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DEPARTMENT OF DIPLOMACY AND INTERNATIONAL STUDIES

EFFECTIVENESS OF CONFLICT EARLY WARNING SYSTEM AS A FRAMEWORK FOR CONFLICT PREVENTION IN AFRICA. CASE STUDY OF SOUTH SUDAN.

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DECLARATION

This research project is my original work and has not been submitted for any degree to any other University

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DEDICATION

I dedicate this research to my family, who have always encouraged me to pursue a master's

degree and served as my inspiration. I also give gratitude to the Almighty God for its

effectiveness.

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ABSTRACT

Since conflict will always exist, many academicians and policymakers are more concerned with how conflict might be controlled. This has sparked the creation of a number of conflict management techniques, the most prominent of which is: conflict early warning systems. This study looks at the importance of conflict early warning systems as a foundation for preventing conflicts in Africa. An example is South Sudan. Carnage has been occurring in the region ever since South Sudan proclaimed its independence from the main Sudan in 2011. The study is driven by three main goals: to identify and investigate the factors influencing early warning systems' effectiveness as a conflict prevention mechanism in Africa; to evaluate the main difficulties encountered when using early warning systems to prevent the conflict in South Sudan; and to evaluate early warning systems' effectiveness in conflict prevention in South Sudan. To analyze this study, the Conflict Transformation Theory was used. The study used both qualitative and quantitative research methods, using a mixed methodological approach. Additionally, information from primary and secondary sources was utilized. It was done to analyze the subjects and content of the qualitative data. According to the study's findings, early warning and response systems offer the chance for conflict resolution tactics to be used promptly and reliably at different stages of a dispute. The study also discovered that South Sudan's early warning systems contributed to greater understanding of the conflict and increased public awareness of it. It outlined the conflict's root causes, potential escalation triggers, the leader's complaints, the viewpoints of the civilian population, and potential conflict resolution strategies. Due to early warning systems, South Sudan's seven-year road to the end of the civil conflict was greatly aided. The agencies' ability to perform their duties effectively was hampered by a lack of sufficient personnel and financial resources, poor timing, inadequate monitoring of the changing circumstances surrounding the war, and a lack of effective means of coordination. The early warning systems' inability to effectively keep up with conflict developments and formulate accurate/sufficient suggestions was also negatively impacted by poor inter-agency coordination. As a result, the study provides the following proposal for South Sudan's policy-making level of governance: it is required to pinpoint the factors that affect the occurrence of conflict in the nation and designate these as areas of focus for the early warning system in the country. The report contends that for South Sudan to have lasting peace, it is essential to create an early warning system that respects collaboration, communication, and teamwork.

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ABBREVIATIONS

ARCSS- Agreement on the Resolution of the Conflict in South Sudan

AU- African Union

CEW- Conflict Early Warning

CEWARM- Conflict Early Warning and Response Mechanism

CEWARN- Conflict Early Warning and Response Network

CEWERU-Conflict early warning and response Unit

CEWS- Conflict Early Warning System(s)

COHA- Cessation of Hostilities Agreement

IFP- The initiative for peacekeeping

IGAD- Inter-governmental Authority on Development

SPLA- Sudan People_s Liberation army

SRIC- Security Research and Information Centre

UN- United Nations

UNDP- United Nations Development Program

UNMISS- United Nations Mission in South Sudan.

1.1 Introduction

Early warning systems are now an essential part of conflict prevention in many parts of the globe. This study examines conflict early warning systems in order to better understand their effectiveness as a means of preventing conflict in Africa with specific reference to an investigation in South Sudan. As a result, this chapter includes a summary of the study's history, issue statement, key research questions, key research objectives, literature reviews, study hypothesis, study rationale, theoretical framework, research methods, and chapter layout.

1.2 Background

A set of tools known as an Early Warning System (EWS) enables accurate and timely production and dissemination of warning information, allowing for correct planning and early action to lessen loss or damage. Early warning strategies help decision-makers understand the intricacies and effects of violent conflict by alerting them to the potential for violent conflict's inception, intensification, and recurrence. This technique is described in the book Conflict. Mwagiru notes that it entails the gathering and interpretation of conflict data on a regular basis, as well as the continuous tracking and reporting of conflict variables.[1] Based upon quantitative and qualitative analytical methodologies, early warning systems produce a systematic conflict analysis that is meant to predict conflict and its reoccurrence. This aids in the creation of situations and reaction alternatives for decision-makers to consider. Early warning systems are associated with responsive tools that are meant to respond to conflict before it becomes intense.[2]

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[1] Mwagiru, M. (2010). Conflict early-warning and response mechanisms: A review of sub-regional organisations in Africa. *Africa Review*, *2*(2), 163-174. https://doi.org/10.1080/09744053.2010.10597297

[2] Defontaine, C. (2019, February 15). Setting up early warning and response systems to prevent violent conflicts and save lives. *World Bank Blogs*. https://blogs.worldbank.org/dev4peace/setting-early-warning-and-response-systems-prevent-violent-conflicts-and-save-lives

Effective early warning systems have long been recognized as desirable and required investments that, when combined with appropriate response and greater preparation, contribute to increased stability and conflict mitigation. Early conflict warning was developed as a method of preserving and safeguarding lives. Since its inception, the area has progressed substantially, and early warning has become an integral part of many organizations' practice.[3] According to Wulf and Debiel, such technologies have their roots in intelligence and security surveillance dating back to the 1950s. The development of early warning systems for natural catastrophes, humanitarian crises, grave human rights violations, the spread of disease, and financial collapse was the focus of the second phase. Since the 1980s, the UN High Commissioner for Refugees has tried to forecast political-humanitarian disasters. A "Humanitarian Early Warning System" was developed as a result of numerous early warning initiatives within the UN Department of Humanitarian Affairs and the Office for the Coordination of Humanitarian Affairs. Early response systems were created with some success in the context of humanitarian situations, and they are much more recent attempts to reduce the time between early warning and actions performed.[4]

In Europe, the EU has taken a more active part in the movement to put early warning systems into place for efficient conflict prevention in its region and beyond. This drive has been brought on by developments such as in the Balkans that have suffered at the hands of conflict situations for long periods. However, as Cameron notes, there have been difficulties along the way. He asserts that the creation and application of early warning systems have proved challenging. He

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[3] OECD. (2009). *Preventing violence, war and state collapse: The future of conflict early warning and response*. https://www.oecd.org/dac/conflict-fragility-resilience/docs/preventing%20violence%20war%20and%20state%20collapse.pdf

[4] Wulf, H., & Debiel, T. (2009, May). *Conflict early warning and response mechanisms: Tools for enhancing the effectiveness of regional organisations? A comparative study of the AU, ECOWAS, IGAD, ASEAN/Arf and PIF*. Crisis States Working Papers Series No.2.

shows how the failure of early warning systems is due to a lack of political will and coordination with tools of formulating policy. According to Rohwerder, the community-centered early warning and early reaction mechanisms offered by the UNDP's Peace through Development PTD division have significantly improved the early warning and conflict prevention efforts at the local level. He uses Indonesia as an illustration. Prospects for the effective use of preventative measures in the area have improved with the participation of women and the local community.[5]

In Africa, the AU since its formation in 2002 has had an uphill task in the prevention of conflict , the continent has seen a persistent and protracted number of conflicts across the region resulting from different reasons. As Odote and Nzomo note, some of the reasons behind many of Africa's conflicts in recent years have included but are not limited to bad governance, inter-ethnic clashes, boundary disputes, resource scarcity, and persistent poverty.[6] The earliest depiction of a need for conflict prevention in Africa is notably so from the Rwandan genocide in 1994 which led to the death of many for the lack of proper prevention and response systems.[7] According to the International Peace Institute, the events in recent times in Mali and Guinea Bissau in North Africa have shed light on the shortfalls of the AU's efforts in the prevention of conflict using its present methods.[8]

Masila notes that although early warning systems upon their creation were facing skepticism with many opting to separate them from prevention mechanisms, it has come to be established that there is no way the two mechanisms can work without each other. An early warning system

[5] Rohwerder, B. (2015). Conflict early warning and early response. *Human Rights Documents Online*. https://doi.org/10.1163/2210-7975_hrd-0148-2015095
[6] Odote, P. O., & Nzomo, M. (2019). Role of Early Warning Systems in Conflict Prevention in Africa: A Framework. *Journal of peace, education and social studies*, *13*, 36-61.
[7] Ibid.
[8] International peace institute. (2012). Preventing Conflicts in Africa: Early Warning and Response. https://www.ipinst.org/wp- content/uploads/publications/ipi_e_pub_preventing_conflicts.pdf

goes beyond just assessing possible conflicts but also entails the application of the information gathered to effectively prevent escalation and eliminate conflict emergence. He further adds in his research that in Kenya the National Steering Committee was created in 2001 in an effort to join the works of the government together with civil society organizations to coordinate all peace activities in Kenya. The NSC uses tools such as social networking sites, GIS mapping, mobile phones, and radios as technologies that are at its disposal to track relevant information.[9]

Julius Uma posits that South Sudan as a nation has grappled with the effects of conflicts that have stymied development in the nation since it gains its independence a little over a decade ago. In an effort to lessen these effects through early warning systems, the government established and commissioned the national Conflict Early Warning and Response Unit. This division was created especially to strengthen the government's ability to respond to potential violent conflict risks facing the country. However, following its acceptance, violence breakouts have continued in the nation since 2013 and have caused hardship. According to Nyadera's research, confrontations between the Christian south and the Arab north, which mostly ignored the ethnic tensions present among the inhabitants in the south, brought an end to the fighting in South Sudan.[10] For this reason, the youngest country in the world to attain its independence has faced ethnic-based power struggles for the past 11 years that have continued to stall the nation.[11] Herein, the role played by early warning systems comes in. though questions still remain as to the effectiveness of their implementation.

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[9] Musila, G. (2013). Early warning and the role of new technologies in the prevention of violence and conflict in Kenya. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3392084

[10] Nyadera, I. N. (2019). South Sudan conflict from 2013 to 2018: Rethinking the causes, situation and solutions. *ACCORD*. https://www.accord.org.za/ajcr-issues/south-sudan-conflict-from-2013-to-2018/

[11] Engel, U. (2018). Early warning and conflict prevention. *The Routledge Handbook of Transregional Studies*, 573-581. https://doi.org/10.4324/9780429438233-71

1.3 Statement of the Problem

Conflict has a serious impact on human life as it leads to deaths, physical injuries, destruction of property, loss of livelihoods, and displacements. On the African continent, civil wars are still a big problem. Threatened by the South Sudanese civil war are not only the people of South Sudan, but also the entire continent. A number of conflict prevention and conflict management mechanisms have been applied in South Sudan with limited success in ending the conflict.

All conflicts have root causes since conflict arises due to irreconcilable interests. As such conflict progresses through various stages. As a result, it is feasible to prevent conflict in its early phases. All disputes can be avoided; however, the effectiveness of conflict prevention depends on the methods employed and the time of their implementation. In light of this, Effective early warning systems are essential in continuing wars like the South Sudan Conflict, which cannot be overstated. Only when there is sufficient understanding of the when, how, and why conflict is likely to arise can conflict be prevented effectively.

Despite the existence of a Conflict Early Warning System in the South Sudanese, conflict continues to erupt. The ongoing fighting in South Sudan raises concerns about the early warning system's usefulness as a tool for conflict prevention there. The South Sudanese conflict's conflict prevention techniques have been documented in the literature; nevertheless, little is known about the effectiveness of the country's conflict early warning system. There is a knowledge vacuum, in particular, about the elements that have reduced the early warning system's capacity to prevent conflict.

1.4 Study Objectives

1.4.1 Research questions

i.   What elements affect early warning systems' ability to effectively deter conflict in Africa?

ii.   How effective are the early warning systems in South Sudan at preventing conflict?

iii.   What challenges must be overcome in order to use early warning systems to halt fighting in South Sudan?

1.4.2 Objectives of the Study

This study's primary goal is to evaluate how effectively the conflict early warning system serves as a foundation for conflict prevention. The study's case is South Sudan.

1.4.3 Specific Objectives

i.   To determine and study the factors that have an impact on how effective early warning systems are at preventing conflict in Africa.

ii.   To assess early warning systems' effectiveness in South Sudan at preventing conflict.

iii.   To evaluate the main difficulties encountered when using early warning systems to stop the conflict in South Sudan.

1.5 Literature review

An overview of pertinent research on the topic of the investigation will be provided in this part. Reviews that are both theoretical and empirical will be covered in the review.

1.5.1 Theoretical literature review

Conflict continues to be a major issue for policymakers and academics. As such there are various theoretical debates underpinning the subject of conflict management and prevention.

1.5.1.1 The Ripe moment theory

The theory of the Ripe moment, which was first proposed by William I. Zartman and endorsed by others like Richard Hass and Steve Steadman, states that successful conflict resolution is contingent on taking action at the proper time. The idea focuses on the parties' contextual circumstances that make a situation appropriate for intervention. This is because timing is important for the intervention of any conflict management strategy. The theory is intuitive, and many practitioners agree with it. The only issue is that, despite being intuitively clear, this moment might be challenging to recognize in the heat of battle. In hindsight, the theory does a better job of explaining why mediation worked than it does of predicting when the moment would actually happen. The results are in line with the idea that, where necessary, a conflict early warning system should be put in place.

1.5.1.2 Stakeholder approach in conflict analysis (Model)

Conflict analysis using the Stakeholder method is advocated by Jonathan Goodhand. Identifying the primary parties or stakeholders in the conflict and determining how each one affects the system as a whole is the process of doing a stakeholder analysis. A thorough analysis of the political economy of conflict provides a comprehensive understanding of how conflict functions and may result in more precisely focused conflict prevention and resolution activities.[12]

Every conflict has a unique history, dynamics, and parties involved. The issue of stakeholders must be addressed by those involved in conflict management. Conflict managers must pose important questions to themselves in order to avoid conflict from recurring: Who makes up the war economy's primary players? What drives them to participate in the war economies? What

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[12] Goodhand, J. 2004. Afghanistan, in: Pugh, M. and N. Cooper, with J. Goodhand 2004. War   Economies in a Regional Context: Challenges of Transformation. Boulder: Lynne   Rienner Publishers

drives their efforts to find peace? Who is in charge of the military equipment? This is crucial for accurately assessing the many functions of war economies.

1.6 Empirical Literature Review

In accordance with the specific goals of the investigation, this section evaluates the empirical literature on a subject level.

1.6.1 Factors influencing the effectiveness of early warning systems as a conflict prevention mechanism

According to Odote, conflict prevention necessitates the detection of both systemic and proximal contributing factors, as well as attempts to prohibit causes from escalating before violence breaks out. The promotion of conflict resolution does not suggest that conflict is a bad thing. It merely means that attempting to mediate a problem after it has occurred complicates and costs money. There are three phases of conflict prevention: structural or long-term, early warning and assessment, and practical. Preventive action is more practical (though more challenging) in a post-conflict setting, and that the lessons learnt from post-conflict prevention efforts must educate and inspire pre-conflict deterrence, are the two main concepts of conflict prevention.[13]

Since the end of the Cold War and the independence declarations of various nations throughout the world, there have been a number of ongoing hostilities. These wars have a variety of causes and can be interethnic, religious, intrastate, or even interstate in nature.

However, despite the emergence of new ways to abate further escalation of conflicts both in Africa and around the world, we are still witnessing continued occurrences of conflicts and violence that are setting back economies and communities from experiencing development.

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[13] Odote, P. O. (2019). Role of Early Warning Systems in Conflict Prevention in Africa: A Framework. *Journal of Peace Education and Social Studies*, *13*, 36-61.

According to Lewis and Shinoda, corruption, ethnicity, nepotism, sociopolitical prejudice, and economic inequities resulting from the unequal distribution of public funds served as the foundations for tyranny and repression, which eventually contribute to upheavals, tribal warfare, and protracted armed conflicts in various communities.[14]

Herein the reprieve provided by preventative approaches to conflict resolution comes in. According to writers of studies on peace building, the Rwandan genocide was one of the most well-known wars in Africa that caught the attention of the international community. The death toll from the genocide stimulated the development of innovative techniques to identify conflict through preventative measures even before conflict starts. According to Odote, it was in this setting that the concept of early warning first appeared, implying that it was meant to be a way to stop open confrontation from escalating to intolerable proportions. The nature of warfare changed when the cold war ended in the early 1990s, with intrastate conflicts taking precedence over interstate conflicts. The nature of wars altered after the Cold War, forcing stakeholders to consider new approaches. This circumstance sparked support for conflict early warning as a means of averting protracted conflicts.[15]

Jonathan Whittall defines early warning as "approaches centered on comprehensive information gathering, evaluation, and/or development of guidelines, encompassing risk evaluation and exchange of information." The goal is to generate or draw early responses during the latent phases of an anticipated violent conflict in order to prevent, decrease, resolve, or modify situations that might enhance the risk that a violent conflict will break out. acquiring, evaluating,

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[14] Lewis, R., & Shinoda, H. (2012). Operationalizing Early Warning for Conflict Prevention and Peacebuilding in West Africa: A Case Study of ECOWAS Early Warning System. *Hiroshima Peace Science*, *34*, 1-32.

[15] Odote, P. O. (2016). *Role of early warning systems in conflict prevention in Africa: Case study of the Ilemi triangle* [Doctoral dissertation]. The University of Nairobi.

[9] Ibid. P. 07.

authenticating intelligence assessment and monitoring, risk calculation, educating, lobbying, surveilling, and evaluations are some of the most key functions in early warning.[16]

According to Ackerman, a slightly more conceptual and empirical study-directed approach has made it possible to use quantification methods widely to enhance data-based forecasting analytics for identifying the risks of complicated humanitarian emergencies, political unrest and poor governance, intrastate and ethno political disputes, genocide and politicization, and other serious violations of human rights. In the first, structural markers are used, in the second, sequential models, and in the third, inductive methods. These are three different risk assessment types. The issues of ‒lost opportunities‖ to prevent as well as the warning-response shortfall represent problems with early warning and preventive diplomacy.[17]

To be effective, early warning and response systems must be more proactive than merely data gatherers and risk assessors, and this depends in part on their capacity to be more proactive.

