures, proxy indicators have been used in some cases without attenuating the provisions of the COMESA Treaty as enshrined in Article 3.

\[\text{Table 1: The Composite Index}\]

<table>
<thead>
<tr>
<th>No.</th>
<th>Component</th>
<th>Description the Variable is Measured</th>
<th>Data Source</th>
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*Source: COMWARNPrimer*

\(^2\)A council decision was made by COMESA member states in 2010 that informed the establishment of an early warning system that focus primarily on the structural factors of conflict.
The selection of the four (Peace, Health, Wealth and Trade Openness) variables is guided by the provisions of Article 3 of the COMESA Treaty. A series of deliberations and consultations led to the final agreement to use the four variables as they were more reflective of the objectives articulated in Article 3 of the COMESA Treaty. Specifically, Article 3(a) aims at attaining sustainable growth and development of member states by promoting a more balanced and harmonious development of its production and marketing structure. This Article seeks to enhance the easy movement of factors of production within and between member states in the COMESA region. Thus, this aspect is represented by the variable “economic integration” which is measured as trade openness in the COMWARN model. Article 3(b) of the Treaty seeks to promote joint development in all fields of economic activity and the joint adoption of macro-economic policies and programmes that raise the standard of living of citizens and foster close relations among member states. An essential aspect of this sub-article is the improvement of standards of living of the populace. The COMWARN model is cognizant of the fact that improving standards of living is critical in reducing regional and national vulnerability to conflict. Therefore, it uses the variable “health” which is measured as inverse of child mortality to reflect the improvements in living standards as encapsulated in Article 3(b). The theoretical underpinning behind the selection of this variable is hinged on the fact that improving the health standards of citizens, will in the long run provide a fertile ground for peace and prosperity to flourish. The overriding assumption is that a healthy population is a productive population. On the other hand, an unhealthy population overburdened by diseases is most probably unproductive therefore making the state and its citizen vulnerable. As noted by McInnes (2008) health problems such as the spread of infectious diseases pose an exogenous threat to the people of a state. According to him:

a pandemic may cause social disruption and threaten the stability of a state: confidence in the state may be reduced if it cannot provide a basic level of protection against disease; social inequalities may be highlighted as the rich or privileged obtain access to better drugs or healthcare, potentially leading to public disorder; if large numbers of people die or are unwilling/unable to go to work, public services may be placed at risk threatening the functioning of a state; violence and disorder may appear if the authorities become unable to cope and if groups feel they have nothing to lose.

Article 3 (c) of the Treaty espouses the need to cooperate in the creation of an enabling environment for foreign, cross-border and domestic investment including the joint promotion of research and adaptation of science and technology for development. In particular, the sub-article primarily underscores the need to enhance material well-being by creating wealth as a means of reducing regional and national vulnerability to conflict. Wealth creation in this case, is tethered to capital formation that includes employment, harnessing existing resources, building infrastructure, providing education, among other developments. The underlying assumption is that a wealthy population is less susceptible to violent conflict. This viewpoint has been challenged by scholars (see for example Hippe, 2002) who contend that predisposition to poverty does not cause conflict or make a society vulnerable to conflict. At the flip side of it, scholars have founda theoretical correlation between poverty (read lack of wealth creation) and conflict. In their monograph titled “Assessing long-term state fragility in Africa: Prospects for 26 ‘more fragile’ countries” Cilliers and Sisk (2013) argue that poverty undeniably is linked to conflict. In their analysis of 26 more fragile countries they established that these countries were indisputably poor, experienced cyclic violence, characterized by exclusion and inequality
and had weak governance structures. Their findings buttress the decision by COMESA to include “wealth” as a variable in the Index (read CPPI) to measure the level of vulnerability to structural conflict/violence.

