

The Role of African Risk Capacity in Mitigating The Food Crisis Due to Climate Change in Mali in 2021-2022

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Abstract

This study aims to explain the role of the African Risk Capacity (ARC) organization in tackling the food crisis due to climate change in Mali in 2021-2022. This study used a descriptive qualitative method, with the research object describing the role of the ARC organization in tackling the food crisis due to disasters related to climate change in the country of Mali and using a literature study as a data collection technique. From this study, the authors found that ARC climate risk insurance has an impact on reducing hunger and poverty in Mali by 2021 by providing financial support for emergency response and disaster risk reduction initiatives. ARC also assists with disaster management program planning and participates in carrying out supervision when the program is implemented. ARC's efforts have proven to help ease the burden on local governments in responding to climate hazards and reduce the impact of climate-related disasters on the most vulnerable populations and gradually increase their welfare.

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I. INTRODUCTION

In 2021, Mali experienced a severe drought that hit many regions of the country following the failure of three consecutive rainy seasons. Drought is a major contributor to increased hunger in Mali. Droughts cause significant reductions in crop yields and livestock productivity, which can lead to food shortages and reduced food availability. This results in increased food prices and reduced food access for vulnerable populations. Moreover, in 2021, drought caused cereal production in Mali to decline by 10.5%, putting more than 1.9 million people at risk of a food crisis, especially in the regions of Kayes, Gao, Mopti, Segou, and Timbuktu.¹

The government of Mali, like other Sub-Saharan African governments, has made efforts to minimize the impact of climate risks on agriculture, such as investing in agricultural technology, irrigation, and advanced agronomic management practices to reduce dependence on rainfall and increase agricultural productivity.² However, this transition in agricultural technology is predicted to bear fruit only in 2050, as the process of transitioning new agricultural technologies and methods takes a long time, while problems such as crop failure or poor yields due to natural disasters almost always hit every year.³ While some of the problems associated with climate change are emerging gradually, effective action is urgently needed to allow sufficient time to build resilience into food production systems.

Prolonged conflict in Mali is a driving factor, in addition to climate change, that has led to the government's inability to address the food crisis.⁴ Mali and many other African countries have been relying on foreign aid to implement government programs related to food crisis management. However, instead of improving people's lives and promoting economic growth, foreign aid from developed countries has kept these countries trapped in poverty due to their dependence on international aid to survive. This is considered highly problematic as no country in the world can achieve substantial development based on aid dependency.⁵ Therefore, there is a need for a targeted strategy to slowly move away from aid dependency through better mobilization of domestic

¹ ICRC. (2022, November 16). *Climate Change In Mali*. Accessed from International Committee Of Red Cross: <https://www.icrc.org/en/document/climate-change-mali-we-drilled-deep-found-nothing>, on the date of February 20 2022.

² International Monetary Fund, “*Climate Change and Chronic Food Insecurity in Sub-Saharan Africa*”. Accessed from: <https://www.imf.org/-/media/Files/Publications/DP/2022/English/CCCFISSAEA.ashx>, on the date of March 10 2022.

³ Ibid.

⁴ Relief Web. “*Mali: Alarming food crisis leaves 1.9 million hungry*”. Accessed from Relief Web: <https://reliefweb.int/report/mali/mali-alarming-food-crisis-leaves-12-million-hungry>, on the date of December 26 2022.

⁵ Rincón, E. *How International Aid Failed Africa and Made Poverty Worse*. Accessed from FEE Stories: <https://fee.org/articles/how-international-aid-failed-africa-and-made-poverty-worse/>, on the date of December 27 2022.

resources and encouraging collaborative efforts with regional countries. Mali's integration into the African Risk Capacity is one of the government's initiatives to achieve this goal.

Before the ARC mechanism and in the absence of any parametric insurance, natural disaster management was largely reactive and relied on funding from the international community after the disaster occurred, hence disaster management programs and relief were always untimely and inequitably distributed.⁶ Under these conditions, governments are forced to reallocate funds from development programs in their national budgets to cope with the crisis. In the process, affected countries suffer tremendous losses from population loss as many die of disease and hunger or migrate to other regions, depleted state assets, and national development hampered by budget relocation, further increasing chronic hunger, malnutrition, and poverty across the continent. ARC's solutions are therefore an important step in creating a sustainable strategy for the African continent to manage climate risks and disease outbreaks.⁷

ARC offers a range of services to help African countries build resilience to natural disasters and climate change, including risk assessment and modeling, emergency planning, and access to insurance and other financial instruments for African countries to manage their disaster risks more sustainably and effectively. ARC also plays an important role in promoting cooperation and coordination among African countries to enhance their capacity to respond to disasters. By working together, countries can share knowledge, resources, and expertise to build a more resilient and sustainable future for the continent. Seeing how ARC offers alternative solutions and sustainable systems in tackling the impacts of the climate crisis in Mali. So this research will explain the role of the African Risk Capacity in Overcoming the Food Crisis Due to Climate Change in Mali in 2021-2022.