Therefore, an important factor that comes into play is that of stakeholders in making sense of information gathered to predict conflict from small occurrences of disputes and unrest. Odote confirms this by stating that early warning, on the other perspective, has a dual purpose: to prevent conflicts and to influence deterrence. However, it stands to reason that in order to receive a prompt answer, the proper documentation and information must be given to the appropriate party at the appropriate time. Conflict anticipation requires both expertise and enough local credibility for the intervening entity to be trusted with the authority to intervene.[18]

[16] Rosenberg, S. P., Galis, T., & Zucker, A. (2016). *Reconstructing Atrocity Prevention*. Cambridge University Press.

[17] Ackermann, A. (2020). Early warning and conflict prevention responsibilities of the international community. Oxford Research Encyclopedia of International Studies. https://doi.org/10.1093/acrefore/9780190846626.013.527

[18] Ibid. P. 107.

Types of conflict are different depending on the region and the people involved. Therefore, no one conflict situation can be the same. Thus, early warning and response measures have to be conflict specific to be effective. Odote and Nzomo opine that on the one end, knowledge of the nature of a dispute is critical, while on the other, intelligence about the scenario is at risk. Disseminating information is also considered as part of early warning, highlighting the amount of data gathered. An early warning system is incomplete without a frequently updated database of countries at danger of conflict, where information has been exchanged among relevant parties. An effective dispute intervention can control conflict in its early stages. As a result, academics advocate for a definition of early warning that includes specific sorts of violence instead of large-scale fighting, which often occurs later in a conflict.[19]

The existence of effective and accountable humanitarian, security, and political institutions working together to solve the conflict and dispute problem before it even arises is another aspect that impacts the efficacy of early warning and reaction. According to Paul, In Africa, approaches have included bolstering the continent's conflict resolution organizations. They are predicated on the premise that maintaining peace necessitates long-term organizations rather than ad hoc actions. Establishing agendas, assigning resources both in form of human and financial, and developing both bureaucratic procedures and methods, as well as an ability to create and share information were all components of the process of establishing such an organizational architecture throughout the continent (and hopefully act upon it). One of the major issues in the early 1990s was that Africa's regional organizations were ill-equipped to deal with armed

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[19] Ibid. P. 39.

conflicts; they were understaffed, lacking in funds, and most had been founded to stimulate economic development and sub-regional cooperation.[20]

Agbunde and Olorunyomi posit that to successfully implement conflict prevention and early warning there is a need for improvements in other areas of governance including; the sincerity of democratic government, respect for human rights, awareness of the media's role, encouragement of economic development, and higher educational standards and processes.[21] They also add that in identifying conflict indicators for early warning, what may be a conflict indicator according to one analyst may not be so for another. therefore, a streamlined and systematic approach to early warning is needed. They propose that following the three steps of information gathering, analysis and response is the best way to do so. The ability of an early warning system to appropriately identify a potential conflict situation is therefore a key component of its success. This is by identifying whether it is rooted in political issues, demographic or societal issues, or economic issues.[22]

1.6.2 Efficacy of early warning systems in conflict prevention in Africa

Early warning systems, in Nyheim's opinion, are essential for preventing conflict from starting in the first place. Predicting conflict patterns, warning communities about potential dangers, supporting in decision-making, providing advice on how to design response tactics, and initiating responses to violent conflict are some of its objectives. However, given the dynamic character of war, the emergence of fresh security issues, and the underfunded global defense and stability construction, it is important to take into account whether current early warning systems are still

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[20] Paul, W. (2013). *War and Conflict in Africa*. John Wiley & Sons.
[21] Agbunde, G., & Olorunyomi, B. R. (2013). Conflict: Preventive Mechanism and Early Warning. P. 215.
[22] Ibid. p. 223-224.

pertinent. If they are relevant then establish whether they are prepared to handle such a changed security context.[23]

According to Nhema et al., a key element of a successful early warning system is establishing the dependability of an information source for the system. One characteristic of early warning is the use of enormous amounts of data and information gathered over extended periods of time.

Such information is then evaluated to ensure its relevance and accuracy. However, despite being bombarded by a lot of information, the key to efficacy is centered upon the reliability of this information in the prediction of conflict situations. In addition, the involvement of a wide range of participants who are knowledgeable in the issues in the context of conflicts enables the systems of early warning to become more effective in their implementation over time.[24] This way they benefit from both information availability and knowledgeable actors.

The African Union (AU) has long dominated discussions in Africa about the need for early warning systems to address crises that are erupting throughout the continent. In order to respond swiftly and effectively to both ongoing and impending conflicts and crises throughout Africa, the Peace and Security Council was founded in 2002. This council was established to serve as a system for group defense and early warning. In 2006, a Continental Early Warning System (CEWS) was established to function as an examination and surveillance center or Situation Room where data on possible conflicts and dangers to peace and stability in Africa was collected

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[23] Nyheim, D. (2015). *Early warning and response to violent conflict. Time for a rethink*. Safeworld.
[24] Nhema, A. G., Zeleza, P. T., Zeleza, T., & Organization for Social Science Research in Eastern and Southern Africa. (2008). *The roots of African conflicts: The causes & costs*. Ohio University Press.

and then sent to the Peace and Security Council as suggestions, including recommendations on the best way to proceed.[25]

Regional and sub-regional organizations, according to Amao et al., have a part to play in this circumstance. As they are obliged to give the political and socioeconomic aid necessary for their practical execution, regional organizations have taken on the task of ensuring the effectiveness of these violence prevention measures. The regional organizations ECOWAS and IGAD, which have taken the initiative to build and implement conflict early warning and response mechanisms in their respective regions, stand out for carrying out this job in Africa.[26] Therefore, part of the efficacy of existing early warning systems is hinged upon collaboration and coordination of activities between regional organizations and civil society organizations across the continent.

Literature on the country underplays the role of civil society organizations as a component of the early warning system. They collaborate with regional organizations to put the community-level mechanisms into action. Eze and Frimpong contend that civil society organizations (CSOs) are recognized as key stakeholders in strengthening the effective implementation of continental early warning systems at the sub-regional and multilateral echelons by providing early-warning assessments and disseminating information that is pertinent to reducing the impact of potential threats to peace and stability.[27] Therefore, in ensuring successful and effective early warning systems in the prevention of conflict, the coordination and collaboration efforts between civil society organizations and the already-existing regional bodies on the continent need to be

[25] African Union. (2010). Moving Africa forward-The African Peace and Security Architecture, Assessment Study. Security Council Report. https://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/RO%20African%20Peace%20and%20Security%20Architecture.pdf

[26] Amao, B. O., Ettang, D., Okeke-Uzodike, U., & Tugizamana, C. (2014). Revisiting the Utility of the Early Warning and Early Response Mechanisms in Africa: Any Role for Civil Society. *Peace and Conflict Review*, *8*(1), 78.

[27] Eze, C. B., & Frimpong, O. B. (2020). Contributions of early warning to the African peace and security architecture: The experience of the West Africa network for Peacebuilding (WANEP). *The State of Peacebuilding in Africa*, 182. https://doi.org/10.1007/978-3-030-46636-7_11

improved. An additional crucial element of conflict prevention and mitigation through early warning systems is preventive diplomacy. The AU and RECs have used preventive diplomacy to intervene in conflicts, such as those sparked by election-related unrest in Zimbabwe and Kenya in 2008. Despite the challenges associated with its early response to specific crisis situations, preventive diplomacy has been successful in resolving conflicts.[28] Additionally, strong levels of collaboration and goodwill among state leaders are necessary for early warning systems to function effectively. According to Ettang, doing so will necessitate placing national security and peace above of political considerations. Technology improvements are also a major factor in how successful early warning systems are. Studies reveal the potential for even the most fundamental technological developments, like cell phones, to enhance early warning systems in the future. Today, in nations like Uganda, the transmission of timely and trustworthy data has been made possible in large part by CEWARN's ICT for peace programmes. However, difficulties persist.[29]

According to Ikhalid, the Horn of Africa is marked by protracted conflicts that have wreaked havoc on the area. At any given period, each nation in the region has experienced its own unique brand of conflict, which has led to instability and impacted other facets of national development. This documented history of the area is also true of South Sudan. Since its inception, the role of CEWARN in IGAD's established early warning and response in the region has made concerted efforts to realign the data collection and activities taken to avert conflicts in the region.[30] Its efficacy has been centered on an open information center. CEWARN is tasked with working

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[28] Ibid. p. 186.

[29] Ettang, D. (2015). Early Warning and Early Response in Africa. Gaps and Prospects. *Consultancy Africa Intelligence*.

[30] Ikhalid, H. (2017). *The effectiveness of conflict early warning and response mechanisms in Africa: A comparative study of IGAD and ECOWAS (2005-2015)* [Master's thesis]. The University of Nairobi.

with established and successful early warning systems to prevent the emergence of violent conflicts, particularly cross-border pastoral conflicts.[31]

Mbugua opines that South Sudan, like most of its neighbors, has had a conflict atmosphere crippled by numerous developments in the dynamics of politics and ethnic-related disputes. Literature on the country shows that the conflicts have been directly or indirectly related to armed resources that continue to be redistributed across the nation. For CEWARN to be effective in the nation, there is a need for a realigning of the existing legal protocols under the IGAD docket to incorporate the negotiating parties in the process of peacebuilding. In addition, there is a need to change from the initial focus, which was pastoral conflicts, to an effective and enhanced approach to early warning systems in the country.[32]

1.6.3 Challenges faced in the application of early warning systems in preventing conflict

Whitehall notes that since interference in another country is predicated on individual self-interests and sovereign limits, early warning as an area of science and technology has often faltered. The authorities appear unconcerned aside from these issues. The majority of the literature we've researched focuses on the technological solutions needed to get around the well-known problems with early warning since this reality is ignored. As a result, early warning systems for humanitarian emergencies are frequently ineffective at best and have even been used by governments to justify intervention in other nations in the name of their own self-interest, which is becoming more closely linked to national security in the context of the so-called "war against terror."[33]

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[31] Ibid.

[32] Mbugua, J. (2014). Conflict Early Warning and Response Systems in Eastern Africa. *International Peace and Secuirty Training Center*.

[33] Whittall, J. (2010). Humanitarian early warning systems: Myth and reality. Third World Quarterly, 31(8), 1237-1250. https://doi.org/10.1080/01436597.2010.542967

The OECD cites that despite the various advances in the sector of security studies and early warning systems, there are challenges that continue to affect the sector. These issues are centered upon coordination and cooperation between the different organizations and the leaders of states. Another area of concern is seen as that of effective interpretation or understanding of information. Clear warning signs continue to be overlooked and misinterpreted in the age of information access.[34] Accordingly, given the results of this study, any early warning and response mechanism's performance will depend on how well crucial information is disseminated in a timely manner and how well the necessary solutions are developed for the given situation. Acknowledging that no two disputes are same and that each has prevailing dynamics that are regionally unique.

One of the challenges in developing and coordinating early warning systems is the absence of political will among the leaders and politicians in positions of authority in a country. According to Maru, decision-makers are unwilling to acknowledge early warnings from powerful African nations, hesitate to prioritize continental wellbeing over national security interests, and lack the power to apply judgments on member countries, according to an evaluation of political will. The AU's conflict early warning system's organizational structure contains elements that provide for early decision making, however, it also faces elements that inhibit successful decision-making processes. Significant obstacles include the typical lack of or restricted communication between early warning experts and decision-making processes, the poor information flow, the lack of a clear framework, and the top-down hierarchical organizational structure.[35]

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[34] OECD. (2009). *Preventing Violence, War and State Collapse: The future of conflict early warning and response.* Organization of Economic Cooperation and Development.
[35] Maru, M. (2016). Conflict Early Warning and the Response Nexus: The Case of the African Union-Continental Early Warning System [Doctoral dissertation]. https://digitalcommons.kennesaw.edu/incmdoc_etd/3/

Lewis and Shinoda opine that inside the functional, legal, and organizational structure, the Early Warning System lacks a formal linking structure that boosts or supports early response mechanisms in response to early warning signals or analyses provided by partners. This hinders preventive and transformational mobilization because it lacks collaborative cooperation with important stakeholders in establishing effective and collaborative reaction approaches and network mechanisms to handle potential early warning situations.[36] In addition to this, they add that a major challenge faced in early warning systems is the lack of gender consideration. Gender-sensitive topics should be included in the early warning data collecting and assessment process since it makes current methods more complete and provides for early warnings by predicting macro-level problems by micro-level happenings. In the comprehensive evaluation of the processes, when it comes to information gathering, the creation and evaluation of markers, and the evaluation and monitoring of special indigenous conditions, the ECOWAS method falls short of an acceptable system for fostering early warning.[37]

How early it is appropriate to respond to conflict concerns is another area that challenges warning systems implementation. Twagirayezu's study reveals that in any case, early hybrid response systems are very suitable. The research study discovered that before a conflict breaks, people from the local community are aware of it, and conflict signs are anticipated in the area. Frequent attacks and the spreading of hateful speech and weaponry inside neighborhoods are the most visible manifestations of open warfare. When it comes to determining the optimal moment for preventative intervention, there is no simple or prescribed solution. For all parties concerned, determining "how early is early" remains a challenge. Another constraint is the timeframe in which you give a warning. Converting early warning into an efficient early reaction is the key

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[36] Ibid. p. 10.
[37] Ibid. p. 11.

challenge for AU conflict early warning systems on the continental environment. The inability to quickly mobilize resources in advance of violent disputes slows early action.[38]

Tanui asserts that aside from the absence of political will to put early warning systems into place, there are other issues to be concerned about. In addition to this, other issues related to political will also come into play and exacerbate the issue. One of these is the incorporation of security sector reform. This is because security sector reform is also determined by good governance structures and ultimately a lack of coordination between both challenging early warning systems.[39] Tanui further adds that the occurrences of conflicts are revealed in signs and signals that early warning systems are meant to identify. Therefore, she notes that in the case of IGAD and in particular for nations such as South Sudan which have been in conflict for the last decade, the issue of undetected signals is a major challenge to early warning and prevention mechanisms. The gaps in the identification of conflict signals beforehand through engaging with community members and leaders are a major hurdle in the effectiveness of early warning systems.[40]

Like many other challenges that face various sectors in the African landscape, the lack of funds, resources, and capability is a prevailing issue even in security and peacebuilding initiatives. As Matveeva posits, any interventionist organization with a responsibility to act must have both the capability and the local confidence to prevent. The advantages of civil society-based early warning are significant; yet, it is critical to be pragmatic about civil society's mandate, as its capabilities for action are sometimes overestimated and vary widely from place to region. Recognizing the need to strengthen civil society organizations' response abilities is already a leap

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[38] Twagirayezu, A. (2021). Understanding the African union conflict prevention mechanisms constraints:―the case of eastern Democratic Republic of the Congo‖ [Doctoral dissertation]. http://hdl.handle.net/123456789/1468
[39] Tanui, C. C. (2020). *Challenges and prospects of prevention and management of conflict in Africa: The role of IGAD early warning mechanism* [Master's thesis]. The University of Nairobi.
[40] Ibid.

forward.[41] This illustrates that when there is insufficient funding and capacity to handle threats or dangers of conflict erupting in a place, the value of conflict early warning systems is fundamentally degraded.

1.6.4   Gaps in the Literature Review

There are academic gaps notwithstanding the literature review's relevance. In spite of the fact that an early warning system is there and crucial to the research, the literature is unable to explain why conflict in South Sudan continues to occur. The report, in particular, falls short of clearly articulating the reasons behind the ineffectiveness of South Sudan's early warning system. This study will attempt to address these questions and aid in the creation of better policy solutions. It is clear that South Sudan lacks a comprehensive knowledge of how the early warning system should operate. Little has been done to improve South Sudan's early warning system and make it useful for ending the protracted conflict.

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[41] Matveeva, A. (2006). Early Warning and Early Response: Conceptual and Empirical Dilemmas. *Global Partnership for Prevention of Armed Conflict*.

1.7 Research Hypotheses

H1: The complexity of a conflict has a significant impact on how well early warning systems function as a conflict prevention strategy in Africa.

H0: Early warning systems have been ineffective in conflict prevention in South Sudan.

H1: Inadequate institutional and resource support is one of the main obstacles to using early warning systems to stop the conflict in South Sudan.

1.8 Justification of the study

The findings of this investigation are important to many parties.

1.8.1 Policy Justification

The study is useful to South Sudan's government and other regional actors in developing sustainable peace frameworks and pre-conflict intervention strategies. The study will be helpful to the South Sudanese administration, which is dealing with ongoing violence that has had a number of detrimental effects on the nation's development and system of government. The study gives policy recommendations aimed at preventing and controlling conflict in South Sudan through an effective early warning system.

1.8.2 Academic Justification

This study is helpful to other academics who are researching the same subject and serves as a resource for upcoming scholars on unrelated but relevant themes. The study will also reveal other crucial connections that need additional research, such as the ideal time to put in place a conflict early warning system.

1.9 Theoretical framework

The Conflict Transformation Theory was used in this investigation. Examining a number of previous definitions brings up the uniqueness of conflict transformation. The major theoretical contributions of Johan Galtung and John Paul Lederach are highlighted in particular. Lederach's study is especially valuable in understanding why it is so difficult to maintain peace over time and finally alter conflict situations. He contends that many critical deficiencies are to blame for the incapacity to develop and sustain peace projects, the most essential of which are interconnectedness, fairness, and process structures. Conflict transformation is defined by Galtung as the perception as well as a reaction towards the movements and flux of social unrest as chances for developing positive initiatives that minimize aggression, promote justice, and address real-life difficulties in human interactions.[42]

As a result, conflict transformation theory contends that modern confrontations necessitate more than simply rethinking perspectives and identifying win-win resolutions. A trend of contentious interactions might well be ingrained in the underlying principle of entities and interactions. According to the conflict transformation school, conflicts are constantly in flux, in a state of perpetual change, and the goal is to turn them into something socially helpful and non-destructive. As a result, conflict is a fluid and variable approach, as well as the method that strives to transform conflict, should be similarly agile and adaptable. Conflict transformation further contends how certain conflicts are best transformed rather than resolved.