Under Article 3(d) of the COMESA Treaty, member states aim to cooperate in the promotion of peace and security and stability among the member states in order to enhance economic development in the region.” Article 3(d) underscores the importance of peace in the realisation of development. In others words, it implies that member states can only enjoy economic dividends, if peace and security is guaranteed. Thus, the COMESA model uses the variable “peace” which is an inverse of the conflict barometer as conceptualized by the Heidelberg International Institute of Conflict (HIIC) in its composite Index (CPPI)³. The conjecture here is that peace is a stimulus for wealth creation - opens borders for trade to blossom and ultimately improves the standard of living (health) of a people. This, in the long run reduces vulnerability to conflict, hence “peace and prosperity.”

The use of the four variables to form a composite Index (the CPPI) makes COMWARN a novel early warning model and differentiates it from other regional early warning systems. Apart from the provisions of Article 3 of the COMESA Treaty, other set parameters have been used in the selection of variables. They include (1) availability of data; (2) time span of the existing time-series data (at least spanning 10 years); (3) methods of data collection (systematic collection); and (4) comparability (time and space) of the data. To enhance the explanatory power of the model, 79 explanatory indicators/variables have been infused into the model with a possibility of increment whenever necessary. The explanatory variables assist in the analysis of the composite Index also referred to as the “target variable” or “dependent variable”. The 79 explanatory indicators provide directions of the structural factors that are impacting positively or negatively on the CPPI. The explanatory indicators have been selected based on a baseline survey that was conducted to interrogate structural factors that are linked to conflict in the COMESA region. To ease analysis and shape policy options, COMESA policy organs categorized the 79 explanatory variables or independent variables into 8 baskets⁴:

a. Governance: The basket constitutes indicators/drivers that relate to the management and performance of governments. They seek to highlight the importance of policies, institutional performance, perception, among others, in improving the CPPI. They include: functioning of government, government economic effectiveness, government economic legitimacy, polity durability, government political effectiveness, political pluralism and participation, polity democracy, polity autocracy, government political legitimacy, associational and organizational rights, domestic cooperation, rule of law, personal autonomy and individual rights, freedom of expression and belief, electoral process, women parliamentarians, and perception of corruption.

b. Education: The education basket encompasses indicators/drivers that seek to improve human development. The drivers under this basket are outlined as: secondary school enrolment, for both male and female, school students to teacher’s ratio, primary school enrolment for both male and female, tertiary institutions enrolment, and youth age dependency.

³COMESA Peace and Prosperity Index (CPPI) – also referred to as “target” or “dependent variable” or “index”
⁴Some of the 79 explanatory variables can be categorized in more than one basket. This does not in any way skew interpretation.
c. Health: This basket constitutes indicators/drivers that relate to the state of social and physical well-being of the population. It also includes government efforts in fighting infectious diseases and improving the standards of living. The drivers in this basket include: female and male life expectancy, birth rate, total health expenditures, government health expenditures, public health expenditures, female mortality, standard of living – water, standard of living - sanitation, infectious diseases, elderly age dependency (above 64), disaster deaths-by population, and disaster affected-by population.

d. Social: The social basket is composed of drivers that are closely associated with government’s ability to provide goods and services that improve the social welfare of its citizens. It entails, but is not limited to poverty reduction measures. The drivers under this basket include: youth age dependency (under 15), elderly age dependency (above 64), government social effectiveness, government social legitimacy, population density, urban population, refugees by origin, disaster deaths-by population, disaster affected-by population and women parliamentarians.

e. Environment: The environment basket includes drivers that are related to the environment include energy efficiency, protected land, protected waters and agricultural land.

f. Economic: Economic basket comprises drivers that relate to economic issues as understood in the COMWARN model. The drivers under this basket are associated with economic development. It is composed of the following drivers: government-economic effectiveness, government-economic legitimacy, agricultural land, energy efficiency, natural resource rents, food production, livestock production, employed females, female youth employment, male youth employment, foreign debt obligations, foreign aid received, foreign direct investment, inflation, foreign debt payments, external debt repayments, government expenditures, capital formation and economic growth.

g. Security: The security basket is defined as structural factors that relate to state security and include, regional violence, country violence, neighbour violence by borders, regional violence by countries, battle deaths, bomb deaths, domestic conflict, international conflict, domestic cooperation, international cooperation, refugees by origin, refugees in asylum, government security effectiveness, neighbour violence, and government security legitimacy. These indicators are mainly collected by international research organizations such as Centre for Research on the Epidemiology of Disasters (CRED), Stockholm International Peace Research Institute (SIPRI) among others. These indicators are tracked periodically.

