

The Role of COP 27 in Promoting Sustainable Food System in Africa

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ABSTRACT

Climate justice is not just a financial transaction to protect the environment. It needs to be seen as protection for the most vulnerable communities after centuries of resource exploitation. African countries disproportionately face the impacts of climate change on their environment, economy, resources and infrastructure. This leads to greater vulnerability and increased exposure to the negative impacts of climate change. This article reviews the role of COP 27 in promoting food systems in Africa. This research is a type of qualitative research by applying descriptive analytical methods and literature study data analysis techniques. The findings of this research are that conditions in Africa can be addressed through financial and collaborative support for adaptation and local solutions, but this will only be achieved if climate justice is prioritised by decision makers. This needs to include a global-scale transition in the way climate finance is valued and accessed. Climate justice underpins real, effective and sustainable solutions for climate action in Africa.

Keywords: *COP 27, Food Systems, Policies and Commitments, Financing and Investment, Technology and Innovation*

INTRODUCTION

Global warming is causing changes in Earth's climate, including a rise in the frequency and intensity of extreme weather events including heat waves, droughts, floods, and tropical cyclones. The most recent assessment from the Intergovernmental Panel on Climate Change (IPCC) indicates that by 2022, the average worldwide temperature will be 1.1°C higher than the pre-industrial normal, and that we will probably surpass the 1.5°C global target within the next ten years. Heat stress and heat waves are becoming more often due to the rising temperatures, and each year they get worse. A recent study published in the Lancet revealed that, in comparison to the population exposed to heat waves from 1986 to 2005, the number of days annually that surpass the heat exposure threshold is over 4 billion higher. In most places, this led to an upsurge in wildfires. Construction and agricultural workers' livelihoods, health, and production are all impacted by heat. Food costs also rise as a result of international conflicts, heat stress, and altered rainfall patterns. Larger dryland areas are predicted to have a detrimental influence on population movement, agriculture, livestock, and child hunger because the majority of Africans live in drylands (Pietras, 2022)

There is no agreement on how to stop or reverse the catastrophic effects of climate change, which will jeopardize infrastructure, food security, water scarcity, human and

ecosystem health, and other aspects of life on Earth. The Glasgow Climate Pact, which member states accepted at COP26, encourages a more ambitious response to the climate crisis, including additional funding for adaptation and the phase-out of coal power and inefficient fossil fuel subsidies. Human health is particularly important for those living in informal housing and those forced into informal labour to survive. The Glasgow Climate Pact overlooks the importance of customised social and financial frameworks that will enable and accelerate adaptation in an equitable manner (Greibe Andersen et al., 2023).

The Climate Change Summit (COP27) in Sharm El Sheikh is known as Africa's COP, providing a comprehensive overview of climate change impacts across Africa. The continued disregard for the voices of the most vulnerable and developing countries harms not only the regions and communities themselves, but also global climate solidarity (Bulletin, 2022). Africa's food systems face serious challenges, including climate change, land degradation, food insecurity and socio-economic injustice. COP 27, as a global conference addressing climate change, plays an important role in formulating international policies and commitments that can help address these issues. However, the extent to which COP 27 has succeeded in fostering sustainable food system transformation in Africa remains unclear. This research problem focuses on: 1.) What are the policies and commitments resulting from COP 27 related to sustainable food systems in Africa? 2) What are the funding and investments resulting from COP 27? 3) How can technology and innovation support food system transformation?

METHODS

This research is a type of qualitative research, applying descriptive analytical methods to describe the role of COP 27 in promoting sustainable food system transformation in Africa. In collecting research data, researchers used literature study techniques obtained from various data sources in the form of journals, books, and other trusted websites. The data analysis technique starts with data collection, data reduction, data presentation, and ends with drawing conclusions. This research aims to gain an in-depth understanding of the role of COP 27 in promoting sustainable food system transformation in Africa.

RESULT AND DISCUSSION

Policies and commitments resulting from COP 27 related to sustainable food systems in Africa

Food production in several African countries has increased and some have achieved food sovereignty. Malawi's 2006-2010 agricultural development programme has been described as 'pro-poor', increasing yields, boosting incomes and improving crop resilience to drought. The productive safety net policy programme (PSNP) launched in 2005 in Ethiopia aims to assist households and communities that are chronically food

insecure, provide insurance, and invest in public goods such as soil and water conservation (Dawson et al., 2016).

To increase food production, ensure affordability, improve distribution and reduce dependency, Africa needs coordinated policy change and sustained action. Progress has been made in some countries. African leaders should give high priority to incentives aimed at increasing food availability at the domestic and regional levels. This will include the appropriate use of inputs to increase production to meet demand in national and regional markets. In this regard, a key objective should be the full implementation of the AfCFTA to allow free access to inputs, foodstuffs and labour in a single-African market. From a policy standpoint, Africa must shift from food supply to building strong food systems. Policy should concentrate on ensuring that food value chains across Africa are strong and profitable, leaving no community or individual behind (Live, 2024).