Conflict transformation theory fits the study well in that the aim of conflict resolution strategies is to transform a conflicting society to a peaceful one. The aim of a conflict early warning system

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[42] Galtung, Johan. 1967, *Theories of Peace: A Synthetic Approach to Peace Thinking*. Oslo:International Peace Research Institute

is to prevent or avert conflict before it escalates into a full-fledged war. Since South Sudan needs a conflict early warning system, the ideas of conflict transformation theory fit in well with this. South Sudan must be transformed from a country of conflict to one of peace and prosperity because of its vast resources. This is only possible, though, if conflict early warning systems are reliable enough to prevent future conflicts.

1.10 Research Methodology

An overview of the research methods applied in this study is provided in this section. This includes the following: the goal of the study, the intended audience, the sample size and strategy, the data collection techniques, validity and reliability, and the method of data analysis.

1.10.1 Research Design

In order to conduct the inquiry, a hybrid methodology that included qualitative and quantitative techniques was adopted. Using a descriptive research methodology, the conflict early warning system's usefulness as a framework for conflict avoidance was evaluated. It uses South Sudan as a case study.[43]

1.10.2 Target Population

The people who made up the target demographic for this study were South Sudanese government representatives, AU and IGAD representatives in South Sudan, local residents, workers for peace organizations, South Sudanese security personnel, and combatants or former combatants.

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[43] Kumar, Ranjit. *Research Methodology: A Step-by-Step Guide for Beginners.* (New Delhi: SAGE Publishers, 2011) p. 94.

1.10.3 Sampling Techniques

For this study, individuals were chosen by basic random sample methods and purposeful sampling methods. A total of 400 people, including members of the South Sudanese government, African Union and IGAD officials stationed there, locals, workers for peace organizations, South Sudanese security officers, and combatants or former combatants, participated in the survey.

n=number of samples Using the (Yamane,

1967) formula $n=N/1+NE^2$

N= Target Population

E=Margin of Error $(0.05)^2$

$n=11, 200,000/1+11,200,000 \times 0.0025$

$n=11,200,000/1+28,000$

$n=11,200,000/28,001$

n= 399.98

n=400

Table 1.1: Target population, Sample size, and Sampling Procedure

Target Sample	Sample size	Sampling procedure
South Sudan government officials	50	Purposive
Officials of the African	50	Purposive

Union and IGAD in South Sudan		
Peace NGOs in South Sudan	50	Purposive
The citizens of South Sudan	50	Purposive
Academicians	100	Simple random
The security agencies in South Sudan	50	Purposive
The combats or Former Combatants	50	Purposive
Total 400		

Source: researcher 2022

1.10.4 Data Collection Methods and Instrument of Data Collection

In this study, secondary and primary data were combined with data from primary and secondary sources using a mixed methodology. To obtain firsthand information from relevant respondents, key informant interviews were employed (Regional peace organizations, Policymakers, officials from relevant Government Ministries, and security departments). Books, journal articles, reliable reports, and other hard and soft library resources found in national, institutional, and organizational libraries were used to gather secondary data.

1.10.4.1 Interviews

In Kumar's opinion, interviewing techniques are somehow superior than other research approaches. This is due to the fact that after rapport has been built and confidence established,

specific sensitive information that would have eluded the researcher will readily show itself. It further assisted the researcher to make follow-ups where necessary and assist the researcher gauge and authenticicate the answers.[44]

1.10.4.2 Questionnaires

The study used both open-ended questionnaires, see appendix 1. The open-ended questions gave an in-depth insight into the respondents' views and opinions. According to Frankfort-Nachmias, the respondents have time to consult and respond if possible.[45]

1.10.5 Reliability and Validity of Instruments

1.10.5.1 Reliability

Reliability is defined by Mugenda & Mugenda as the accuracy or precision of the measurement equipment, which aids the researcher in looking for errors in the various instruments and relies on the guidance of experts to make the necessary corrections or modifications with regard to the study. It is also the extent to which the results are seen to be consistent over a period of time. It also ensures the same method is used and gets the same results. On the other end, problems with reliability are overcome when there is a high degree of accuracy and consistency. Respondents from the research's target demographics can be used as the small random sample in pre-testing to gauge the validity and reliability of the instrument. When the same respondents are given the instruments at several times and the results are the same, the instruments can be regarded as dependable. Coefficient analysis was used in this particular investigation. Additionally, the

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[44]Kumar, Ranjit. *Research Methodology: A Step-by-Step Guide for Beginners.* (New Delhi: SAGE Publishers, 2011) p. 94
[45] Frankfort-Nachmias, C. and Nachmias, D. (1996), *Research Methods in the Social Sciences* (5th edn) New York: St. Martin's Press. pp.14-36

computable replies to the research items on the pilot study instruments, particularly the questionnaires and interview guide, were used to conduct the reliability test.[46]

1.10.5.2 Validity

On the other hand, validity is the set of indicators that are derived to gauge the concept measures. The validity of the research instrument should be determined by experts in order to ensure that the procedures are followed systematically as per the study objectives.

Last but not least, the researcher has a responsibility to train the research assistant before beginning the work, including topics such the study's goals, significance, techniques of data collecting, and steps to become familiar with the research area.

1.10.6 Data analysis and Presentation

The goal and function of data analysis is for the researcher to draw conclusions and inferences from the data that was gathered in order to determine the outcomes. Therefore, for the researcher to come up with the findings, entails editing, classification, and also tabulation of the raw data. The exploratory/ descriptive data obtained from interviews was analyzed by a narrative report using the thematic technique. In order to enable descriptive analysis when necessary, the data obtained from surveys were examined using a computer spreadsheet in a standard format. Through the use of frequencies and percentages, the researcher presented the data in a descriptive format. The study's findings will be presented as pie charts and bar graphs. Contrarily, data from documents and interviews will also be topically reviewed, transcribed, and then organized as required. This will aid the researcher's assessment, determination, and

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[46] Mugenda, O.M., & Mugenda, A.G. *Research methods: Quantitative and qualitative approaches.* (Acts Press: Nairobi, 2003). pg. 95

interpretation of the study's goals and research questions. As a result, the findings will be able to enhance the results of the questionnaires.[47]

1.11 Chapter outline

The study's background, the problem statement, the research objectives, a review of the literature, the motivation for the investigation, the research hypothesis, the theoretical framework, and ultimately the research methods are all included in the introduction chapter of the study.

The elements affecting early warning systems' efficiency as a tool for preventing conflicts in Africa are covered in Chapter 2.

The effectiveness of early warning systems in South Sudan for preventing conflict is examined in Chapter 3.

The main difficulties encountered while using early warning systems to prevent conflict in South Sudan are evaluated in Chapter 4.

The investigation is concluded in Chapter 5 with a summary of the results, conclusions, and suggestions.

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[47] Mugenda, O.M., & Mugenda, A.G. *Research methods: Quantitative and qualitative approaches.* (Acts Press: Nairobi, 2003). pg. 95

CHAPTER TWO

FACTORS INFLUENCING THE EFFECTIVENESS OF EARLY WARNING SYSTEMS AS A CONFLICT PREVENTION MECHANISM IN AFRICA

2.1 Introduction

Conflicts have been an issue that has become more of a normal occurrence for many nations in the world. The search for peace and security, consequently, continues to be a central focus for many leaders across the world. As a result, early warning systems for disputes have gained popularity throughout time as a tool to anticipate and prevent disagreements from growing out of control. Systems for early warning and preventing conflicts must be connected because they are crucial components of the process. As a result, the discipline that studies early warning systems and conflict prevention techniques continuously comes up with fresh, original ideas for how to stop the trend of conflicts.

A major area of concern for many countries has been the availability of various early warning systems and institutions. However, the main problem for many countries, including South Sudan, has been the absence of strong supporting elements for the structures put in place to deal with the various impending crises. The successful prevention of conflicts using early warning systems requires certain factors that ensure that these mechanisms hold up in the long term. The goal of this chapter is to clarify the elements that affect early warning systems' efficacy. An efficient early warning system must have all of these components operating at once. The timeliness, resource availability, institutions in existence, efficient communication channels, and conflict dynamics monitoring structures were among the issues that came into emphasis.

2.2 Demographic characteristics of the respondents

The respondents' demographic information is provided in this section.

2.2.1 Response rate

A 64% response rate was achieved to the 85 surveys that were distributed, with 55 questionnaires fully completed and returned to the researcher.

For data analysis, a response rate of 50% is regarded as normal, one of 60% as respectable, and one of more than 70% as extraordinary. This study's questionnaire had a 64% response rate. The study was successful in obtaining responses from all of the target samples; therefore the response rate was favorable for data analysis.

Figure 2.1- The Response Rate
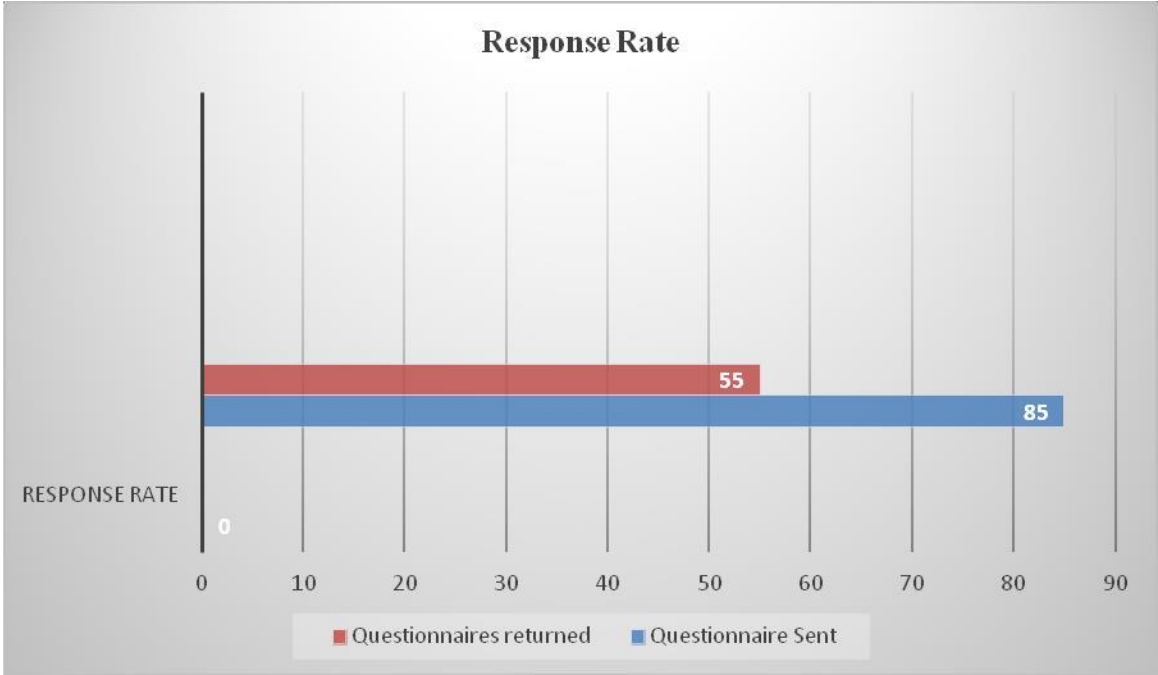
Source: Field Data, 2022

2.2.2 Gender of the respondents

Men made up the bulk of the respondents since the study examined the efficiency of the conflict early warning system as a framework for conflict prevention in Africa. 56% of people were male and 44% were female. Despite this, men still made up the slight majority since they continue to govern the security and military industries Gender must be considered in the study in order to comprehend how respondents felt and evaluated the conflict early warning system as a framework for conflict prevention in Africa.
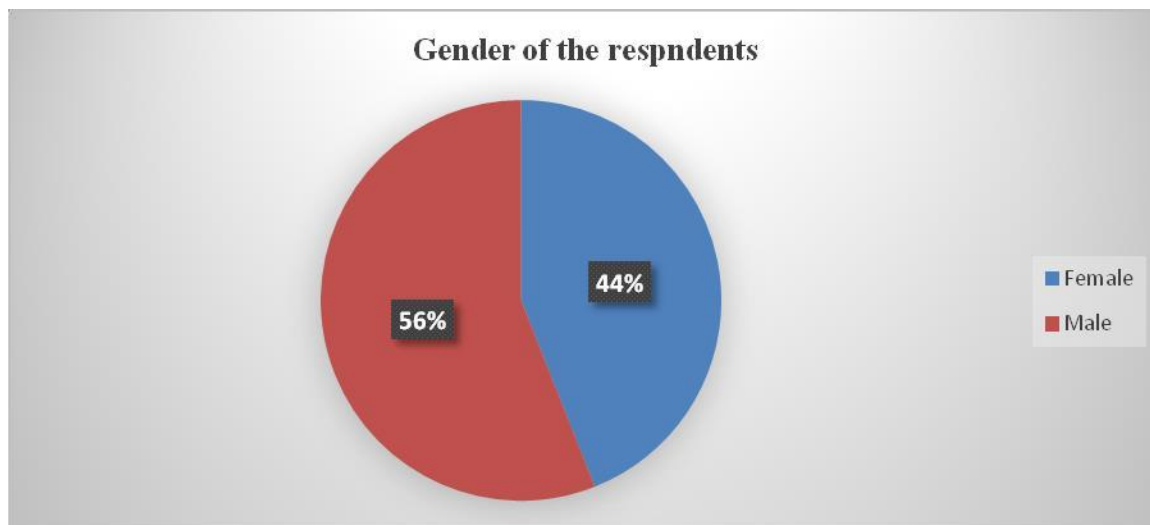
Figure 2.2: Gender of the Respondents

Source: Field Data, 2022

2.2.3 Age of the respondents

The survey aimed to determine the respondents' ages, and it found that 47% of them were between the ages of 19 and 30. Then, 33% of respondents aged 41 to 70, and 20% of respondents aged 19 to 30 were next in line. The age element was important to the study since it provided insight into how different age groups felt about the research issues. Numerous respondents from a range of age groups shared their opinions and experience on the study's topic. The age factors are important in a study in that a lot of useful information will be gained from the various age

brackets of the people who took part in the survey. This will show whether there is a significant relationship between age and later attitudes and behavioral characteristics.[48]
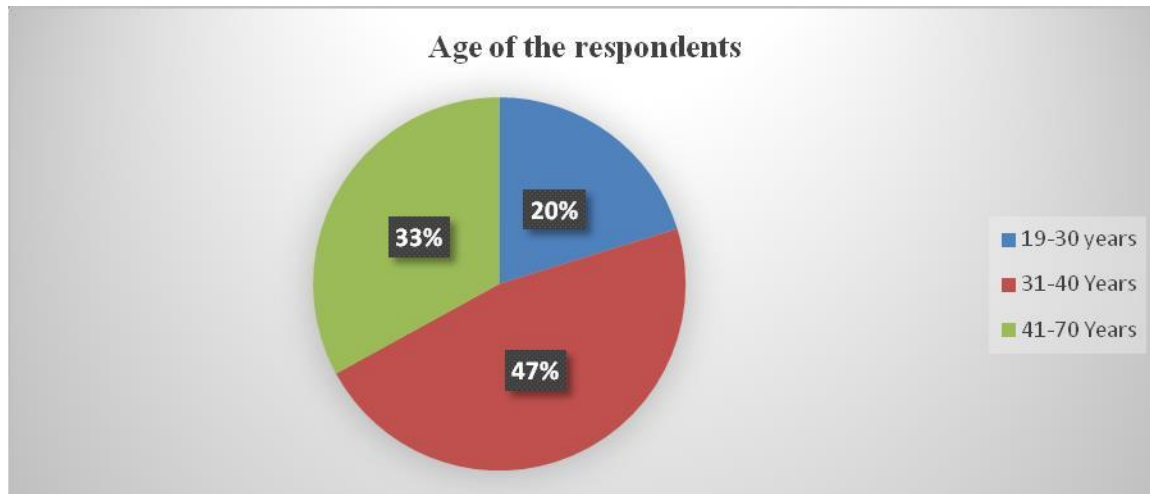
Figure 2.3: Age of the Respondents

Source: Field Data, 2022

2.2.4 Level of education

To ascertain whether or not the respondents understood the research study, it was crucial to determine their degree of education. The majority of respondents (41% of the total) had post-graduate degrees, followed by degrees (23% of the total), and college (21% of the total). This proved the correspondents' understanding of the research study's topic.