II. METHODOLOGY

This research aims to find out and understand more deeply how the role of African Risk Capacity in overcoming the food crisis due to climate change in Mali in 2021-2022. The object of this research is the role of the African Risk Capacity organization in overcoming the food crisis due to climate change-related disasters in Mali. The research period of 2021-2022 was determined based on the fact that Mali received payments from

⁶ African Risk Capacity. (2022). *How the African Risk Capacity Works*. Accessed from African Risk Capacity: <https://www.arc.int/how-arc-works>, on the date of 10 February 2023.

⁷ Ibid.

African Risk Capacity for the first time due to a severe drought that caused crop failure in 2021 and the aid distribution process is still ongoing until 2022.⁸

This research uses a qualitative method (library research) with a descriptive analysis approach. Library research is a research using library sources, either in print or online, to find information that meets needs or answers questions⁹. The author utilizes and studies materials in the form of reference books, articles, magazines, research reports, scientific journals, internet websites, e-books, theses, and other literature related to this research.

III. RESULT AND DISCUSSION

The Role of African Risk Capacity Through Climate Insurance in Mali

For Mali, climate risk insurance is essential in the face of the country's vulnerability to climate risks. The country has experienced several severe droughts in recent years, with the most recent one occurring in 2021, causing food insecurity and malnutrition and affecting the livelihoods of many. Mali is one of 35 African countries that are members of ARC and also participates in ARC's climate insurance program by paying an annual premium to secure protection against drought. Mali joined the ARC in 2015. The decision to join the agreement was made by the Malian government as part of its efforts to address the country's vulnerability to drought and other climate-related disasters. Mali's membership in the ARC involves several programs aimed at building the country's resilience to climate-related disasters.¹⁰

Mali's participation in the ARC is driven by several factors, firstly Mali is a country that is highly vulnerable to natural disasters, including drought. These disasters can have a significant impact on the country's agricultural production, which is an important sector for the economy and livelihoods of many Malians. Mali also has limited resources to respond to natural disasters, and disaster response efforts can often strain government finances. So joining the ARC allows Mali to access risk insurance and other risk transfer mechanisms that provide financial protection against the impacts of natural disasters, without having to divert funds from other important development priorities. To address the impacts of climate disasters, the Malian government, like other African governments, has also made efforts aimed at minimizing the impact of climate risks on

⁸ Reliefweb, "Drought-stricken Mali receives first-ever ARC Limited climate risk insurance pay-out". Accessed from Reliefweb: <https://reliefweb.int/report/mali/drought-stricken-mali-receives-first-ever-arc-limited-climate-risk-insurance-pay-out>, on the date of November 14 2022.

⁹ IGI Global Dictionary, "What is Library Research". Accessed from IGI Global Dictionary: <https://www.igi-global.com/dictionary/library-research/75496>, on the date of March 09 2022.

¹⁰ African Risk Capacity. (2022). *ARC Member States*. Accessed from African Risk Capacity: <https://www.arc.int/countries>, on the date of February 11 2023.

agriculture, such as investing in agricultural technology, irrigation, and advanced agronomic management practices to reduce dependence on rainfall and increase agricultural productivity.¹¹

However, this transition in agricultural technology is predicted to come to fruition by 2050, as the process of transitioning to new agricultural technologies and methods takes time, while problems such as crop failure or poor yields due to natural disasters occur almost every year. While some of the problems associated with climate change are emerging gradually, effective action is urgently needed to allow sufficient time to build resilience into food production systems. This is also what prompted Mali to join ARC. Based on the climate risk mechanism, ARC provides climate insurance services to each member country. The policy determines the amount and triggers of payment as well as the amount of funds to be provided in the event of a disaster. The amount a country pays in annual premiums to ARC varies depending on the level of risk it faces and the coverage it chooses. In the event of a disaster, such as a drought, ARC will assess whether the disaster fits the insurance trigger conditions and if it does, ARC through ARC Ltd will pay to the government of the affected country. The government can then use the funds to implement its emergency plan and provide relief to the affected population.