The development partners for Africa also have a significant part to play. Although short-term support is required, it is crucial to fully support initiatives that lower risks and maximize vital investments in the food sector in Africa. This will make it easier to obtain the financial and technological resources needed to modernize Africa's food production, storage, and marketing. African development partners can also support initiatives to boost food trade within the region by lowering inefficiencies and disincentives (Nepad, 2011). The recovery effort has substantial financial commitments, proving that it is a profitable investment. For instance, the three funding partners of AFR100, an initiative involving 32 African governments, promised to restore more than 120 million hectares of degraded land by 2030. They also announced a \$2 billion blended funding mechanism to support and accelerate locally-led restoration (Seddon et al., 2021).

At COP27, Additionally, a coalition supporting the African Cities Water Adaptation Fund (ACWA) was established. African city leaders will be able to directly access funding and technical support through this new project to put creative solutions to a variety of water-related problems into practice, including integrated governance, watershed management, enhanced sanitation services, and better rainfall and wastewater management. By 2032, the fund will contribute \$222 million in grants, \$288 million in direct investments, and \$5 billion in extra investments to assist in the implementation of resilient water systems in 100 African cities (Alayza, 2022).

Funding and investment resulting from COP 27

The decisions made by the COP27 are a reflection of the grave worries held by developing nations that wealthy nations will not live up to their \$100 billion annual pledge. Numerous developing nations also voiced discontent with the funding system, citing issues such as the high proportion of loans, the growing debt load on already highly indebted nations, and the absence of accountability and transparency (Aruna Chandrasekhar, 2022).

The decision on safeguards also recognises the need to reform the wider public finance system, including multilateral development banks. According to the Bridgetown Initiative, a call to reform the international financial system announced earlier this year by Prime Minister Mottley of Barbados, this demonstrates the need for additional climate finance as well as the ways in which debt can hinder developing countries' action on climate change. Leaders from developing and developed countries, including French President Emmanuel Macron, expressed support for the initiative at COP27 (Nations, 2023).

Central to the COP27 negotiations was funding. One of the key outcomes was an agreement to establish a fund to pay countries for losses and damages caused by climate change. The UNFCCC stated that new pledges totalling more than \$230 million were made to the Adaptation Fund, resulting in ‘significant progress on adaptation’. In addition, a mitigation work programme was announced. It will start immediately after COP27 and last until 2026. By the end of 2023, governments are also required to strengthen their national climate plans (Programme, 2022).

When Vanuatu and the Association of Small Island States (AOSIS) made a request to the international insurance pool for sea level rise in 1991, the idea of a fund to compensate for loss and damage first emerged more than thirty years ago. When a special fund for loss and damage was established at COP27, agreement on this concept was finally reached. The purpose of this fund is to provide financial assistance to countries that are most affected and most vulnerable from the impacts of climate change (Ahmad & Zahidi, 2023).

Technology and innovation in support of food system transformation

Since the Neolithic era, technological advances have been critical to improving human well-being, such as reducing hunger, increasing life expectancy and preventing disease. While advances in food and agriculture bring benefits to humans, some environmental and health indices continue to decline, especially in the 21st century. For example, instead of forests becoming farmland or pasture, air and water pollution and greenhouse gas emissions have increased. In addition, nitrogen and phosphorus have been used diversely and are increasing. The overuse of nitrogen and phosphorus in agriculture is harmful to the environment and human health. For example, runoff from agricultural watersheds causes water bodies to become eutrophicated. On the other hand, too much nitrogen in the air can impair our breathing and limit our visibility. Significant malnutrition in many countries around the world is caused by the increased consumption of cheap, fast food (RI, 2021).

In the Community-based Food Security System (SFS), technological innovation and advancement depend on sufficient investment in rudimentary studies and improvements to sustain the research and development process. In the future, contemporary methods will make significant contributions to the global food system. Consequently, preventing bottlenecks in the favourable ecosystem is crucial, especially

in developing countries, where the positive and negative impacts of technological modernisation can be substantial. History shows that there are winners and losers in technological progress. A sizeable agenda for the sustainability of societies and food systems is used to address several social and agricultural sectors in the short and long term (Khan et al., 2021). While there are many advantages to using innovative and advanced agricultural technologies, as with any major innovation breakthrough, digital farming is not without its challenges and risks. The two main issues facing the implementation and training of such technologies are cost and how to use them (Deichmann et al., 2016).

CONCLUSION

COP 27 provided a strong impetus for sustainable food system transformation in Africa. With a comprehensive, inclusive and evidence-based approach, COP 27 is helping to build a strong foundation for food security and environmental sustainability on the continent. Through international co-operation, investment and commitment to continuous improvement, COP 27 can deliver significant benefits to individuals and communities across Africa, as well as to global efforts to address the challenges of climate change and food security. The conference also highlighted the importance of engaging all stakeholders, including governments, the private sector, civil society and local communities, to ensure that solutions are truly inclusive and widely applicable. Thus, COP 27 not only focuses on current issues but also prepares strategic measures for a more sustainable and equitable future for all.

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