h. Military: The basket contains drivers that relate to defense and battle-related issues. It includes military personnel, militarisation-weapons sub-index, militarisation-expenditures sub-index, military expenditures, militarisation-personnel sub-index, bomb deaths and battle deaths. The model can be summarized as shown in figure 1 below, with the CPPI at the nucleus consisting of the four variables that make it a composite index or dependent variable. The 8 baskets on the
outskirts are packaged with independent variables (read Drivers) that have an association with the composite index (CPPI) and also influence or drive it.

**Figure 1: The Eight Basket in relations to the CPPI**

![Diagram showing the eight baskets (Security, Health, Military, Governance, Environmental, Economic, Educational, Social) and their relation to CPPI]

Source: Authors modeling

5. **The Structural Vulnerability Assessment (SVA) Methodology**

In terms of functionality, the SVA methodology requires the specification of a target variable (CPPI) to be forecasted as well as a broad range of comparable structural indicators that are perceived to drive the target (CPPI). In addition, it requires specified time-series (cumulative) data or indicators dating back to at least ten (10) years. This allows the creation of a structural indicator data set or country profiles for the world, continent and region over at least the past decade through to the present which can be compared at set intervals against the target (CPPI). This helps in providing evidence-based structural vulnerability forecasts using the target (CPPI). After creating historical profiles, a process of learning is used to establish a link between historical profiles of structural indicators and past levels of conflict and forecast future levels of the CPPI from past and

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5 Originally developed for the African Union (AU) and customized by COMESA for COMWARN.
present structural indicator profiles. This helps to support the contextualised diagnoses of structural vulnerability drivers. The model can also triangulate the forecasted CPPI results with country, regional and global data. After learning, it assigns probability scores of intensity or closeness to a certain level of each target at each interval that can be used to explain future associations to forecasted levels of the target. This also helps to identify the common or shared structural indicator drivers for each forecasted level of the CPPI and diagnose each of the individual, country-specific structural indicator effects. This supports the formulation of contextualized structural prevention and mitigation options based on the diagnosed structural indicator profiles. In summation, we posit that the COMWARN SVA methodology seeks to:

- a. Provide a systematic approach for the purposes of periodic prioritisation of countries at risk for longer-term structural vulnerability
- b. Provide evidence-based structural vulnerability forecasts using the CPPI
- c. Support contextualized diagnoses of structural vulnerability drivers
- d. Support the formulation of structural prevention and mitigation options

6. Input, Processing and Output: The Compilation of COMWARN Data
The COMWARN model is a symphony that utilizes both qualitative and quantitative data. In scientific research, qualitative data deals with designs, techniques and measures that do not have numerical data (Mugenda and Mugenda, 2003: 155 -156). On the other hand, quantitative data is described as “designs, techniques and measures that produce discreet numerical data or quantifiable data” (Mugenda and Mugenda, 2003). Jwan and Ong’ondo (2011: 4-5) observe that quantitative data in most cases consists of frequencies with definite categories. The categories can be structured as ordinal or cardinal depending on the complexity levels of measurement. Superior statistical techniques are thus used to compute such data (Jwan and Ong’ondo, 2011). In spite of the fact that the model utilizes the two typologies of data, it is apposite to note that the COMWARN SVA model predominantly relies and utilizes time series data (quantitative data) that is collected from various global data sources. The use of qualitative data gathered from open sources complement interpretation. The selection of the data to be used in the model is dependent on the 79 explanatory variables. The model predominantly depends on data that has been collected by international organizations. This was proposed by COMESA policy organs in order to ensure that the data used in the model is standardized. In other words the region lacks data that has been systematically collected using the same methodological processes. Some of the repositories that the COMWARN SVA model extracts structural data from include: the World Bank, Heidelberg Institute of International Conflict (HIIK) Transparency International (TI), Centre for Research on the Epidemiology of Disasters (CRED), Major Periods of Episodic Violence (INSCR-MPEV), the State Fragility Index (INSCR-SFI), and Freedom House (FH) among others. Data from these institutions thus allows for standardized data that complies with the COMWARN SVA model. At this point, one may argue that the model is designed using a western yardstick. It is noted that it is member states that provide the required data to these institutions, which enables them to put the data in a coherent format that can