In addition to benefiting from the annual premium payment, Mali is also a beneficiary of the ARC Replica program in collaboration with the World Food Program (WFP), the ARC Replica program allows WFP or other humanitarian organizations to contribute by purchasing a 'Replica Policy'¹². Once the insurance payment is received, the local government works with WFP to implement an emergency plan and provide assistance to the affected communities. This can include the provision of food aid, water and sanitation, and other forms of support.

Emergency Response Program Operationalization

In 2021, Mali experienced a severe drought caused by a long dry season and low rainfall, putting 1.9 million people across the country at risk of severe food insecurity. More than 204,000 people in drought-affected areas in Mali will benefit from a US\$7.1 million climate risk insurance payment by African Risk Capacity Limited (ARC Ltd) to be channeled to the World Food Programme (WFP).¹³

¹¹ International Monetary Fund, “*Climate Change and Chronic Food Insecurity in Sub-Saharan Africa*”. Accessed from: <https://www.imf.org/-/media/Files/Publications/DP/2022/English/CCCFISSAEA.ashx>, on the date of 10 March 2022.

¹² Ibid.

¹³ Ibid.

As an ARC Replica technical partner, WFP has subscribed to a climate insurance policy in Mali since 2019 to finance an early emergency response. In 2021, WFP's insurance premium is funded by the United States Agency for International Development (USAID) and the German Government. To that end, the Government of Mali and its Replica partner WFP, have established a joint response plan that will be implemented in a coordinated manner to manage and prevent drought-induced food insecurity and malnutrition. WFP operations focus on emergency response efforts, resilience building, and strengthening national capacity. The following are the programs implemented by the Malian government in collaboration with WFP to tackle the food and malnutrition crisis in 2021-2022:¹⁴

○ ***Emergency Food Assistance***

The World Food Programme (WFP) has been providing emergency food assistance in Mali for several years, particularly in response to the food crisis that began in 2021. WFP provides a range of assistance, including in-kind food distributions, cash assistance, and food vouchers, to help those most in need.

In areas of Mali where food insecurity is particularly high, WFP provides monthly food distributions to vulnerable households. WFP also operates a food voucher program in Mali, which allows households to purchase food at local markets using vouchers provided by WFP. This program not only helps ensure that vulnerable households can have access to food but also supports local markets and economies. As of November 2022, WFP has assisted nearly 96,900 people (47,500 men and 49,400 women) in Kayes, Gao, Menaka, Segou, Mopti, and Timbuktu regions, mainly through the distribution of SCOPE, e-vouchers and Mobile Money.

○ ***Nutrition Improvement Program***

The Nutrition Improvement Program in Mali is an initiative that aims to reduce malnutrition and improve the nutritional status of children under five, pregnant women, and lactating mothers in the country. The program is implemented by the Malian government and WFP in collaboration with international partners such as UNICEF and other non-governmental organizations. The program has several components, including:

1. The distribution of nutrient-rich supplementary food includes supplementary feeding to under-fives as well as pregnant and lactating

¹⁴ World Food Programme. (2022). *WFP Mali Country Brief June 2022*. World Food Programme.

women (PLW). This program is formulated to meet the nutritional needs of undernourished individuals and is distributed through health centers and community-based organizations.

2. Community-based management of acute malnutrition involves identifying and treating children with acute malnutrition in their communities. Community health workers are trained to screen children for malnutrition and refer severe cases to health facilities for further treatment. This approach ensures that malnourished children receive early treatment and reduces the burden on health facilities.
3. Exclusive breastfeeding promotion aims to encourage mothers to exclusively breastfeed their babies for the first six months after birth. Breast milk provides all the nutrients a baby needs for the first six months and helps protect against infection and disease.
4. Nutrition education provides mothers and caregivers with information on healthy eating practices, food preparation, and hygiene. The aim is to improve caregivers' knowledge and skills to ensure that children receive a balanced and nutritious diet.

In November 2022, through these programs, WFP assisted more than 19,200 children aged 6-23 months and 30,600 pregnant and lactating women. Regarding nutrition assistance, about 40,500 children aged 6-59 months and 14,100 pregnant and lactating women were also treated for moderate acute malnutrition (MAM) with a cure rate of 95 percent. For the supplementary feeding program, WFP assisted 18,000 children aged 6-23 months and 18,400 PLW.