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[48] Sandberg. F, How age affects survey interaction – the case of Intelligence studies, (Halmstad University, 2016)
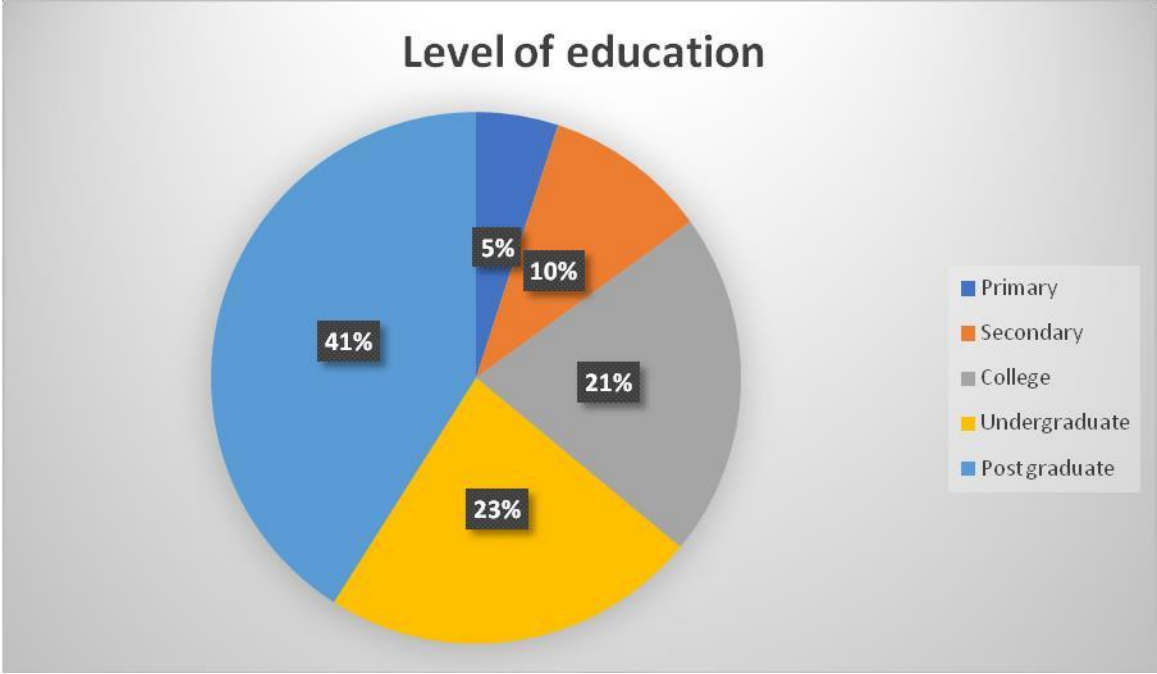
Figure 2.4: Level of education of the Respondents

Source: Field Data, 2022

2.3 Early warning systems for conflict prevention in Africa

According to the vast majority of respondents, conflict early warning strives to pinpoint and launch initiatives to minimize the origins, breadth, depth, and repercussions of various forms of political violence. Despite the fact that governments' commitment to comprehensive conflict prevention was not uniform across Africa, more than 60% of respondents stated that conflict prevention - and, as a result, conflict early warning - had gained relevance in international relations during the past three decades. The respondents further noted that greater investment in better early warning systems with incredibly advanced temporal and spatial components has resulted from this growing engagement, combined with developments in computation. However,

for a multitude of reasons, the practical implementation of conflict prevention and early warning falls behind its theoretical growth.[49]

This is further supported by Schmeidl & Piza-Lopez who notes that the culmination of the Cold War generated various changes to the international order, including increased prominence of early warning systems. The resolution of prior stalemate scenarios between East and West - illustrated best in the United Nations Security Council - made serious measures for early warning conceivable. Nevertheless, the transition from international to mostly internal conflicts made conflict prevention initiatives including military intervention problematic, as they posed a threat to state sovereignty. The increased visibility of long-running domestic conflicts, along with increased media and non-governmental attention, has pushed the horrors of war considerably closer to home.[50]

As noted by Masila, the conception of early warning systems was met with much skepticism from various people and organizations. However, in recent years, it has gained popularity as a method for spotting potential conflict situations and taking action to prevent their escalation. An early warning system must have a conflict prevention component in order to be effective. Masila asserts that because the two concepts work together to foresee and settle any potential conflicts, it is impossible to tell them apart.[51]

Policymakers, international organizations, and other stakeholders have become more aware that early intervention could have prevented or at least mitigated tragedies like those in Rwanda, Somalia and humanitarian organizations to improve their ability to detect the onset of a violent

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[49] Muggah, R., & Whitlock, M. (2022). Reflections on the Evolution of Conflict Early Warning. *International Journal of Security and Development*, *10*(1).
[50] Schmeidl, S., & Piza-Lopez, E. (2002). *Gender and conflict early warning: A framework for action*. London: International Alert.
[51] Ibid.

conflict with its accompanying needs for humanitarian aid. The authorities in charge of providing humanitarian relief are hoping that the early warning will allow them to schedule food and other supply deliveries to people who have been affected by the violence more successfully. Other groups that focus on diplomatic or military operations desire to use early warning to prevent an escalation of violence or its reappearance after a conflict in order to give themselves more time to implement conflict prevention measures, such as preventive diplomacy or preventative peacekeeping.[52]

According to Wulf and Debiel, early warning and conflict prevention systems can be divided into two groups. Both qualitative and quantitative models may be used. The most detailed early warning response system exists in at the UN level and is mainly catered to humanitarian crises and not specifically to conflicts.[53] Only in the last two decades have these responses established in humanitarian organizations begun to be applied beyond merely natural disasters and economic crises and evolved to other areas such as conflict and wars. Wulf and Debiel add that the under-explored areas remain as to who is to be warned, at what time, and what actions are to be taken to prevent the escalation into conflicts.[54]

Questions remain as to why despite the presence of established conflict prevention and early warning systems especially in war-prone nations, there is still a prevalence of violence and war in these areas. Reasons, why these systems are not working to prevent, de-escalate and control the spread of war to other regions, remain largely under-explored. Organizations that have taken upon themselves the role of peace-keeping and humanitarian aid in such situations are lacking in their conflict prevention and early warning approaches.

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[52] Brecke, P. (2000). Risk assessment models and early warning systems. *WZB Discussion Paper*.
[53] Ibid. p 1.
[54] Ibid. p 3.

Therefore, the absence of a workable preventive response is the basic issue with early warning systems and conflict prevention in Africa. According to the Ripe moment theory, it is challenging to make precise predictions, but it is even more challenging to convince important figures and the general public to heed warnings. It is difficult to reach out to communities that might be able to use the knowledge gathered to respond to the threat of violence.[55] Haider adds to this by stating that civil society organizations frequently find themselves in the position of both warning and response, despite their inability to adequately record and respond. The system is less effective as a result of the redundant practices used by numerous groups involved in early warning and conflict prevention.[56]

2.4 Factors influencing the effectiveness of early warning systems in conflict prevention in Africa

The elements that affect successful early warning and early reaction in Africa were asked about by the respondents. In a more coordinated and team-oriented approach that offers better prospects for successful conflict prevention, the respondents provided a variety of variables. The factors that have been identified in this section are the main areas that have come up as crucial to the effective running of conflict early warning systems at all levels of governance.

2.4.1 Timing of the early warning

The majority of respondents, representing more than 90% of the sample, believe timing is an essential element of the early warning system. Everything that determines whether or not a possible conflict situation will be prevented or escalated is dependent on the timing of any response to a crucial circumstance. The issue here is when the right time to respond is. Basically,

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[55] Arnado, M. A. (2012). Opinion – Women's involvement in conflict early warning systems: Moving from rhetoric to reality in Mindanao. Centre for Humanitarian Dialogue.

[56] Haider, H. (2014). Conflict: Topic Guide. Revised edition with B. Rohwerder. *Birmingham: GSDRC, University of Birmingham*. p 50.

how early is good enough to do something about the existing tensions and emergent situations? The reality is there is a need for the existing structures to be implemented effectively without exacerbating the situation to its tipping point.

Nevertheless, because of a paucity of fine-grained and encompassing indicators of geopolitical tensions, efforts to predict hostilities have so far failed miserably. Chadefaux posits that one of the most persistent challenges in predicting conflicts has been the absence of measures that are comprehensive in their assessments of tensions. Furthermore, these measures are frequently inconsistent among countries, and their assessment (for example, military spending) may be influenced by the government's benevolence or strategic objectives. Ultimately, they are unable to accurately assess the perceived actuality and importance of timing. Contemporaries could have been unaware of real risk factors or, on the other hand, could have invented them when none existed.[57]

There are three stages in every conflict situation: the pre-conflict stage, the conflict stage, and the conflict stage after the conflict. Specific circumstances in each of these phases could either end the disagreement or make it worse. Early warning systems are based on the premise that they can only be applied to stop or minimize conflict after it has already started. However, this is not the case when a trustworthy early warning and response system is to be deployed. According to Tiruneh, an early warning can happen at any point in the conflict management, escalation, or prevention process. It's a system that detects nascent, potential, or current conflict at an early stage. As a result, thinking about early warning as an essential feature of three phases: pre-conflict, in-conflict, and post-conflict is somewhat more applicable and realistic.[58] With this in

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[57] Ibid.
[58] Tiruneh, B. T. (2010). Establishing an Early Warning System in the African Peace and Security Architecture: Challenges and Prospects. *KAIPTC Occasional Paper No. 29*.

mind, it is crucial to keep in mind that an efficient early warning and reaction system's timing is crucial to the conflict management process. Without proper timing then the escalation into violent conflict is prone to be faster and much harder to manage as relates to the notions presented by Ripe moment theorists.

Early response systems, in Stine's opinion, are preventive measures that are put into place in a timely and appropriate manner, typically during the latent phases of a potential violent conflict. Short-term conflict responses are more reactive since key stakeholders use speedy gathering and transmission of information concerning violent occurrences to prevent the violence from escalating. Longer-term preemptive approaches are more proactive, analyzing data accumulated over time to address conflict sources.[59]

According to the discussion in this paper, the implementation and timing of responses affect how well an early warning system performs. The process of early warning is said to be greatly influenced by the interval between the gathering of information and the response. The information gathered analyzed and verified must reach the persons and communities involved in time for it to make a difference in turning the tide in a potential conflict situation.[60] Therefore, accurate timely, and consistent information is an essential component in an effective conflict early warning system.

2.4.2 Availability of resources to support early warning systems

Most respondents also noted that early warning and response systems' effectiveness is hinged upon the reliable collection and analysis of data from various sources over time. The process of

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[59] Stine, K. (2013). *Internal evaluation: Participatory early warning for more effective response to religious conflict in Plateau State, Nigeria – A pilot project funded by USIP*. Search for Common Ground. https://www.sfcg.org/wpcontent/uploads/2014/07/NGR_EV_Nov13_ParticipatoryEarly-Warning-for-More-Effective-Response-to-Religious-Conflict-in-Plateau-State.pdf

[60] Ibid. p. 2

data collection on potential conflict indicators entails the application of various resources that are pertinent to the accuracy and reliability of this data. This is the most important stage in any early warning system. It entails the application of various technologies that are required for data collection. Pham and Vinck note that access to these technologies proves hard for many nations creating deeper disparities and inequalities in data collection.[61]

A smart strategy to guarantee the accuracy of data collection and analysis is to focus early warning systems on the acquisition of new technologies. However, these resources times prove to be quite expensive. This means that leaders prioritize other aspects of conflict management that are not as expensive in an attempt to optimize their available resource use. One of the ways that have come up in the recent past is the integration of existing technologies with new technologies instead of reinventing the whole system every time.

According to Wulf and Debiel, taking that into consideration, early warning and response research funds should prioritize the integration of current models and discoveries, with a focus on openness, accessibility, and connectedness to local and regional early warning and response systems. At the same time, development assistance to multilateral organizations should refrain from funding the building of entirely new systems and instead encourage its crisis-affected partners to benefit from current informational resources, connectedness, and cooperative learning. In order to develop realistic and workable response plans, it may be essential to track and evaluate local events, as well as to create policy-oriented scenarios and regional early warning and response techniques.[62]

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[61] Pham, P. N., & Vinck, P. (2012). Technology, conflict early warning systems, public health, and human rights. *Health and Human Rights Journal*, *14*(2), 106-117.
[62] Ibid. p 30.

An early warning system must rely on data analysis to pinpoint the precise regional and local causes that could motivate individuals or organizations to conduct violence. Everyone involved in an early warning process should be able to agree on the events or developments that are most likely to raise tensions in this situation as a result of this. Such a scenario relies solely on information and its quality. The process of information gathering and analysis of data relies on resources that if made available ensure that the process of early warning is implemented timely and effectively as the potential for conflict increases.

Palli notes that although the information is becoming more widely available, quantity does not always guarantee quality. Quantitative and qualitative data collection methodologies employed in the early warning are still improving, and conflict databases have considerable discrepancies in terms of coverage, definitions of what constitutes conflict/violent occurrence, and other factors, which might compromise the accuracy and validity of findings. Methods to encourage more innovation in this field through investments of resources could produce better results.[63]

Despite the proven advantages of resource investment in the area of data collection and early warning response mechanisms, there remain many hindrances. Among them is the lack of political will. Early warning techniques' limited ability to trigger intervention is well understood, and policymakers are eager to use early warning products that decrease risk in complex decision-making operations.[64] However, despite these structural limitations, significant resources have

[63] Palli, S. (2017, May). *Early Warning Systems as a Conflict Prevention Tool: Recommendations for the Arab Region*. Economic and Social Commission for Western Asia (ESCWA).
[64] Power, S. (2013). *A Problem from Hell: America and the age of genocide*. New York: Basic Books.

been invested in developing increasingly sophisticated systems that combine high-resolution surveillance, communication, and responsiveness in response to the early warning system.[65]

2.4.3 Availability of good institutions in place

The majority of respondents also agreed that the early warning system mechanism's efficacy was largely dependent on the presence of reliable institutions. According to the respondents, governments, international agencies, and non-governmental organizations increasingly have early warning systems. They perform a number of tasks, including as issuing alerts, quickening response times, enhancing the quality of the data used to make choices, and acting as full-fledged response mechanisms. There is consensus on what constitutes a "good" early warning system, and numerous initiatives have put this best practice into practice. Political decision-making bodies are ideally suited to help early warning systems.[66]

Although structural indications fall into fairly simple models, the progression of a heated situation into conflict is the product of the interplay among various phenomena in a complicated network of interrelated levels of organizations, not the straightforward summation of a cleanly defined set of causes.[67] Complexity research suggests that in order for organizations to adapt to the structures of their surroundings, they must put in place feedback systems and decision-making frameworks that are more flexible in order to strengthen organizational resilience and legitimize the learning process. It follows that the institutions in question must be able to learn from their past mistakes and adapt to the changes that materialize during the early warning and reaction phase.

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[65] United Nations Office for Disaster Risk Reduction. (2009). *Global assessment report on disaster risk reduction*. https://www.undrr.org/publication/global-assessment-report-disaster-risk-reduction-2009

[66] Ibid. p 15.

[67] Meier, P. (2007). *New Strategies for Early Response: Insights from Complexity Science*. http://www.conflict-reduction.org/meier/Early%20Response.pdf

Meier suggests that by constructing hybrid hierarchies and networked governance systems, the "warning-response gap" could be closed through early warning and response mechanisms. Certain situations may prompt the formation of ad hoc task groups, which serve as consultation tools to guarantee that information and potential judgments do not get drowned in predetermined decision-making routes.[68] The competence of the institutions and offices charged with this responsibility, according to Wulf and Debiel, restricts the efficacy of the current conflict early warning systems.

Debasing measures must be utilized in a variety of areas where cognitive biases exist in these companies in order to assure the success of the early warning and reaction process.[69]

Muggah and Whitlock assert that the bulk of conventional early warning systems in use today involve investigation, notification, and intervention through necessary institutions that is tactically, strategically, and operationally pertinent. There is a divide between study, warning, and action for some organizations, such as the Organization for Security and Co-operation in Europe, which includes conflict resolution and settlement (OSCE). Others have more flexible and integrated roles, such as the African Union (AU) and the Economic Community of West African States (ECOWAS) (ECOWAS). The core tenet of many of these early warning systems is that decision-makers may effectively record, investigate, disseminate, and consolidate information about the fundamental risks associated with crises and conflicts, which can then be utilized to generate suggestions for action.[70]

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[68] Ibid.
[69] Ibid. p 26.
[70] Willmont, H. (2017). Improving U.N. Situational Awareness: Enhancing the U.N.'s ability to prevent and respond to mass human suffering and to ensure the safety and security of its personnel. *New York: Stimson Center*.

It is therefore fair to say that international institutions, bi-lateral institutions, research centers, and non-governmental groups have all a role to play in early warning and reaction systems. Civil society organizations frequently find themselves in the position of both warning and response, despite their inability to adequately record and respond. When several early warning and early response organizations carry out the same duties, the system is less effective. According to a recent study on regional organizations, the primary threat to early warning systems rather than a lack of trustworthy data—comes from organizational issues and internal political disputes.[71]

2.4.4 Availability of effective communication channels

The majority of respondents also agreed that gathering knowledge and useful data is important for informing the conflict intervention process and is related to early warning and response. As was already said, the collecting and analysis of data is made much faster and more trustworthy by the use of technologies like machine learning. But this is just one step in the procedure. Once information is gathered, there is a need for this information to be communicated through the right channels of the organizations involved to ensure a timely response at the ripe and opportune time for it to be effective as advanced by the ripe moment theory.

According to Palli, the flow of information goes through different levels and is prone to issues of information bias and distortion along the way. The amount of information that is being communicated at any given time is another important aspect to note. This indicates that a variety of information is received, and for the decision-making process to be effective, it must be carefully filtered and categorized. In this view, the efficiency of communication channels is a crucial component of early warning and response for community-level conflict prevention.

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[71] Ibid. p 50.

Many facets of operations in hostile and post-conflict environments depend on communication. It has long been recognized that the traditional or mainstream media—radio, television, and print journalism—is an important medium for communicating ideas and messages with the potential to influence public opinion. These venues for communication have been used to spread messages that support peace and reconciliation and help prevent violent conflict, as well as to incite violence. New communication channels and opportunities have been made possible by technological breakthroughs. Additionally, communication has been boosted, information is conveyed quickly, and new places for individuals and organizations to participate in the various stages have been established thanks to mobile phones, crowdsourcing technology, and social networks.[72]

Meyer et al. developed a persuasive intrastate conflict warning model that highlighted the filtering of information as part of the communication channel that this information on potential conflicts goes through before it reaches the response stage. This flow of information is rooted in the organizational culture that is already established in the institutions in question. Essentially, organizational culture affects the way information flows and how it is filtered.[73] Dev notes that the inclusiveness of an organization, its consistency, flexibility, and mission are all four aspects of the organizational culture of any institution involved in early warning.[74]

In keeping with the idea, a functional communication channel is thus a crucial component of the early warning system. Only if the intended recipient can receive the information on time is an early warning system effective. The age of information and communication technology is

[72] Coyle, D., & Meier, P. (2009). New Technologies in Emergencies and Conflicts: The Role of Information and Social Networks. *Washington D.C. and London U.K.: UN Foundation and Vodofone Partnership*.

[73] Meyer, C. O., Otto, F., & De Franco, C. (2010). Recasting the warning-response problem: Persuasion and preventive diplomacy. *International Studies Review*, 556-578.

