

Social Protection and Climate Resilience: A Review Of Sub-Saharan African Case Studies

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Abstract— *Social protection is mainly used for assisting the most vulnerable in the area of poverty reduction. However, international development scholars are arguing that social protection aside impacting the poor can also help in climate resilience. This study examines selected case studies in the social protection and climate resilient debate in Sub-Saharan Africa. Using qualitative and quantitative approaches in data collection, the study finds that social protection through cash transfers have been able to build climate resilience among participants of the scheme. Though findings from the study were minimal, a wide range of research needs to be carried out to determine the impact of social protection on climate shocks on a broader scale.*

Keywords— *Climate Change, Cash Transfers, Social Protection, Sub-Saharan Africa.*

I. INTRODUCTION

Climate change will affect many people globally due to the increase in temperature and greater variability of rainfall (Béné et al, 2013; Canonge, 2015; Kuriakose et al., 2012). It is argued that the impacts of climate change will pose tremendous challenges to individual livelihoods (Béné et al., 2013; Canonge, 2015). Climate change is real in Africa (Besada & Sewankambo, 2009). The Intergovernmental Panel on Climate Change (IPCC) has envisaged that harsh climate events across Africa are expected to increase resulting in disasters (Hulme et al, 2001).

Sub-Saharan Africa has been categorised as one of the regions that is most vulnerable to climate change due to its high exposure and poor adaptive capacity (Béné et al., 2013; Niang et al., 2014). Climate experts think that Sub-Saharan Africa is more susceptible to climate events due to its high poverty rate, droughts coupled with rain-fed agricultural production (Wild, December 2015b). This hypothesis is “based on two things: geographically and climatically Africa is exposed... Africa in general is already quite hot. Heat it up more and it’s just downhill for animal production, plant production and human health” (Wild, 2015a). The African continent has witnessed severe climate events such as flooding, droughts and desertification (Awojobi, 2017; Awojobi & Tetteh, 2017). While no one is immune to the impact of climate change, the poor are the most vulnerable because they lack the capacity to adapt in the case of extreme weather events. Similarly, it is argued that the poor will particularly be disadvantaged as they have a low capacity for response and adaptation, as a result, they are at an expanded risk of losing lives and property in climate shocks and of having to depend on unpleasant coping strategies with long-term negative consequences for human development, such as pulling children out of schools, selling assets and involving in perilous jobs (Kuriakose et al., 2012).

Since the poor have been considered to suffer most in the event of climate change (Awojobi, 2017) There is need to consider how humanitarian and development approaches can help improve poor households’ capacity to adapt to an extreme climate event (Jones et al., 2010). Social protection represents one approach when link with climate change adaptation measures (Ziegler, 2016). Social protection is a strong tool to protect people at a greater risk of climate-related adversity (Canonge, 2015). Furthermore, social protection instruments such as cash transfers, insurance, pension and employment guarantee schemes can be used to assist communities that are exposed to climate-related disasters (Béné et al., 2013; Ziegler, 2016). However, evidence illustrating how these measures can assist those affected to adapt and cope with climate challenges is still narrow (Béné et al., 2013).

This paper does not seek to expand on the concept of adaptive social protection developed by the Institute of Development Studies (IDS) and the United Kingdom (UK) Department for International Development (DFID), rather, it aims to provide a

concerted review of Sub-Saharan African case studies of current evidence about the role of social protection in reducing the impacts of climate change on poor communities and households

Section 2 of the paper expatiates on the methods adopted for the study. Section 3 accesses the evidence of the nexus between social protection and climate change. Section 4 is the discussion while section 5 concludes.

II. MATERIALS AND METHODS

The following review looks at the nexus between social protection and climate change case studies from Sub-Saharan Africa. The selection of the sample case studies was based on a search for research articles in Google search engine examining the role of social protection in mitigating the impacts of climate change among households and communities.

The study uses the blend of quantitative and qualitative approaches to tackle the research problem. Both approaches have different advantages and in some cases the problem to solve dictate what types of approach is needed (Morrissey, 2009).

Quantitative approaches have been used basically as a means for searching the interface between social protection and climate change adaptation. The main approach has been used to undertake a statistical analysis of various proxies for social protection and the impacts of climate change and ascertains the level to which changes in climate events lead to change in adaptive social protection. One unique advantage of this method is that it underscores the interface between various aspects of social protection quality and climate change adaptation.

While quantitative approaches are considered to be unique in impact evaluation in social programmes. Most of the social protection programmes in Africa are meant for poverty reduction and not for climate change adaptation. As such, statistical analyses may well miss the connections between social protection and climate change adaptation, thereby achieving results which downplay the problem.

Qualitative analyses, in contrary, have primarily been used to elicit information for beneficiaries of social protection schemes regarding the impacts of any of the social protection schemes in response to extreme climate events. Furthermore, they have been used to underscore the level to which social protection schemes lead to climate change mitigation in the study areas. Despite the advantages of qualitative analyses, their shortcoming is that they do not present pragmatic measures of the robustness of the connections between the various aspects of social protection and the impacts of climate change.