○ ***School Feeding Program***

The School Feeding Program in Mali is an initiative of the Malian government, in partnership with WFP, to provide daily meals to school children to improve their nutrition and promote education. The program targets vulnerable children in rural and urban areas who may not have access to regular and nutritious meals at home. The program is implemented through a community-based approach, involving local governments, schools, parents, and community members. WFP provides technical and financial assistance to support program implementation.

Under the program, WFP provides food commodities, such as rice, beans, and vegetable oil, to participating schools. The meals are prepared by community volunteers, who are trained in basic food preparation and hygiene practices. The meals are

distributed to children during the school day, which encourages school attendance and reduces student absenteeism.



Picture 1. School feeding program

In addition to providing nutritious meals, the School Feeding Program in Mali also contributes to local economic development by purchasing food commodities from local farmers and suppliers. This helps stimulate local markets and creates income-generating opportunities for small-scale farmers and traders. The program has successfully improved the nutritional and educational outcomes of participating children while contributing to local economic development. As of November 2022, there have been about 79,700 enrolled in the program. And they are still working on reaching more children across the country.

The concept of human security also highlights the importance of participation and empowerment in promoting security. In the case of ARC, this is seen through the involvement of affected communities in the decision-making process as well as their perspectives being taken into account.

○ *Capacity Building of Local Communities*

WFP's local community capacity-building program in Mali aims to empower local communities by providing training and knowledge on agriculture, natural resource management, nutritional health, and other economic activities. The program also aims to increase the self-reliance of local communities in the face of food crises and natural disasters. One of the programs conducted by WFP in Mali is sustainable agriculture

training for farmers. This program involves the provision of quality seeds, organic fertilizers, farming tools, and training on environmentally friendly farming practices. In addition, WFP also provides training on water resource management, such as how to manage irrigation and deal with drought issues.

WFP also provides education on nutritional health to the community, especially to pregnant women and children. The program involves providing nutrient-rich food supplements, such as supplementary food for infants and nutrient-rich food for pregnant women. In addition, WFP also provides training and support for productive economic activities, such as handicraft making and other small businesses. This program aims to increase the income of local communities and help them become more financially independent. WFP's local community capacity-building program in Mali aims to empower local communities by providing them with the knowledge, skills, and resources they need to become more self-reliant and cope with food crises and natural disasters.

In addition, in Islam, there is a concept called ta'awun which means cooperation. This concept of cooperation in Islam is highly valued and emphasized as a means to achieve goals and overcome common challenges. ARC is an example of cooperation between African countries to manage and respond to natural disasters and climate-related risks. The ARC operates as a mutual insurance pool, where participating countries share risks and resources to manage disaster risks collectively. Muslims are encouraged to work together to achieve common goals and help each other in times of need. This is reflected in the Qur'anic passage Surah Al-Maidah Verse 2 which means "And help each other in (doing) righteousness and piety".

ARC embodies the spirit of cooperation and mutual support among African countries. By pooling resources and sharing risks, participating countries can better manage and respond to disasters, and build their resilience to future risks. In addition, lessons can also be learned at the time of the Prophet Muhammad when he entered into an agreement with the people of Makkah in the Jahiliyah era where the community agreed to defend anyone regardless of their background, and when the Prophet cooperated with the people of Medina including those who embraced Christianity and Judaism to unite against aggression and fight for justice, this means that ta'awun can not only be applied among fellow Muslims but all humanity. This has been applied by the country of Mali, which is a Muslim-majority country that cooperates with other African countries that do not embrace Islam.

IV. CONCLUSION

As a form of multilateral cooperation among African regional countries, ARC has played a role in addressing human security issues in terms of food security by providing support to help better manage and respond to natural disasters and climate-related risks. In Mali in particular, the ARC has played an important role in several ways, including:

- Providing financial protection: Through risk insurance transfer mechanisms, ARC has helped Mali access financial protection against disasters. In 2021, Mali received ARC insurance payments to support its drought response program. This allows Mali to respond to disasters more quickly and effectively, without having to divert funds from other important development priorities.

Building disaster management capacity: ARC also works with the Malian government and other stakeholders to build disaster management capacity. This includes providing training and technical assistance and supporting the development of community-based disaster risk management initiatives.

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