[74] Dev, S. (2013). Assessing and understanding organizational culture: Variouse views and theories. *Indian Streams Research Journal*, 1-11.

currently in effect. Utilizing social media and mobile technology as a whole is a part of early warning and reaction. Utilization of these technologies at the local level makes access to information easier for those who are capable of taking action to prevent the escalation of violence. ICT-supported programs, on the other hand, must begin with a reliable understanding of local geopolitical tension to be successful. Peacebuilders must also be conscious that these instruments can be used to organize violence, and they must be prepared for this.[75]

2.4.5 Monitoring of changing conflict dynamics

Monitoring, according to the OECD, is "a continuous process that includes collection and analysis of information on specified indicators to give management and relevant parties with indications of the level of performance and progress of objectives, as well as effectiveness in the use of allotted money."[76] The process of gathering data is ongoing, and the information is utilized to inform programming decisions that will improve timely planning and implementation in addition to serving as a source of transparency. The ability of programs to adapt and respond to changing circumstances, which is critical in complex and dynamic conflict and violent situations in particular, must be monitored effectively.[77] As a result, monitoring program implementation performance in conflict contexts entails more than just reporting.

The majority of respondents also mentioned that a vital component of the early warning system is altering conflict dynamics. Therefore, it's crucial to continuously monitor how conflict dynamics are changing. Data and information serve as the foundation for an effective monitoring strategy. However, data gathering and monitoring might occasionally be misunderstood. At both

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[75] Shields, C. M. (2014). *ICTs in conflict early warning - possibilities and challenges*. Peace Insight. https://www.peaceinsight.org/en/articles/icts-conflict-early-warning-possibilities-challenges/?location=kenya&theme=culture-media-advocacy

[76] OECD-DAC. (2010). Glossary of Key Terms in Evaluation and Results Based Management. Paris: OECD, 27-28.

[77] OECD-DAC. (2012). Evaluating Peacebuilding Activities in Settings of Conflict and Fragility – Improving learning for results. *Paris: OECD*, 30.

the action and result stages, program managers must have the discipline to consistently gather, assess, and reflect on data about their programs. To put it in another way, a monitoring strategy must have aspects that allow information to be absorbed and used.[78] Both donors and implementation organizations must put in place analytical, organizational, and procedural aspects to have a comprehensive and appropriate monitoring strategy that influences flexible and fast decision-making on programs in crisis settings.

Conflict situations are dynamic processes that do not just prop up out of the blue. They are situations that develop and evolve resulting from existing or new tensions between communities as advanced by the conflict transformation theory. They are propelled by various factors such as incitement by politicians and leaders, prevailing challenges such as resource scarcity, and many more issues. A functional early warning and response strategy requires the ongoing monitoring of these elements. The sharing of this data, which is gathered in advance of conflict, enables prompt conflict resolution. Therefore, keeping track of conflict dynamics as they develop offers a crucial chance for early warning systems to operate effectively in conflict prevention.

As a result, it is accurate to argue that early warning systems need to adopt a proactive mindset.[79] In post-conflict situations, the potential for future escalation into conflict is still a threat that requires to be addressed. Therefore, monitoring conflict situations even after they have been resolved presents a chance for future prevention of new conflicts from emerging. Early warning systems as noted have a role to place in all stages of a conflict. Therefore, changing dynamics should be constantly monitored even after a solution is reached.

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[78] Church, C., & Rogers, M. M. (2006). Designing for Results: Integrating Monitoring and Evaluation in Conflict-Transformation Programs. *Washington: Search for Common Ground*, 83.
[79] Ibid. p 49.

2.5 Chapter summary and conclusion

Early warning and response systems provide the opportunity for effective conflict resolution methods to be applied at various stages of a disagreement. The process relies on information gathering and dissemination. However, there are various challenges encountered in this process. The factors that are essential to an effective early warning system must exist together in a synchronized and harmonious system to be functional. These factors as identified in this chapter are the timing of the responses, resources required for response, effective communication channels, presence of appropriate institutions, and monitoring of conflict dynamics.

CHAPTER THREE

THE EFFICACY OF EARLY WARNING SYSTEMS IN CONFLICT PREVENTION IN SOUTH SUDAN.

3.1 Introduction

This chapter looks at the effectiveness of South Sudan's conflict early warning systems. It assesses the efficiency of conflict early warning systems and their impact on the direction of the national conflict. Despite failing to entirely stop civil wars in South Sudan, conflict early warning systems have influenced developments toward peace and alleviated conflict in the country to some level. Today, as opposed to full-fledged wars in the early years of South Sudan's independence, early warning systems have helped reduce the conflicts to endemic low-tone clashes, giving the country some level of stability.

3.2 Predicting and Preventing Violent Conflict Occurrence

The vast majority of respondents to the study noted that South Sudan's early warning systems for violent conflict had been extremely effective in foreseeing and preventing bloodshed. In addition to regional and international early warning systems run by the Intergovernmental Authority on Development (IGAD) and the United Nations Mission in South Sudan (UNMISS), the country's Conflict Early Warning and Response Unit (CEWERU) routinely evaluates and forecasts the conflict situation. Based on the review, the agencies collaborate with the government to create strategies for reducing violent conflict and advancing national stability. The developments below highlight the role of early warning systems in predicting and preventing violent conflict in South Sudan.

The remarks make it very evident that the early warning system was essential for anticipating and ending the fighting in South Sudan. The early warning system's mechanism, which was put in place to prevent conflict from reoccurring in the country, bears some responsibility for the relative peace that has been achieved in South Sudan.

3.2.1 Effective management of the electoral process

The majority of respondents claimed that an early warning system had been used to control the voting process and avert unrest over elections. Brosché & Höglund elaborate that following its independence from the larger Sudan in 2011, South Sudan was scheduled to have its first general elections in July 2015. IGAD and the country's early warning system however reported the possibility of a coup d'état in light of the continuing conflict in the country. IGAD reported that there remained heightened divisions in the military – a situation they warned would have been made more volatile if the country was to hold its first elections as scheduled[80]. With attempted evidence of violence in African countries that went to elections with divides in their armed forces like Chad, Mali, and Guinea, it is fair to conclude that the systems successfully predicted violent conflict and helped prevent it.

"I believe that the postponement of the country's general elections was a smart move in conflict prevention. It prevented the worst from happening and is a tool in the conflict early warning mechanisms for the country to employ even in future instances."[81]

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[80] Brosché, J., & Höglund, K. (2016). Crisis of governance in South Sudan: electoral politics and violence in the world's newest nation. The Journal of Modern African Studies, 54(1), 67-90. https://doi.org/10.1017/S0022278X15000828
[81] Oral interview June 15, 2022.

3.2.2 Development of Peaceful Governance Strategies

The respondents observed that Early warning systems in South Sudan have also shielded the country from full-blown conflict by helping the government come up with leadership strategies that contain the situation and steer the country towards peace. The country's parliament amended the transitional constitution of 2011 in 2015 to lengthen the presidential and legislative terms to two and four years, respectively. International peace groups, particularly IGAD and the United Nations through UNMISS, were instrumental in this process. 2018[82]. With elections postponed, these organizations through their conflict early warning systems provided recommendations that influenced the decision of the parliament and ensured continuity in an otherwise uncertain period that would have easily ended in violent conflict. Again in 2018, the country's rival pacts influenced by concerns over the feasibility of a violent power transition signed a peace agreement that invoked a three-year transitional period to be followed by general elections next year (2023)[83]. By influencing the postponement of the general elections, conflict early warning systems have given the country a sense of stability and continuity essentially transforming the conflict situation as advanced by the conflict transformation theory. Thus, making even rival political leaders appreciate the value of peace and sustainable development over an unguided scramble for power.

"As a young nation, South Sudan finds itself in the early stages of learning to build up its leadership and governance. Despite being rocked with ethnopolitical conflicts, the early warning systems present are strategic tools in formulating a new governance structure that works."[84]

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[82] Agwanda, Billy, and Uğur Yasin Asal. "State fragility and post-conflict state-building: An analysis of South Sudan Conflict (2013-2019)." Güvenlik Bilimleri Dergisi 9, no. 1 (2020): 125-146. https://doi.org/10.28956/gbd.736103

[83] Liaga, Emmaculate Asige. "South Sudan's transitional government Realities, challenges and opportunities." ISS East Africa Report 2021, no. 41 (2021): 1-28. https://journals.co.za/doi/10.10520/ejc-isear-v2021-n41-a1

[84] Oral interview June 15, 2022.

It is evident from the observations that South Sudan's early warning system has aided in the creation of peaceful governance initiatives. The early warning system has helped avert and prevent election-tied conflict and fight for power by predicting and opting for power-sharing to help strengthen governance and prevent election violence.

3.2.3 Establishment of the Community Dialogue Programs

Most respondents expressed their opinion that South Sudan's conflict early warning led to the establishment of community dialogue programs to mitigate hostility among civilians and sustain peace after the 2014 ceasefire[85]. Due to this, the Action for Conflict Resolution (ACR) was created and registered in 2015 with the goal of preventing disputes by fostering more collaboration between the Dinka and Nuer groups. ACR works to prevent violent conflict by reducing extremism among civilians who support one side over another in conflicts because of their racial or ethnic affiliation. One of the key advantages of early warning systems, according to Souare, is their capacity to pinpoint and address the underlying causes of conflict before violence breaks out. ACR reaches out to the civilian population, raising awareness of the devastating effects of armed conflict, the necessity of peaceful coexistence with neighbors, and the appropriate channels for resolving disagreements rather than resorting to violent conflict, along with other community dialogue programs influenced by reports and recommendations by South Sudan's CEWERU[86]. In a country where civilization has not sufficiently taken root, community dialogue helps reduce the extremism and alignment to ethnic rivalries thus mitigating conflict. Conflict early warning systems in Sudan have therefore played a critical role in preaching peaceful coexistence, helping the country avoid all-out community wars.

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[85] Oral interview ,…
[86] Ibid.

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"The citizens of South Sudan must be included in the process of conflict prevention if the process is to work. This is because they are the first affected and stand to lose the most from a protracted conflict situation."[87]

From the discussion, it is evident the critical role conflict early warning systems have played in preventing violent conflict in South Sudan, especially on the subject of power transition. Elections are the main cause of conflicts in African countries – a fact that the conflict early warning systems in South Sudan were clearly weary of. Thus, the systems have constantly urged the country to pursue stability before attempting to alter its leadership through a general election, and they have influenced peaceful governance tactics in this way. So far, South Sudan's deadly conflict has been predicted and mostly avoided thanks to conflict early warning systems.

3.3 Early warning systems enhanced adequate responses to conflict

The significant majority of responders stated that the early warning systems had enhanced the reaction to the violence in South Sudan. The South Sudanese conflict has recently been waning in terms of both intensity and frequency. This is primarily the fault of the early warning systems that have increased mediation in South Sudan.

Conflict early warning systems, in particular the Conflict Early Warning and Response Mechanism (CEWARN) of IGAD and the Conflict Early Warning and Response Unit (CEWERU) of the country, have been crucial to the creation of successful responses to major conflicts in the country since South Sudan's independence. While sporadic civil wars remain

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[87] Oral interview June 15, 2022.

prevalent in the country, major wars have over the years been successfully contained by the efforts of early warning systems and associated organizations.[88]

3.3.1 Cessation of Hostilities Agreement (COHA), 2014

Following the IGAD involvement, the first significant confrontation (2013) between President Salva Kiir Mayardit and the allied forces of his adversary Riek Machar was successfully contained. In 2014, the group used information from its conflict early warning system to negotiate the COHA (Cession of Hostilities Agreement), which put an end to hostilities and allowed for further negotiations. After that, negotiations to determine and resolve issues of the warring pacts were promised by the August 2015 Agreement for the Resolution of the Conflict in South Sudan (ARCSS). This is the first evidence of conflict transformation by early warning systems in South Sudan[89]. As outlined in the conflict transformation theory, one strategy to subdue violence is to diffuse hostility by encouraging objectivity in conflict[90]. Conflict early warning systems in South Sudan have been able to manage major conflicts by proposing objective approaches to grievances and non-violent approaches for advancing the interests of parties in a war.

3.3.2 The Agreement on the Cessation of Hostilities (ACoH), 2017

Following the breakdown of the initial peace agreement by Salvar Kiir and Machar's forces through the Agreement on the Cessation of Hostilities in 2017, IGAD again brokered a second ceasefire through its early warning system (CEWARN), with the assistance of the United Nations UNMISS and the African Union (ACoH)[91]. The agreement went on to influence the

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[88] Nyadera, Israel Nyaburi. "South Sudan conflict from 2013 to 2018: Rethinking the causes, situation and solutions." African Journal on Conflict Resolution 18, no. 2 (2018): 59-86. https://doi.org/10520/EJC-14066df969
[89] Kasaija. "IGAD's mediation‖
[90] Jeong, Ho Won. "Conflict transformation." In Routledge companion to peace and conflict studies, pp. 25-34. Routledge, 2019.
[91] Nyadera, "South Sudan conflict‖

signature of the September 2018 Revitalized Agreement on the Resolution of the Conflict in South Sudan, the second peace accord (RARCSS). The conflict between the opposing political factions was successfully put under control, and as negotiations continued for the following three years, the two leaders were urged to order the withdrawal of their armies and entreat their constituents to remain in place so that talks could take place.[92]. Conflict early warning systems were crucial in keeping these two significant episodes of intense conflict under control and in laying the groundwork for an objective discussion of the conflict between President Salva Kiir and his rival, Riek Machar, the two supreme leaders.[93]

" The tensions between supporters of rival leaders Salva Kiir and Riek Machar have been an issue since the nation gained its independence. The hope for conflict resolution through an early warning mechanism has been aided by their acceptance to reach peaceful agreements. These agreements maintain a sense of peace because the two leaders a seen to be in collaboration and consensus with each other which translates to the citizens."[94]

It is therefore evident that early warning systems have been relied upon to prevent conflict in South Sudan. This has led to the singing of various cessation of hostility meant to prevent the outbreak of war. The early warning system has enabled relevant institution like IGAD and Africa Union to broker peace at the early stages of a conflict.

3.3.3 Negotiations by International Community Envoys

Majority of the study's respondents stated that early warning systems have also influenced the intervention of the international community towards peace in South Sudan. Wepundi reports that since the country's independence, international agencies have been substantially involved in negotiations to resolve power struggles in the country and establish policies for the peaceful and

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[92] Ibid.
[93] Ibid.
[94] Oral interview June 1515,

sustainable utilization of the country's capital resources[95]. South Sudan's capital resources including oil and pastoral land are a serious bond of contention and one of the factors behind the endless civil wars. The UN, AU, IGAD, and other international bodies have all sent envoys to South Sudan over the years to help the country's leadership establish better governance structures and better strategies for the exploitation of capital resources. As elaborated by Stamnes, the involvement of international agencies is largely influenced by the desire to uphold human rights and to avoid spillover effects of war such as refugee situations in neighboring countries[96]. International agencies are therefore keen on findings and reports by conflict early warning systems and are always on high alert to move in and intervene appropriately. Early warning systems have therefore been highly critical to drawing the attention of international organizations leading to effective interventions on conflicts in South Sudan.

"The international community has been active in supporting South Sudan and its people since attaining independence. This support from international institutions through aid, finance, and military support has been strategic in improving the prospects for a peaceful nation."[97]

Early crisis detection technologies have made it possible for UNMISS to provide assistance to civilians during hostilities until the situation has been stabilized and everyone has been turned over to government custody. The United Nations Mission in South Sudan (UNMISS) works with the country's Ministry of Foreign Affairs to strengthen peace and security and foster sustainable development in South Sudan. The agency was established as a preventative measure leading ahead to South Sudan's independence in order to emphasize the significance of conflict early warning systems. Early warning systems influence precautionary measures that enable better and

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[95] Wepundi, Manasseh, and Roba D. Sharamo. "The state of peace and security in East Africa." Institute for Security Studies Monographs 2021, no. 205 (2021): 1-68. https://journals.co.za/doi/10.10520/ejc-ismono-v2021-n205-a1

[96] Stamnes, Eli. "The United Nations mission in the Republic of South Sudan (UNMISS): Protecting civilians in a volatile environment." Policy Brief 24 (2015). https://www.files.ethz.ch/isn/193787/NUPI-Policy-Brief-24-15-Stamnes-3.pdf

[97] Oral interview June 1616,

adequate conflict management whenever violence ultimately ensues. UNMIS established bases for civilian protection during war, Protection of Civilians Camps (POCs) manned by the UN peacekeeping forces. These camps whose establishment was informed by conflict early warning systems by the UN, are safe havens for civilians in times of conflict and help diffuse wars by safeguarding targeted communities from their adversaries[98]. The POCs are a further example of how conflict early warning systems have influenced adequate response to war since South Sudan's independence.

"Civilians suffer the most when conflicts break out in South Sudan. The death toll, injuries, loss of land and property, and many more areas of normal life suffer. The humanitarian aid that is made available through already established early warning systems ensures that assistance to those affected is available."[99]

It is therefore correct to say that the early warning system has enabled the involvement of as many mediators as possible in the South Sudan conflict to prevent the outbreak of war. By intercepting conflict at its early stages and incorporating both international communities and regional actors, conflict in South Sudan has been addressed and peace agreements signed to strengthen the peace processes.

3.4 Early Warning led to timely Intervention of Conflict

A bigger percentage of the respondents were of the opinion that conflict early warning systems have facilitated timely interventions to conflicts in South Sudan by influencing decisions to restore peace before conflicts intensify, or prompting preventive action before major conflicts can break out[100]. As explained in the Ripe moment theory, successful conflict resolution is

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[98] Sugawara, "Effectiveness of Early‖
[99] Oral interview June 16, 2022.
[100] Ibid.

contingent on taking action at the proper time[101]. Decisions such as the procrastination of elections on two occasions for the sake of peace are examples of timely interventions that the country was able to arrive at due to the influence of early warning systems. Through an assessment of precedents in newly liberated nations, the early warning systems in South Sudan were able to accurately appraise the volatile nature of general elections in such a country and have continued to push it forward as the country waits for the ripe moment. The decisions on elections were made well in advance before the country got into an electoral mood further ensuring that violence does not erupt as a result of the postponements[102]. Early warning systems have therefore been able to successfully mitigate electoral chaos in South Sudan by ensuring that the decision to postpone polls is made well in advance before the country is polarized politically and peace prioritized over the interest of the country's rival leaders

Also, the systems in South Sudan recognized the limits to which certain strategies for preventing war lasted. First, the agencies recognized the dangers of continuing to postpone elections. Vhumbunu explains that with the opposition growing agitated about the further derailment of its plans to ascend to power, IGAD in collaboration with other regional and international agencies saw the need for a revised accommodative arrangement that would see a transitional government put up for 3 years, awaiting elections in 2021[103]. The Revitalized Transitional Government of National Unity in February 2020 brought the conflict to a formal end and continues to buy the country time as it awaits its first general elections in 2023[104]. Conflict early warning systems have therefore ensured timely management of the South Sudan situation and the strategies by the

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[101] Keethaponcalan, S. I. "Resolving Third World Conflicts Ripe Moment to Intervene and The Peaceable Change." (2021): 32-51. https://indianjournals.com/ijor.aspx?target=ijor:wa&volume=25&issue=1&article=003

[102] Ibid.