III. FINDINGS

3.1 Social protection and climate resilience: review of selected evidence

The instruments of social protection include cash transfers, insurance, cash for work and social pension. This paper will focus on the role of cash transfers in building climate resilience among their beneficiaries. Cash transfers in Africa are mostly conceptualized for the poor and are designed to uplift them above the national poverty line and mitigate their vulnerability to risks and shocks (Awojobi, 2017). Scientific evidence has affirmed that cash transfers also favour those affected by extreme climate events (Awojobi, 2017). For example, in a study on cash transfers and climate-resilient development in Zambia, Lawlor et al, (2015), through the randomized roll-out of Zambia's Child programme and a panel of 2,515 households. The study finds that cash transfer decreases the possibility of embracing negative coping strategies connected with poverty traps and increases the possibility of embracing positive coping strategies. In addition to such findings, Lawlor et al. (2015), find among households that faced agricultural shocks, cash decreases their possibility of decreasing food consumption by 14 percentage points and increases the possibility of spending savings by 6 percentage points. Also, the study finds that cash transfer increases the possibility of using social services (such as seeking medical service, help from government or NGO) by 2 percentage points in the event of agriculture shocks and by 12 percentage for other shocks (Lawlor et al., 2015).

Supporting Lawlor et al.'s (2015) are those of Asfaw et al. (2016) whose work in Zambia found through the use of impact evaluation data from the Zambia Child Grant Programme (CGP) along with set of novel weather variation indicators that in the context of limited rainfalls that affected agricultural production, cash transfers were able to mitigate the impact of climate

shock. However, despite the positive correlation between climate shock and the cash transfers, they did not find a statistically significant correlation between the cash transfers and long-term average rainfall variable (Asfaw et al., 2016).

Similar findings came out of the work by Eriksen et al. (2005) who investigated the dynamics of vulnerability: locating coping strategies in Kenya and Tanzania. While they found a significant correlation between the capability of people to draw on supplementary sources of income and the capacity to tolerate droughts, they did find that various households had inadequate access to the preferred coping strategies as a result of inadequate skills, labour and capital (Eriksen et al., 2005).

In a more comprehensive study in Zimbabwe and Niger Republic by CARE International (2017), based on quantitative data, describes how cash transfers were able to build resilience on beneficiaries of the cash transfer programme. According to CARE International (2017) findings, cash transfer had a net positive impact on approximately all measures of absorptive capacity amongst recipient households across both the Zimbabwe and Niger country social interventions. However, the magnitude of the impact differs depending on what indicators are measured. CARE International (2017) affirms that the cash transfers contributed to mitigating the hike of food insecurity and the use of negative coping mechanisms and strengthening consumption (CARE International, 2017).

In addition, CARE International (2017) states the different impacts of the cash transfer interventions under three other core resilient capacities which are anticipatory, adaptive and transformative CARE's programming explores to bolster. According to CARE International, (2017), the impacts of the cash transfers on measures of adaptive capacity differed across the Zimbabwe and Niger country programme. In Zimbabwe, the findings claim that the receipt of cash transfer is positively correlated with increases in off-farm income generation. In Niger, a higher percentage of the participating households (60%) declared access to and use of improved seed varieties than non-participating households (43%), suggesting a cut in the risks that beneficiaries face (CARE International, 2017). Similarly, in transformative capacity, CARE International (2017), findings reveal that 26% more cash beneficiaries took part in various social networking than non-cash transfer beneficiaries. However, CARE International (2017), made it explicit that this not centrally a causal relationship but rather suggestive of the likely impact of a cash transfer programme. Still on CARE International (2017) findings, this time in the area of anticipatory capacity, the study indicates that in Niger, a positive impact on access to and use of climate information by the beneficiaries of the cash for work scheme (46%) compared to non-beneficiary households (41%). The impact was attributed to extra income and the participation in the programme helped beneficiaries' access to platforms they may not have otherwise known about (CARE International, 2017). However, female-headed households of the cash beneficiaries occur to be less likely to access and make use of climate information in planning and farm management practices as compared to the beneficiaries of male-headed households (CARE International, 2017). The study did not find any impact in Zimbabwe due to the non-availability of anticipatory-focus data.

IV. DISCUSSION

Social protection in Sub-Saharan Africa is often used for supporting the most vulnerable due to their precarious conditions. While those designing social protection programmes for their target groups do not take cognizance of the impact of climate events affecting the poor. The Institute of Development Studies (IDS) and the United Kingdom (UK) Department of International Development (DFID) have developed the concept "adaptive social protection" (Ziegler, 2016). This is because of the poor being the most vulnerable to climate change. It is argued that during extreme climate events, the poor suffer most. For instance, when there is excessive flooding, the poor lack resources to assist themselves to migrate (Awojobi, 2017).

Linking social protection to climate change is one concept that researchers in the development field have been canvassing. Instruments of social protection are bound to fail if they do not recognize both the short and long-term and stresses connected with climate change (Davies & Leavy, 2007). Current evidence has shown that social protection especially cash transfers have impacts on the beneficiaries of cash transfers when extreme climate events occurred, for details (see Asfaw et al., 2016; Awojobi, 2017; CARE International, 2017; Lawlor et al., 2015). While evidence in the correlation between social protection and climate change is still minimal, governments in Africa should devise methodology in incorporating social protection into climate change adaptation in regions that are vulnerable to climate change. This is one way that the poor can feel the presence of government when there are caught up in extreme climate events.

V. CONCLUSION

The study examines the impacts of social protection on climate resilience in Sub-Saharan Africa. Using a mixed method approach, the study was able to find a positive correlation between social protection (cash transfers) and climate resilience in some selected case studies. Though, cash transfers are designed purposely for the poor for them to live above the national poverty line. There is concern from development experts who think that linking social protection with climate change will help in assisting the poor who are affected by climate change in building resilience.

Evidence from this study was minimal because the scope of the study was concentrated in Sub-Saharan Africa making the search for case studies to be limited. A comprehensive study will be needed in order to articulate the positive correlation between social protection and climate change on a larger scale.

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