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6 The Number of the 79 variables currently being utilized is not caste on stone. It may change with time based on the emergence of new variables that are considered useful to the model and availability of data on the selected variable.
7 In most cases member states employ different methodology in collecting data regarding different aspects of societal life for example school enrolment, employment, youth dependency among others. There is no standardized framework for collecting, coding and collating the collected data that cuts across board in the COMESA region.
be easily consumed by those who are interested in making constructive use of the data. Therefore, pessimist views on the data usage in the SVA model may be overstretched.

The data extracted from various global data sources are then loaded to the tool –Africa Prospects\(^8\). Africa Prospects is software that is loaded with formulas that compute, standardize, normalize and triangulate the input (data). The internal mechanism of the tool gives output of forecasted data which includes CPPI values and graphs, regional and country specific drivers. It is from the output that the analyses of structural factors that are associated with a high or low CPPI are discussed and mitigatory policy options are drawn. Results that depict a high CPPI imply that the country is less vulnerable to structural factors of conflict while results reflecting a low CPPI infer vulnerability to structural factors of conflict. It is at the stage of analysis that dynamic data is infused into the SVA analysis. Figure 2 indicates a schematic representation of the COMWARN SVA model.

*Figure 2: COMWARN SVA Model*

As figure 2 suggests, the COMWARN model operates as a robust system with each part feeding into one another. The model has the following characteristics:

a. Interdependency: Just like any other model, the different parts of the COMWARN SVA model are interrelated. This implies that no part can operate without the other. For example the tool depends on accurate data for it to function optimally while the interpretation component also depends on the output (CPPI data, graphs, and drivers) from the tool for it to assign meanings.

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\(^8\)The Africa Prospects is a tool that was developed by the African Union (AU) and shared with COMESA through a mutual cooperation agreement.
b. Recursive process: The process involves going back and forth. This process involves data verification, and drivers’ verification. The idea is to enable analysts to have confidence in the final output. The response component also entails recursive engagement between the COMESA secretariat and the consumers of the SVA reports – the member states.

c. A living model: the model operates like a living organism that needs revitalisation by inputting new data. Secondly, the explanatory variables in the model can change at any particular time depending on their usefulness.

d. Focus on the longer term, structural influences and constraints: The model supports very early warnings thereby facilitating an emphasis on structural prevention rather than on crisis intervention or after the act mitigation of effects.

e. GIGO – Garbage In, Garbage Out: The model is very much dependent on accurate data entry as this contributes to accurate results.

Like other models COMWARN model has some limitations. Some of the limitations include:

a. Lack of data on some indicators especially those that relate to security issues. This may skew analysis.

b. Delay in the release of data which affects the preparation of structural vulnerability (SVA) reports.

c. The assumption that historical data determines the future cannot be entirely generalized. This is based on the assumption that historical data may not capture current events for example the breakout of Ebola. Historical data may not anticipate such events.

7. Conclusion

From the foregoing discussion it is apparent that conflict prevention largely depends on having a robust early warning system that can detect conflict symptoms at the earliest time possible. The efforts to establish early warning systems both at the continental and regional level are a step in the right direction. However, there is need to link early warning and early response. Secondly, there is need for synergy between the different early warning systems in the continent. A platform should be established to facilitate information sharing among the different early warning systems on potential structural triggers to conflict. The platform will provide a platform for sharing best practices and lessons learned among and between the different early warning systems. Certainly, the success of the COMESA Early Warning System (COMWARN) hangs on its continued acceptance as well as timely and positive response from the Member State. COMWARN should be viewed in line with other early warning systems in the continent. The more conflicts are nipped in the bud, the more human, financial and other material savings the region expects to gain, and consequently with other facets of integration streamlined, the trajectory will be less thorny and more expedient.
References