[103]Vhumbunu, Clayton Hazvinei. "Reviving peace in South Sudan through the revitalised peace agreement: understanding the enablers and possible obstacles." Conflict Trends 2018, no. 4 (2018): 3-11. https://doi.org/10.10520/EJC-14c04c94cd

[104] Vhumbunu, "The formation of the revitalized‖

organizations associated with them keep on changing with the evolving nature of the country's animosity landscape. The systems continuously develop early responses during the latent phases of a forecasted violent conflict, effectively arresting situations that may enhance the probability of violent conflict erupting.

Second, the conflict early warning systems in South Sudan realized the diminishing impact of the country's supreme leaders, Sava Kiir and Riek Machar, and influenced community dialogue strategies as a means of reaching the people as their allegiance to the two leaders' fade. Krause notes that as opposed to the early years of South Sudan's independence and Riek Machar's dismissal as vice president when the country's citizens pledged strong allegiance to either of the two leaders, years of negotiations between the two parties have seen their influence on the ground fade significantly[105]. In fact, Krause reports that most of the sporadic ethnic wars witnessed regularly in various parts of the country today are no longer nationalistic and are rather ignited by local struggles for capital resources such as pastoral land, water sources, land, and local control[106]. The early warning systems recognized these developments and embarked on strategies to encourage communities to peacefully coexist. The agreement on cessation of hostilities (ACoH) previously discussed is an example of efforts by early warning systems to promote peace among the locals without having to go through their leaders. This and many other community empowerment initiatives influenced by early warning systems are timely interventions that have helped de-escalate conflict in South Sudan.

From the discussion, it is worth mentioning that conflict early warning systems in South Sudan have moved the country closer to stability every year by igniting negotiations whenever the conflict situation is about to get out of control. It can be argued that the country has moved closer

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[105] Krause, Jana. "Stabilization and local conflicts: communal and civil war in South Sudan." Ethnopolitics 18, no. 5 (2019): 478-493. https://doi.org/10.1080/17449057.2019.1640505

[106] Krause, "Stabilization and local conflicts‖.

to stability every year since 2013 except for the significant setback in 2017. Liaga explains that conflict early warning systems have been the force behind the revision of peace agreements ultimately leading to the end of the political clashes when the revitalized transition government was established[107].

The early warning system, therefore, has consistently alerted key stakeholders in South Sudan, particularly IGAD and international agencies on developments in the country's conflict situation allowing continuous negotiations and deliberations that have seen the country unite under one government and a formal end to the political war. While the systems can be criticized for failing to completely ensure peace, an analysis of the developments in the war lay bare the possibility that the situation would have been much worse over the years if not for the interventions influenced by these systems. It is on this basis that the interventions are considered to have been timely and the systems are accredited with leading effective timely strategies to improve the situation.

3.5 Early warning helped address the underlying causes of conflict

According to the vast majority of responders, the early warning system has made it simpler to deal with the underlying reasons of conflict. Conflict early warning systems helped South Sudan deal with some of the conflict's core causes. This is consistent with the ideas of conflict transformation theory, which hold that understanding the traits and underlying causes of conflict is necessary in order to try to overcome it. These included ethno political animosity, scramble for capital resources, divisions in the country's army, and economic devastation and oil production.

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[107] Ibid.

3.5.1 Ethno-Political Animosity

According to the responders, the early warning system has been crucial in tackling the major sources of conflict in South Sudan, such as the intense political tension that sparked a civil war there. The main cause of conflict in South Sudan when the country effectively seceded from the original Sudan was political competition between Dinka leader Salva Kiir and Nuer-backed Riek Machar[108]. The marriage between the two rival ethnic groups in pursuit of independence was bound to break given the deep history of animosity between them. The conflict between these communities was predicted by early warning systems, which influenced the establishment of several peace initiatives in South Sudan, including the United Nations Mission in South Sudan.

"Ethnic-related politics has been the bane of South Sudan's sovereign progress as a nation. Each of the two conflicting ethnic groups believes in their right to leadership and this causes conflict."[109]

Divisions in the country's army were the other underlying cause of conflict identified by early warning systems and were of the stand-out agendas of the revitalized transitional government. In the new government, the army was to incorporate soldiers from Riek Machar's break-away troops, and strategies were outlined to ensure unity in the army as well as precautionary measures against possible future divisions. Vhumbunu presents that while the country's president did not welcome the idea of incorporating Machar's soldiers into the army to which he is commander in chief, Kiir succumbed to international pressure and agreed to the reunification of the country's forces under one transitional government[110]. Conflict early warning systems underscored the role of the country's divided army in propagating conflict and effectively pushed for reforms to address it.

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[108] Johnson, Douglas H. "Briefing: the crisis in South Sudan." African Affairs 113, no. 451 (2014): 300-309. https://doi.org/10.1093/afraf/adu020

[109] Oral interview June 16, 2022.

[110] Ibid.

"The military of South Sudan much like its citizens is divided between the two rival leaders. This created increased tensions in the country and exacerbated the conflict situation further. Early warning systems have enabled the nation to recognize this underlying cause and address it through the reunification of the military arm."[111]

It is therefore true to say that through the early warning system, political tension is South Sudan has been de-escalated. The early warning system has allowed the political players main President Salva Kiir and Riek Machar to share government and avoid political violence. In cases where violence was likely, through an early warning system it was made possible for the election to be postponed to a time when tension has de-escalated.

3.5.2 Scramble for Resources

According to most respondents interviewed by the study, conflict early warning systems also identified the scramble for capital resources as a significant driver of the conflict and influenced programs aimed at facilitating equitable and sustainable utilization of capital resources. The local government, regional agencies, and the international community have since embarked on projects to empower communities economically and promote peace in South Sudan through sustainable development[112].

For instance, South Sudan is recognized as one of the key partners in the 2063 Africa development blueprint, which aims to promote inclusive and sustainable socio-economic development over a 50-year period, as part of the African Union's economic development program.[113] The program recognizes that capital resource issues in South Sudan must be resolved to enable the country to thrive both socially and economically. The union has outlined several

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[111] Oral interview June 15, 2022.

[112] Radon, Jenik, and Sarah Logan. "South Sudan: Governance arrangements, war, and peace." Journal of International Affairs (2014): 149-167. https://www.jstor.org/stable/24461710

[113] Gowreesunkar, Vanessa. "African Union (AU) Agenda 2063 and tourism development in Africa: contribution, contradiction and implications." International Journal of Tourism Cities (2019). https://doi.org/10.1108/IJTC-02-2019-0029

economic empowerment initiatives including mega To address the nation's capital resource problems and reduce friction amongst communities, irrigation projects and other types of infrastructure development are needed.[114]. The identified sources of conflicts that early warning systems have identified and are currently a priority in the nation's peace efforts are capital resources like arable and pastoral land, water bodies, and transportation infrastructure.

"Early warning systems in the country have enabled recognition of the economic factors that spark conflicts. These factors once identified can therefore be dealt with beforehand and during a conflict to prevent its escalation."[115]

According to the respondents' responses, the conflict early warning and response unit (CEWERU) of South Sudan recognized the nation's oil resources as a key factor in the conflict. In collaboration with other peace agencies, CEWERU pushed for the formation of the Nile Petroleum Corporation (Nilepet) to represent the interests of the country's citizens in the exploitation of oil resources in a way that benefits the people and promotes national peace[116]. The conflict early warning system explained that one of the causes of the intense struggle for power is the country's oil wealth, observing that rival factions avidly view oil income as a potential prize for holding central power and control of the purse. Onditi et al. explain that this has fueled political ambitions and is behind the zero-sum thinking in negotiations where parties with the upper hand want total control over oil resources[117].   The ability of the current administration to fund ongoing military and security operations while also preserving the patronage networks , in a more immediate sense, largely dependends on the price of oil. As a

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[114] Gowreesunkar, "African Union (AU) Agenda 2063‖

[115] Oral interview June 15, 2022.

[116] Onditi et al., "Power-sharing consociationalism in resolving South Sudan's ethnopolitical conflict in the post-Comprehensive Peace Agreement era." African Journal on Conflict Resolution 18, no. 1 (2018): 37-64. https://www.ajol.info/index.php/ajcr/article/view/175828

[117] Onditi, et al."Power-sharing consociationalism‖

result of South Sudan's conflict early warning systems, Nile Petroleum Corporation was created. It is a shareholder in all oil processing firms there and is primarily responsible for guaranteeing the equitable distribution of oil earnings and advancing the interests of the populace.[118]. Early warning systems in South Sudan acknowledged the importance of the nation's oil resources in influencing conflicts and encouraged measures for their equitable and sustainable management to reduce conflicts brought on by the battle for power and control of the nation's primary source of income.

"The presence of oil deposits in South Sudan is a major economic boost for the nation. However, it also represents a potential for conflict emergence and escalation if it is not dealt with. Early warning systems come into play in this sense through identification and de-escalation of potential conflict caused by disputes over oil deposits."[119]

Notably from the discussion, the early warning system has been key in addressing the main issue of resource conflict in South Sudan. It is worth mentioning that resource conflict remains a challenge for the country. However, through the conflict early warning system in South Sudan, it has been made possible to address the issue of sharing resources like oil. The early warning system has made it easy to predict the likelihood of violence erupting hence allowing the relevant institution to act promptly.

3.6 Early warning led to a deeper knowledge and understanding of the conflict

The success of any conflict resolution mechanism relies on how well the conflict is understood.

3.6.1 Better Understanding of Conflict Root Causes

By understanding the underlying causes and some of the driving forces behind the ethno political antagonism between the Dinka and Nuer, early warning systems, according to the majority of those surveyed, helped them better understand the conflict. Through continuous assessment and

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[118] Ibid.
[119] Oral interview June 16, 2022.

early warning systems, root cause analyses of the war situation identified several factors that contributed to the conflict in South Sudan, including the historical rivalry between the Dinka and the Nuer, the competition for capital resources, the fight for control of oil resources, and the politically motivated divisions in the army that were covered in the previous section. As Mamiya et al. report, the first step toward managing conflict understands the root cause of the problem[120]. Early warning systems for conflicts helped to comprehend what was happening by identifying the root reasons of the conflict.

Conflict early warning systems, according to 73% of survey respondents, also helped people better comprehend how the battle was progressing. Systematic data gathering and analysis on disputes served as the foundation for the systems. In so doing, a better understanding of variables in the war was established and used in the formulation of responses or providing recommendations to the appropriate organizations to act on the intel. Larrauri explains that conflict early warning and response programs systematically monitor and report conflict indicators based on quantitative and qualitative analytical methods[121].

Additionally, early warning systems influenced players to divulge more about their grievances and reasons for getting involved in the conflict. Interventions proposed by the systems involved bringing the warring parties together in negotiations where both were encouraged to air their grievances and why they felt violent conflict was the only way out. In the negotiation processes, the leaders opened up on issues influencing the war increasing peace organizations' understanding of the war and building knowledge on how best the conflict can be managed.[122]

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[120] Mamiya, Ralph, and Haidi Willmot. "Early warning, the protection of civilians and United Nations peacekeeping operations." African Security Review 22, no. 2 (2013): 68-77. https://doi.org/10.1080/10246029.2013.792549
[121] Larrauri, Helena Puig. "New technologies and conflict prevention in Sudan and South Sudan." New Technology and the Prevention of Violence and Conflict (2013): 71-86. https://www.jstor.org/stable/pdf/resrep09625.9.pdf
[122] Zambakari et al.,"The role of the UN Mission in South Sudan (UNMISS) in protecting civilians." In The Challenge of Governance in South Sudan, pp. 95-130. Routledge, 2018. https://doi.org/10.4324/9781315158464-5

Therefore early warning system has provided the information used in hypothesizing possible war scenarios and brainstorming response options for mitigating conflict. Early warning systems in South Sudan provided invaluable insight into the war from continuous data collection and analysis and active monitoring allowing the institutions in place to act on time and prevent violence or civil war.

3.6.4 Civilian Perspectives on the Conflict

A bigger percentage of the respondents 65% also pointed to the fact that the early warning system has also helped rope in civilians and citizens in peacebuilding in South Sudan. The interventions influenced by early warning systems such as community empowerment programs and campaigns for peaceful coexistence revealed the civilian perspectives on the war. In many conflict situations, the focus is always on the leaders, and sometimes critical follower perspectives are missed. Dorff explains that to effectively manage conflict, followers' perspectives should be taken into account to build an understanding of whether the citizens are merely participating in wars because of their leaders or whether they share in their leaders' views and objectives for the war[123]. Interventions founded on insights from the early warning systems connected with the civilians hence better knowledge and understanding of the war.

"The presence of an early warning system in the nation has enabled the leadership in South Sudan to understand the conflict situation in its essence. The causes, character, and drivers of conflict once identified facilitate better leadership and decision-making in the nation."[124]

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[123] Dorff, Cassy. "Violent and nonviolent resistance in contexts of prolonged crisis: the civilian perspective." Journal of Global Security Studies 4, no. 2 (2019): 286-291. https://doi.org/10.1093/jogss/ogz007
[124] Oral interview June 16, 2022.

Early warning systems in South Sudan were successful and contributed to the official end of the civil war in that nation in 2020. Even though the country still witnesses sporadic ethnic clashes, there is far much less violence today and the country is geared towards stability under the revitalized transitional government. While the several years of unrest may make it seem that peace strategies were effective, evidence demonstrates that the situation would have been much worse were it not for conflict early warning systems by the local government, regional entities (particularly IGAD), and the international community – most notably the UN. Early warning systems predicted violent conflict scenarios and influenced preventive measures to contain situations before they could erupt. The country's general elections were postponed for the sake of peace and ultimate readiness before power shifts could even be considered, which is an excellent example of peace preservation actions adopted as a result of warnings from these systems.

There as per the discussions it is true to conclude that early warning systems have enhanced timely and adequate responses to conflict. The systems enabled prompt and efficient interventions, such as ceasefire agreements and peace treaties, to ensure that the conflict did not explode through meticulous analysis of conflict trends. The root causes of the conflict were also addressed with the aid of early warning systems. The conflict's underlying causes were examined by the systems, and they developed resolution plans. These included community empowerment and cohesion programs, proposals for better management of the country's capital resources, unification of the army, and better management of oil resources.

3.7 Summary of the chapter findings

In conclusion, early warning systems in South Sudan promoted knowledge and a better understanding of the war. It laid bare the causes of the conflict and risk factors for its escalation, the leader's grievances, the civilian perspectives, and how the conflict could be resolved. Early

warning systems therefore played a significant role in South Sudan's seven-year path to the end of the civil war. The mechanisms contributed to the conflict's effective and gradual containment until its resolution in 2020.Conflict early warning systems are effective in predicting and managing violence but are constrained by systematic challenges. Implementing conflict early warning systems can help South Sudan and indeed all African countries become stable and develop sustainably because of peace.

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CHAPTER FOUR

THE KEY CHALLENGES FACED IN THE APPLICATION OF EARLY WARNING SYSTEMS IN PREVENTING THE CONFLICT IN SOUTH SUDAN

4.1 Introduction

Significant obstacles must be overcome in order to employ early warning systems to halt the conflict in South Sudan, and these obstacles are discussed in this chapter. The efficiency of early warning systems in preventing confrontations was assessed in the chapter before. Due to a number of institutional limitations, using conflict early warning systems to manage the civil war in South Sudan was difficult.

Even though the systems significantly helped steer the country to the formal end of the conflict, several factors challenged their implementation with the war consuming an estimated four hundred thousand lives. If there hadn't been so many barriers, the early warning and reaction systems may have been more successful and peace might have been achieved much sooner. This chapter discusses the key difficulties South Sudan's early warning and response systems ran into when seeking to prevent conflict. African conflict early warning systems face a number of challenges, which lowers their effectiveness and fuels growing criticism of their role in preserving peace and preventing violent clashes between governments.

4.2 Lack of Resources to Support Early Warning System

From the responses sampled, most of the respondents argued that early warning systems in South Sudan failed to achieve maximum because of resource constraints. South Sudan's early warning systems were limited by the absence of the majority of these resources. For instance, Nganje explains that one of the biggest challenges faced by South Sudan's conflict early warning and the CEWERU response unit has outdated technology. Nganje goes on to say that the agency's low

effectiveness in foreseeing developments that would endanger the nation's peace is due to the agency's slow adoption of the majority of the most recent intelligence analytical technologies.[125] Ohazuruike goes on to explain that the UNMISS, the UN Mission in South Sudan, is currently forced to hire workers from neighbouring nations like Kenya and Ethiopia due to a dearth of competent manpower. Due to resource constraints, South Sudan's conflict early warning systems are no longer as effective at fulfilling their duty to avert violent conflict.[126]

"Part of an effective early warning system is its ability to have all the required resources needed to avert conflict situations and deal with them if they do occur. South Sudan is fairly young in its independent status, as such, it is yet to obtain and take advantage of key resources relevant to conflict prevention and economic development. This has been a major constraint for the conflict early warning mechanisms in the country."[127]

Success stories of early conflict warning systems in other parts of Africa imply that the effectiveness of these systems is determined by resource availability. For instance, the success of west Africa's early warning Network (WARN) in preserving peace in West Africa is largely attributed to the availability of both human and capital resources to support the operation of the system.[128] Formed by the West African Preventive Peacebuilding Program coordinated by (WANEP) and supported by civil societies across the member states, WARN has been successful in preventing violent conflicts in nations such as Sierra Leone, Liberia, Cote D'Ivoire, and

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[125] Nganje, ‒Local Peace Committees‖.
[126] Kennedy Ohazuruike, "The United Nations and Challenges of Civilian Protection in South Sudan Crisis, 2013-2018," *Uluslararası Sosyal Bilimler Dergisi* 3, no. 15 (2019), https://www.ceeol.com/search/article-detail?id=785783.
[127] Oral interview June 15, 2022.
[128] Peter Arthur, "Promoting Security in Africa through Regional Economic Communities (RECs) and the African Union‗s African Peace and Security Architecture (APSA)," *Insight on Africa* 9, no. 1 (2017), doi:10.1177/0975087816674577.

Cameroon among many others.[129] Perhaps if the conflict early warning systems in South Sudan including the country's own CEWERU, IGAD's CEWARN, and the United Nation's Mission in South Sudan received the same infrastructural and human capital support as WARN, more incidences of violent conflict would have been prevented, more lives preserved, and an end to the war achieved much earlier.

The poor state of transport and communication infrastructure in South Sudan further impeded the work of conflict early warning systems. Newly independent, war-torn, and underdeveloped, South Sudan lacked critical transport and communication infrastructure such as roads and network coverage in most parts of the country. This limited the movement and communication of members of the peacekeeping organizations, preventing them from gathering comprehensive intel on conflict developments in some parts of the country and coordinating with teams scattered in different locations.[130] The lack of sufficient infrastructural resources therefore significantly compromised the operations of conflict early warning systems, limiting conflict research to the accessible regions and resulting in findings that do not sufficiently represent the war situation throughout the country.

"Conflict situations take away significant resource bases required by the nation and divert them to providing humanitarian aid to the affected citizens. These diverted resources would otherwise be used in ensuring that an effective early warning system is established and functions adequately."[131]

Additionally, the peacekeeping organizations' early warning agendas were constrained by the opportunity cost of advancing humanitarian aid at the expense of investing heavily in early

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[129] Arthur, "Promoting Security‖.
[130] Racheal Watera, "Assessment of challenges to inter-governmental authority on development peace mediation in South Sudan: A case of South Sudan conflict (2011-2016)," (PhD diss., Nkumba University, 2018).
[131] Oral interview June 16, 2022.

warning systems. Juggling between advancing humanitarian aid and funding early warning systems, the international peacekeeping organizations often found themselves sacrificing resources to help civilians while their warning systems remained underfunded and less effective.[132] UNMISS for instance prioritized the provision of humanitarian aid to the civilians affected by war as this was a more pressing and immediate concern. The considerable need for humanitarian aid made any other aspects of the war seem less urgent hence little investment in them.[133] In the competition for the limited resources by the peacekeeping agencies, humanitarian aid won at the expense of conflict early warning systems. The systems operated on tight budgets with limited human and capital resources hence reduced efficiency and ultimately, reduced effectiveness.

From the explanation above, it is clear that the early warning system's resource issues have prevented it from being totally successful. To be effective, early warning systems need a tremendous amount of human and financial resources. The systems' foundation is the gathering and examination of intelligence data. They can be likened to national investigative agencies in that they gather and assess information from the highest commanders of warring parties to the citizens at the grassroots. Highly qualified personnel, resources for networking and connecting with communities at different levels, security apparatus, and logistics for coordination of activities are examples of the resources an effective early warning system would require in a country as vast as Sudan.

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[132] Adam Day et al., "Assessing the Effectiveness of the United Nations Mission in South Sudan (UNMISS)," Norwegian Institute of International Affairs, last modified 2019, http://collections.unu.edu/eserv/UNU:7595/EPON-UNMISS-Report-LOWRES.pdf.

[133] Day et al., "Assessing the Effectiveness‖.

4.3 Lack of Good Offices and Institutions to Support the Early Warnings System

The majority of respondents also expressed their belief that the early warning system in South Sudan is severely hindered by the absence of supporting good offices. The absence of reliable and committed institutions to assist conflict early warning systems in South Sudan was a problem. Critical national agencies in South Sudan such as the military and the police were divided based on the political affiliation of officials, making it difficult for the early warning systems to have any meaningful engagements. Furthermore, according to Watera, national organizations in the country operated under President Kiir's direction frequently impeded the work of foreign groups there to further the Dinka agenda for political power in South Sudan. South Sudanese agencies were not receptive to the early warning systems by international agencies since the country's government was deep into the conflict.[134]

Conflict early warning systems by international organizations which included IGAD'S CEWARN, the Africa Union, UNMISS, European External Action Service, and the initiative for peacekeeping (IFP) also lacked support from the local security agencies. The native government had to provide security support for the early warning system in order for it to function in a country that had a history of civil unrest.[135] No such support was forthcoming, and members of these systems could not effectively execute their tasks which fundamentally involved tactical collection of intel due to security concerns.[136] Officials enrolled in these systems operated in fear, having to watch their backs and unable to penetrate deep into the villages to comprehensively assess the war situation. The lack of local security support significantly compromised the conflict early warning system by international organizations.

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[134] Watera, "Assessment of challenges‖.

[135] Stella N. Mukhono, "State Building and Conflict in the Horn of Africa: A Case Study of South Sudan 2015-2019," (PhD diss., United States International University-Africa, 2020).

[136] Mukhono, "State Building‖.

"A major challenge to the effectiveness of conflict early warning systems in South Sudan was the lack of coordination between the different stakeholders involved. The lack of cohesion between the military, civil society, international organizations, and the private sector was a constraining factor. For the early warning systems in South Sudan to work in the future, collaboration is necessary."[137]

The early warning systems in South Sudan also lacked conducive offices to pitch base. In the war-torn country (South Sudan), early warning systems lacked permanent offices to pitch base and coordinate operations. Watera notes that most of the peace organizations in the country operated albeit nomadically, moving from one base to another and having to live in container houses and offices.[138] Ohazuruike observes that up to today, most of the UNMISS members still operate from container houses and offices. This resulted in poor planning of operations, poor coordination of members, and a lack of consistency and synergy in reports due to limited engagement by teams that made up the systems. An early warning system requires adequate planning and coordination between members. The usefulness and efficiency of conflict early warning systems were severely hampered by the lack of sufficient offices and operation bases in South Sudan.[139]

"Support from international organizations and regional bodies that have a presence in South Sudan is critical to the efficacy of the early warning systems in the nation. However, the wars that have broken out in the nation have revealed that international support and intervention have been lacking to some extent. This lack of supportive engagement from international and regional

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[137] Oral interview June 16, 2022.
[138] Ibid.
[139] Ohazuruike, "The United Nations‖.

bodies has slowed the process of conflict early warning and rendered these mechanisms ineffective in the long-term."[140]

Another institutional hurdle that South Sudan's conflict early warning systems had to overcome was the African Union's failure there. Mlambo and Dlamini argue that the AU, the principal organization in charge of safeguarding peace and sustainable development throughout Africa, made essentially no contribution to the South Sudan conflict early warning system.[141] The union was anticipated to be at the forefront of supporting peace organizations and early warning systems through tactics like resource mobilization and international organizations' condemnation of government sabotage of conflict early warning systems. The union was the main institution in charge of maintaining peace in Africa. In times of extreme crisis, the union would only sometimes send mediation envoys to speak with leaders.[142] Researchers found that, in comparison to the AU, IGAD was far more instrumental in bringing about the formal conclusion of the war. Early warning systems for conflicts were thus severely hampered by a lack of African Union assistance. Had the AU supported the early warning systems and put pressure on the government to cease undermining them, much more would have been accomplished.

"South Sudan has been in a state of stalled development in terms of its governance and democracy. This is an essential element if the nation is to formulate an early warning system that works for the future. This will begin by freely and fairly electing a new government and prioritizing the need for conflict early warning mechanisms in the country."[143]

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[140] Oral interview June 15, 2022.

[141] Victor H. Mlambo and Mpume Dlamini, "Conflict and violence in Africa in the 21st century: Where is the African Union? A case of Libya, South Sudan, Democratic Republic of the Congo, and Central African Republic," *Journal of Public Affairs* 19, no. 4 (2019), doi:10.1002/pa.1939.

[142] Mlambo and Dlamini, "Conflict and violence‖.

[143] Oral interview June 15, 2022.

The position of this study, therefore, is that early warning systems require the support of a functioning and well-integrated governance structure that has the support of its different arms to function. For the better part of the last decade of its independence, South Sudan lacked a functional government that can concentrate on early warning as a central priority to avert future conflict. As such, the nation has gone through phases of conflict and phases of peace that have lasted for a very short period. The presence of a functional government structure that responds well to the indicators of conflict and stems them before they occur is essential to a functioning and effective early warning mechanism. In addition, the country has failed to concentrate on establishing functional and unique early warning systems that are custom to its specific challenges, hence, the adoption of early warning system systems may not always work for it.

4.4 Poor Monitoring of the Changing Conflict Dynamics

Most of the respondents also noted that the inability to Monitor the Changing Conflict Dynamics posed a big challenge to the early warnings system in South Sudan. The war in South Sudan was highly intermittent and unpredictable even for the systems set up to monitor and predict. The triggers of the conflict were largely a secret of the two leaders and without much access to either president Salva Kiir - who cuts out as a highly secretive man and keeps a well-knit inner circle, and his rival Riek Machar – who is equally combative,[144] early warning systems found themselves on the back rows in their attempts to keep up with key developments in the war. Largely made up of non-locals who could not effectively blend in to collect inside information on war planning and developments in the local communities, early warning systems were significantly disadvantaged hence their inability to develop timely predictions and

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[144] Theresa D. Nyombe, "African Sub-Regional Organizations in Conflict Resolution: Analyzing the Contribution of Intergovernmental Authority on Development (IGAD) In the South Sudan Conflict Resolution 2013-2018," (PhD diss., United States International University-Africa, 2019), http://erepo.usiu.ac.ke/11732/5359

sufficient recommendations on how to stop the conflict.[145] Rapidly changing dynamics of the war therefore considerably undermined the ability of conflict early warning systems to fulfill their mandate.

As previously mentioned, resources were limited hence the systems only focused on aspects of the war that were considered critical. This explains why the early warning systems were largely able to predict and influence the prevention of serious violent conflict while sporadic local clashes remained highly prevalent. The nature of the war significantly challenged conflict early warning systems in South Sudan in accordance with the conflict transformation theory. While critics may take this as a point to prove that early warning systems are ineffective, the presentation suggests that maybe the early warning systems in South Sudan would have been much more effective if the war was triggered by fewer factors.

"The effectiveness of a conflict early warning mechanism is reliant on its ability to monitor and predict the future of a certain situation. The conflict in South Sudan was triggered by many different factors that contributed to its escalation and severe consequences. The early warning systems in the nation were active in predicting some of these factors however, failed in picking up on others. Its inability to track and monitor all these factors has been a restricting factor and should be improved for the future."[146]

Limited interagency cooperation also led to the poor monitoring of the changing conflict dynamics. In analyzing the South Sudan conflict from 2013 to its formal end in 2018, Tanui notes that the lack of cooperation between key international bodies such as the IGAD, AU,

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[145] Israel N. Nyadera, "South Sudan conflict from 2013 to 2018: Rethinking the causes, situation and solutions," *African Journal on Conflict Resolution* 18, no. 2 (2018), https://www.ajol.info/index.php/ajcr/article/view/182087.
[146] Oral interview June 16, 2022.

UNMISS, and the EU influenced the long route to the revitalized transition government.[147] Liaga notes that it is only when the agencies started coordinating in 2018 that significant progress in peace and power-sharing negotiations were made.[148] Conflict early warning systems were undermined by the same factor; each agency's system mostly worked independently.[149] With each system facing its challenges, none of the programs were able to adequately keep pace with developments in the field. Lack of cooperation, collaboration, and synergy between the conflict early warning systems from different agencies in South Sudan, therefore, impeded their efficacy for predicting and preventing conflict a great deal. From the highlighted literature evidence, more cooperation and synergy between the systems would have achieved better outcomes.

"At the onset of conflict in South Sudan, there were several international and regional bodies that provided support and assistance in the conflict period. Each of them possessed their methodology and way of dealing with the whole conflict situation, however, their collaboration was lacking. This lack of cooperation challenged the conflict early warning monitoring and prediction process ultimately slowing the road to peace."[150]

According to Verjee, the monitoring is based on the premise that truthful reporting of ceasefire violations will discourage subsequent violations. It's unclear whether this theory holds water in South Sudan. The parties' lack of commitment to their responsibilities and an impartial monitoring process, their limited recognition of the monitoring results, and the absence of

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[147] Carolyne C. Tanui, "Challenges and Prospects of Prevention and Management of Conflicts in Africa: The Role of IGAD Early Warning Mechanism," (PhD diss., University of Nairobi, 2020), http://erepository.uonbi.ac.ke/handle/11295/153688.

[148] Emmaculate A. Liaga, "South Sudan's transitional government Realities, challenges and opportunities," *ISS East Africa Report*, no. 41 (2021), https://hdl.handle.net/10520/ejc-isear-v2021-n41-a1.

[149] Watera, ‒Assessment of challenges‖.

[150] Oral interview June 16, 2022.

substantial repercussions for violations all undermine the value of monitoring.[151] Operational, organizational, and technical shortcomings, such as ineffective leadership, unskilled monitors, and a lack of internal security, have plagued the nation's monitoring operations. Additionally, efforts to engage with South Sudanese civilians and publicly disclose monitors' findings have been patchy. A nationwide, consistent public education campaign would raise the standard of the monitoring procedure.[152]

"The challenge of local leaders' non-adherence to the monitoring and evaluation processes in the early warning mechanisms is slowing down the process of conflict prevention. For a future with no conflict, these leaders must follow the agreements made and face repercussions when they do not."[153]

In line with the above findings, without proper monitoring of changing conflict dynamics, there are several risk factors that have made it an uphill task for the early warning systems to effectively monitor the war situation. The war was influenced by several factors, from national and local politics, scramble for capital resources (grazing land and water), historical ethnic rivalries, oil mining conflicts, and other facilitators. The conflict early warning system was unable to keep up with these factors which have sometimes made it difficult to correctly predict the exact cause of conflict.

4.5 Poor Timing of the Early Warning Systems

Poor timing, according to a sizable proportion of respondents, is a significant obstacle for South Sudan's conflict early warning systems. How successful early warning systems are will depend on when and how they are used to respond appropriately when necessary. This mostly determines when an early warning will be given and how the issue will be addressed. The rising

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[151] Aly Verjee, *Ceasefire Monitoring in South Sudan2014–2019: "A Very Ugly Mission"*, (United States Institute of Peace, 2019).

[152] Verjee, *Ceasefire Monitoring*.

[153] Oral interview June 15, 2022.

goal and the actual results of conflict early warning systems, however, clearly differ from one another. Hegre et al. note that rarely are concurrent political desires and practical action accompanied by increasing investment in analysis tools and supercharged approaches to foresee the threats of organized political violence.[154] However, the bulk of outbreaks of mass violence have been more difficult to foresee and address than anticipated. The causes of this are often the shortcomings of early warning assessments, the restricted availability, dependability, and verification of real-time data, and last but not least, the modelling difficulties posed by the endogeneity found in complex conflict processes. The timing of the warnings was another important factor that significantly reduced the effectiveness of South Sudan's conflict early warning systems. The inadequacy of the early warning systems to determine the best moment to propose cures was the reason for the low efficacy of the efforts advanced based on their recommendations. For instance, the first ceasefire agreement (2014) was signed at the peak of the conflict following president Kiir's fallout with his vice, Riek Machar.[155] The Ripe moment theory stipulates that the opportune moment to resolve a conflict is during a stalemate, thus this would not be the ideal moment to advance negotiations between warring parties.

Explaining the Ripe moment theory of conflict resolution, according to Mac Ginty, parties should only settle a dispute when they are prepared to do so. Keethaponcalan, who asserts that during conflicts, objectivity is lost and the participants feel as though they are in an uncomfortable and expensive predicament, supports this view. As a result, the sides fail to make compromises for fear that it would jeopardize their position going forward.[156] At that ripe moment, parties seek or are amenable to proposals that offer a way out and it is at this moment

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[154] Håvard Hegre et al., "Introduction: Forecasting in peace research," *Journal of Peace Research* 54, no. 2 (2017), doi:10.1177/0022343317691330.

[155] Tanui, "Challenges and Prospects‖.

[156] S. I. Keethaponcalan, "Resolving Third World Conflicts Ripe Moment to Intervene and The Peaceable Change," 25, no. 1 (2021), https://indianjournals.com/ijor.aspxtarget=ijor:wa&volume=25&issue=1&article=003.

that peacekeeping agencies should take the swoop. Conflict early warning systems' poor timing of warning and recommendations significantly challenged their effectiveness in South Sudan.

"When it comes to conflict situations, timing is everything. It determines the precise moment to apply responses, in what places, and in what methods to elicit the required outcomes. The South Sudan conflict early warning mechanisms have failed in this sector due to delays in evaluation, monitoring, and responses. Ultimately this is why the conflicts in the last decade have had such adverse outcomes."[157]

Conflict early warning systems in South Sudan were also poorly timed. Except for UNMISS conflict monitoring systems were set up in the build-up to the country's independence, the other early warning systems such as IGAD's CEWARN in South Sudan were established with the war well on its course. They were introduced when the conflict was already boiling and lacked an adequate background assessment of the situation before embarking on sounding alarms and offering intervention recommendations for preserving peace in the country. Lutz elaborates that conflict early warning systems are a necessity, and should not only be introduced in cases of ongoing/prolonged conflicts. Early set up of the systems would have enabled them to have the proper background of the war leading to better understanding which translates to better prediction of the conflict situation, and superior response proposals.[158]

Part of early warning is also realizing how to convey the information and who to convey it to. This is part of effective timing and response. Where the information is collected in good time but conveyed to the wrong persons or through the wrong channels then the communication fails. Wulf and Debiel note that in a mechanism of multi-level leadership where the directly impacted communities are situated in local contexts and deserve to be more than "objects" of preventative

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[157] Oral interview June 15, 2022.
[158] Luca M. Lutz, "African Early Warning Systems: Challenges and Prospects for African Security Integration," (master's thesis, Charles University, 2021).

measures, but instead "collaborators" and "subjects,". It is important to emphasize that early warning systems must describe explicitly who they should be going to forewarn, premised on which presumptions they anticipate effective early response to be undertaken, and whom they are attempting to address.[159]

" Early warning in South Sudan will forever remain flawed if the governance structures and the leaders present are divided. Their lack of collaboration and cooperation means that early warning data collection, communication, and responses are disconnected. Which makes such mechanisms ineffective."[160]

With this in mind, therefore, the major challenge to effective early warning in South Sudan has been the communication channels and response mechanisms present to aid in the conflict early warning systems present. Tanui contends that as evidenced in the national leadership structure which is divided between two opposing leaders, the communication of structures in such an administration remains fragmented and divided. The lack of trust and accountability in the communication of early warning data to the relevant parties and their subsequent swift response has rendered the early warning systems largely ineffective in some areas. In the future, the government needs to recognize the importance of communication and timely response for early warning to work effectively.

4.6 Failure of Regional Institutions to Respond to Conflict Early

The majority of the respondents also argued that regional institutions like IGAD and AU have failed to promptly respond to the early warning system. Regional organizations play a critical role in the response to a conflict situation. They provide support, resources, and aid to the nation

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[159] Wulf and Debiel, ‒Conflict early warning‖.
[160] Oral interview June 1515,

affected. South Sudan has not been left behind in the response of regional institutions to the conflicts it has encountered since it attained independence. Among the most active organizations has been IGAD providing an early warning mechanism that has aided South Sudan to divert from a conflict state to peace agreements. However, the roles that IGAD has undertaken in its early warning mechanisms for South Sudan have faced numerous challenges in swiftly responding to the conflict.

According to Alunga, IGAD has largely been constrained in its responses to conflict in South Sudan due to member states' reluctance to act as well as their commitments to other regional organizations.[161] These factors have limited the actions that IGAD has taken due to some member states being unable or reluctant to act citing that it goes against their commitments to other regional institutions. In addition, the fact that IGAD largely relies on the supply of funding from international organizations such as the UN, limits it in terms of financial resources to respond timely. Alunga recommends that regional organizations such as IGAD need to establish strategies to ensure they are independent and self-supporting to ensure long-term success in early warning.[162]

"While IGAD has been a major contributor to the early warning system working in South Sudan to date, it faces many constraints that have limited its response to conflict. These internal organizational challenges have affected and continue to affect the effectiveness of the early warning mechanisms in South Sudan"[163]

The African Union specifically let down the South Sudanese people and downplayed the efforts of conflict early warning systems by refusing to impose harsh sanctions against the South

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[161] David D. Alunga, "Sub-regional Organizations on Conflict Management: A case of IGAD in South Sudan," (master's thesis, University of Nairobi, 2014).

[162] Alunga, "Sub-regional Organizations‖.

[163] Oral interview June 1616,

Sudanese government, which played a crucial role in the conflict. The AU is tasked with maintaining a focus on managing conflicts and violence's external manifestations rather than dealing with their true root causes, which include the politics of war, continuous human rights abuses, and never-ending cycles of impunity. This is true despite its desire and need to create organizations and mechanisms like the Peace and Security Council (PSC) and the Continental Early Warning Systems (CEWS). In the absence of significant action from the continent's top peace agency, millions of civilians in South Sudan continued to be slain, forced to flee their homes, and subjected to sexual abuse. Conflict early warning system efforts and suggestions were ineffective because no one carried out the desired steps to halt the war. Therefore, the effectiveness of conflict early warning systems in South Sudan was constrained by the AU's unwillingness to take immediate action to execute conflict prevention and resolution efforts.

Other regional and international institutions compromised the effectiveness of South Sudan's conflict early warning systems by doing nothing. The Northern region, ECOWAS, and the East African Community are examples of war-affected communities that have not taken action, which has hampered the adoption of the early warning systems' recommendations for conflict resolution. South Sudan, however, was a serious issue that received much attention. With the exception of IGAD and UNMISS, many regional and international organizations just condemned the war.[164]

"Delayed action by the international community when the war broke out and gross human rights violations took place was a major challenge in the timely application of conflict early warning mechanisms. Recognition of a problem without acting on it inevitably causes

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[164] Mashilo S. Mokgola, "The role of external actors in resolving the 2013 political crisis in the newly independent state of South Sudan: From 2013 to 2015," (master's thesis, University of Venda, 2019), http://hdl.handle.net/11602/1504.

more harm than good. An early warning goes hand in hand with an early response of both regional and international organizations together.''[165]

In line with this, it should be noted that preaching peace is not enough. Regional organizations are expected to take bold action to address egregious crimes against humanity and crimes perpetrated during times of armed conflict. The organizations should have been more proactive in fighting for justice and peace for the people of South Sudan. Talking about peace without taking necessary steps towards ensuring it – in this case implementing recommendations for conflict resolution by early warning systems, is mere advocacy of capitulation. Calls for the end of conflict must be accompanied by appropriate action to resolve them as advanced by the conflict transformation theory. Conflict early warning systems in South Sudan were let down by regional bodies that failed to take decisive action and implement proposed recommendations.

4.7 Summary of The Chapter's Findings

Conclusively, conflict early warning systems in South Sudan were challenged by both internal organizational factors and external constraints. Internally, the effectiveness of the agencies was impeded by a lack of adequate human and capital resources, poor timing, poor monitoring of the evolving developments in the war, and a lack of good offices to coordinate activities. Poor inter-agency collaboration between the early warning systems also adversely affected their ability to adequately keep up with developments in the war and come up with accurate/sufficient recommendations. Externally, the warning systems in South Sudan were constrained by a lack of sabotage by the South Sudanese government agencies, a lack of support from regional organizations and their failure to take action, the sophisticated nature of the conflict, and poor transport and communication infrastructure in South Sudan. These factors affected the coordination of agency activities and the implementation of system recommendations for

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[165] Oral interview June 15, 2022.

preserving peace and resolving the conflict. Despite the difficulties, early warning systems were crucial in helping South Sudan achieve the end of its civil war in 2020 and the creation of a more effective transitional government. Early warning systems can achieve more if the challenges constraining them are addressed.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1: Key Findings

The study found that early warning and response systems give the chance for effective conflict resolution methods to be applied at different phases of a disagreement. This is based on the study's initial goal, which was to identify and analyze the elements impacting early warning systems' efficiency as a tool for preventing conflicts in Africa. Information gathering and dissemination are essential to the process. However, this method is fraught with a number of difficulties. The factors that are essential to an effective early warning system must exist together in a synchronized and harmonious system to be functional. These factors as identified in this chapter are the timing of the responses, resources required for response, effective communication channels, presence of appropriate institutions, and monitoring of conflict dynamics.

According to this study, South Sudan's early warning systems improved information and a better grasp of the situation. Based on the study's second goal, which was to assess how well early warning systems performed in South Sudan's conflict prevention, this result was drawn. It laid bare the causes of the conflict and risk factors for its escalation, the leader's grievances, the civilian perspectives, and how the conflict could be resolved. Therefore, early warning systems made a significant contribution to South Sudan's seven-year process of ending the civil war. The mechanisms contributed to the conflict's effective and gradual containment until its resolution in 2020. Conflict early warning systems are effective in predicting and managing violence but are constrained by systematic challenges. Implementing conflict early warning systems can help

South Sudan and indeed all African countries become stable and develop sustainably because of peace.

The study concludes that South Sudan's early warning systems for conflict were hindered by both internal organizational issues and external constraints, which is in line with the third objective of this research, which was to evaluate the major difficulties encountered in the application of early warning systems in preventing conflict. Internally, the effectiveness of the agencies was impeded by a lack of adequate human and capital resources, poor timing, poor monitoring of the evolving developments in the war, and a lack of good offices to coordinate activities. Poor inter-agency collaboration between the early warning systems also adversely affected their ability to adequately keep up with developments in the war and come up with accurate/sufficient recommendations. Externally, South Sudan's warning systems were limited by the complex nature of the conflict, South Sudan's poor transportation and communication infrastructure, a lack of sabotage by South Sudanese government agencies, a lack of support from regional organizations and their failure to act, and these factors. These elements had an impact on how agencies coordinated their efforts and how system suggestions for maintaining peace and ending the conflict were put into practice. Despite the difficulties, early warning systems were crucial in helping South Sudan achieve the end of its civil war in 2020 and the creation of a more effective transitional government. If the obstacles limiting early warning systems are overcome, they will be able to accomplish more.

5.2 Conclusion

The study's conclusions show that a lot of factors influence how effectively early warning systems work in any conflict in the African context. The study demonstrates how these factors work together to ensure that a country's early warning systems work to prevent the onset or escalation of conflict situations. It has been demonstrated that an early warning system's success heavily depends on how quickly a response is given. This is because the timing of the use of an early warning system determines its ability to produce the intended results in a potential conflict situation. One important aspect of the early warning process is the interval between information gathering and action. For the information to make a difference in shifting the balance in a possible conflict situation, it must get to the people and communities concerned quickly after it has been gathered, processed, and validated.

The resources that can back up and support an early warning system's efficient operation determine its dependability. In the various stages of a conflict, early warning requires vast amounts of information and intelligence gathering, analysis, and conclusion before any response is made. Such processes require vast resources that at times governments are not willing to offer. The study finds that despite the proven advantages of resource investment in the area of data collection and early warning response mechanisms, there remain many hindrances.

The study concludes that good institutions are needed for an effective early warning system to exist. These institutions all serve their unique purpose in the grand scheme of things and where one falls short then this could make or break the early warning system. Despite this, businesses may still encounter problems even when they are operating at their peak efficiency. The system is rendered less effective by the duplication of efforts by the several groups involved in early warning and early response. The study comes to the conclusion that a good early warning system

and good communication go hand in hand. Information must be relayed to the appropriate authorities promptly after being obtained through the channels of available resources in order for it to be used to prevent or defuse conflict situations. If an early warning system is to be effective, the communication channels must be followed with regard to the volume of information, the channels through which it is transmitted, the individuals through whom it passes, and the crucial filters it is placed through.

According to the study's other findings, conflict situations are characterized by dynamic forces that constantly shift how things play out. Therefore, the monitoring of these changing conflict dynamics is critical to the process of early warning. A reliable monitoring approach is founded based on data and information collected but must not be confused with to be the same thing. Monitoring and data collecting work together to guarantee that an early warning system is operating at its highest level of effectiveness. The study refutes the first hypothesis, according to which the complexity of a conflict situation has a significant role in the efficacy of an early warning system.

The study comes to the conclusion that a number of factors have affected how effective early warning systems have been at stopping the conflict in South Sudan. By effectively managing electoral procedures, nonviolent government tactics, and community engagement initiatives, the nation's conflict early warning systems are effective in foreseeing and averting violent conflict and its escalation. These avenues enabled the government to ensure that conflicts are predicted, managed, and handled to prevent their escalation into violence and war.

The study concludes that the early warning systems in South Sudan have enhanced the adequate responses of both the governments and the international community to conflict situations in the country. The study concludes that the presence of agreements of cessation of hostilities both in

2014 and 2017, coupled with negotiations with the international community envoys and support provided to citizens by organizations such as the UN have all been avenues that have shown response provided through early warning systems.

The study also concludes that conflict early warning systems have facilitated timely interventions to conflicts in South Sudan by influencing decisions to restore peace before conflicts intensify, or prompting preventive action before major conflicts can break out. These timely responses have been made through the early decision-making and taking of action in situations such as the elections postponement, community dialogue, negotiations, and peace agreements. Despite the fact that the country has yet to achieve sustainable peace, early warning systems' quick intervention has allowed conflict situations to be managed.

Early warning technologies have made it possible to identify the root of the conflict in South Sudan. According to the study's findings, the root causes of the conflict have been ethnic politics, competition for few resources, conflicts within the armed forces, and the fight for control of oil revenues. Early warning also allowed for a better grasp of the South Sudanese conflict situation. This basically means that the existence of an early warning system in the nation allowed stakeholders to comprehend the fundamental reasons for complaints, the key players involved, the viewpoints of the residents, and the overall course of the dispute. The analysis refutes the second assumption, according to which South Sudan's early warning system has not been successful.

The study concludes that the early warning systems in South Sudan have faced key challenges that have hindered their effectiveness in the long run since the nation gained its independence. There were both internal and external hindrances that challenged the early warning system in the country. Resource constraints were a major internal hindrance to the South Sudan conflict early

warning systems such as poor technologies, labor shortages, and other relevant mechanisms. One important factor that affects the efficacy of conflict early warning has been recognized as the availability of both human and financial resources.

The study comes to the conclusion that South Sudan's conflict early warning systems were hindered by a lack of internal support from powerful and committed institutions. Critical national agencies in South Sudan such as the military and the police were divided based on the political affiliation of officials, making it difficult for the early warning systems to have any meaningful engagements.

Another significant problem that restricted the organizations engaged in early warning in the nation was the widespread absence of physical locations to set up base and carry out early warning and response activities. These coupled with the lack of functioning government arms rendered the conflict early warning system institutionally challenged.

The study conclusively shows that internally, the poor monitoring of changing conflict dynamics was a major hindrance because the two leaders in disagreement were the only ones who truly knew why they were at loggerheads. The early warning data collection was done by non-locals who could not be able to blend in to collect inside information on war planning and developments in the local communities. Due to improper communication and lack of responsibility throughout the entire process, early warning and response were timed poorly, which had an impact on this as well. These issues internally made the early warning system function poorly.

The study concludes that externally, the conflict early warning system in South Sudan faced hindrances in terms of sabotage by the South Sudanese government, a lack of support from

regional organizations and their failure to take action, the sophisticated nature of the conflict, and poor transport and communication infrastructure in South Sudan. These factors affected the coordination of agency activities and the implementation of system recommendations for preserving peace and resolving the conflict. In conclusion, the study proves the third hypothesis as true that institutional and resource inadequacies were key internal challenges that hindered the effectiveness of conflict early warning in South Sudan.

5.3 Recommendations

The research suggests the following significant points in light of its findings, which were guided by the three particular study objectives:

1. The study makes the suggestion that at the policy-making level of governance in South Sudan, there is a need to identify variables that affect the likelihood of conflict occurring there and designate these as areas of concentration for the nation's early warning system. Such a strategy will ensure that the early warning systems are put to use even in times of peace to monitor the situation keenly by looking at areas of vulnerability.

2. The study recommends more resource allocation to the early warning systems in South Sudan. In South Sudan, it is necessary to acknowledge the significance of conflict early warning systems. For the early warning systems to function well, they will require the provision of material, financial, and human resources by the governing bodies. This will also involve the proper directing of foreign aid and assistance given specifically to early warning systems in the country.

3. Finally, the study recommends the need for stakeholder cooperation and collaboration in the early warning systems. An early warning system that recognizes the value of collaboration, cooperation, and communication is essential for the realization of long-

lasting peace in South Sudan. This will ensure that data and information gathered by the system are relayed to the relevant institutions in time and they can collaborate and coordinate their activities in response to conflict. Thus, the system will function effectively.

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APPENDIX I: QUESTIONNAIRE

Dear Respondent

I am undertaking a study on **ANALYSIS OF THE EFFECTIVENESS OF CONFLICT EARLY WARNING SYSTEM AS A FRAMEWORK FOR CONFLICT PREVENTION IN AFRICA. CASE STUDY OF SOUTH SUDAN..** The findings and recommendations of this study are aimed at contributing to knowledge and a deeper understanding of the conflict early warning system in the case of South Sudan. The information collected in this study will be specifically for academic purposes only and as such will be treated with top confidentiality. Kindly provide the answers appropriately

PART 1: GENERAL INFORMATION

1. Please indicate your gender:

Male ( )

Female ( )

Others (Specify)

2. Age:

19-30 Years ( )

31-40 years ( )

41-70 years ( )

Others (Specify)

3. What is your highest level of education:

Primary ( )

Secondary ( )

College ( )

Undergraduate ( )

Graduate degree ( )

Post Graduate ( )

Others (Specify)

Questions

PART II: To identify and examine the factors influencing the effectiveness of early warning systems as a conflict prevention mechanism in Africa.

1. What is your understanding of the Conflict early warning system?

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2. What are the underlying factors influencing the effectiveness of the early warning system in conflict prevention mechanisms?

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3. How does timing influence the effectiveness of an early warning system in conflict prevention mechanisms.?

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4. How does the Availability of resources influence the effectiveness of the early warning system in conflict prevention?

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……………

5. How Effectively monitoring the changing conflict dynamics influence the effectiveness of the early warning system in conflict prevention mechanisms.?

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Part III. To evaluate the efficacy of early warning systems in conflict prevention in South Sudan.

6. Has the early warning led to adequate responses to conflict prevention in South Sudan?

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7. Has the early warning led to the timely intervention of conflict in South Sudan?

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8. Has the early warning helped address the underlying causes of conflict in South Sudan?

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9. Has the early warning led to a deeper knowledge and understanding of the conflict in South Sudan?

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Part IV. To assess the key challenges faced in the application of early warning systems in preventing the conflict in South Sudan.

10. What are the key challenges faced in the implementation of early warning system in Preventing the conflict in South Sudan?

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11. Is Poor timing of the early warning challenges faced in the implementation of early warning system in Preventing the conflict in South Sudan?

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12. How is lack of resources to support early warning system a challenge in the implementation of early warning system in Preventing the conflict in South Sudan?

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13. How is lack of good offices to support the early warnings system a challenge in the implementation of early warning system in Preventing the conflict in South Sudan?

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14. How is poor monitoring of the changing conflict dynamics a challenge in the implementation of early warning system in Preventing the conflict in South Sudan?

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15. What can be done to overcome the challenges faced in the implementation of a conflict early warning system in South Sudan?

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16. How best can a conflict early warning system be applied in South Sudan?

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APPENDIX II: Research permit

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