

Effectiveness of Self-Help Groups in Enhancing Social Protection Interventions towards Climate Change Adaptation in South Kabras, Kenya

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Abstract: This study investigated about effectiveness of self-help groups in enhancing social protection interventions towards climate change adaptation in South Kabras, Kenya. The study employed a descriptive research design and correlation analysis with a sample of 302 out of 1.240 potential respondents. The study utilized a semi-structured questionnaire as source of data. Data was analyzed through descriptive and inferential statistics. The study concluded that Programs within the Transformative category, particularly those focused on minority rights and social funds, are viewed positively, suggesting that continued focus and investment in these areas could yield beneficial outcomes for members of self-help groups. Therefore, continuous monitoring and evaluation of the programs is essential to measure their impact and make necessary adjustments so as to maintain their effectiveness in helping communities adapt to the evolving climate change challenges. Furthermore, there is need for an integrated approach that combines immediate relief, preventive measures, livelihood support and structural changes to ensure comprehensive adaptation to climate change.

Keywords: Climate change adaptation; transformative adaptive strategies; Self- Help Group.

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Introduction

Long-term changes in the usual weather patterns and conditions of Earth are referred to as climate change. These alterations are mostly caused by human activities, including emitting greenhouse gases into the atmosphere. These practices include, among others, the burning of fossil fuels for energy,

deforestation, industrial processes and agricultural methods (IPCC, 2012). Moreover, sustainable development faces the biggest threat of climate change. Extreme weather conditions have the potential to lower per capita income by more than 5% in low-income countries (IFAD, 2011). It has generated negative effects on important resources

that support human life and natural systems, especially for the poor and vulnerable people who lack resources and are least equipped to handle shocks related to the climate.

Climate change poses a threat to the realization and protection of human rights. In March 2008, Resolution 7/23 by the United Nations Human Rights Council recognized that climate change has an impact on human rights (Cima, 2022). According to a statement from the Maldives, climate change infringes upon human rights as it jeopardizes access to basic necessities like clean water, food and safe living conditions. This impacts not only underprivileged individuals but also future generations who rely on these resources for their survival and overall welfare (Magraw & Wienhöfer, 2018). Fulfilling the worldwide sustainable development agenda set for 2030 requires successful attainment of crucial targets, including Goal 10's objective to diminish inequalities. Tackling discrimination and exacerbated disparities at both national and international levels is imperative in order to uplift impoverished communities by tackling the underlying factors leading to income inequality.

Boetto and McKinnon (2013) argued that, despite extensive knowledge about the problems caused by climate change, women and men still face different risks during the same climate events. A gender-inclusive study in Australia found that the patriarchal nature of rural life increases women's vulnerability. Factors such as poverty, domestic violence and homelessness put women at greater risk of the impacts of climate change and exclude them from public debates on climate issues. Additionally, the inadequacies of some groups' entitlement led to their vulnerability to marginalization due to the gendered nature of social connections (Osiro, 2016).

To make people less susceptible to adverse events, such as natural disasters and economic shocks, and better able to recover from them, British academics at the Institute of Development Studies coined the term 'Adaptive Social Protection.' According to Devereux et al. (2006), the term "Social Protection" encompasses all efforts to improve the lives of the poor by increasing their access to resources, shielding them from the dangers that threaten their ability to make a living and elevating the status and rights of the disenfranchised. Therefore, the authors described adaptive social protection as programs

that help vulnerable and impoverished households become more resilient by enhancing their ability to anticipate, manage and adjust to climate-related shocks. This prevents them from degenerating into poverty.

Kenya has been devastated by the effects of climate change, which include frequent flash floods, droughts, extended dry periods and the increase in temperature. According to Mburu et al. (2015), there is a growing understanding that localized solutions to climate change issues will have the longest-lasting effects. To this end, the International Labor Organization's Kenya Social Protection Policy of 2019 suggests a life cycle that supports the implementation of social protection based on a core social protection guarantee that shall be created by legislation. The life-cycle approach embraces the provisional, preventive, promotional and transforming parts of social protection. This approach targets the various vulnerabilities people experience in their lifetime, from childhood to old age, to improve their coping mechanisms. A high poverty level of 3% in Kakamega County (KNBS, 2019) shows that increased floods, longer dry periods and rising temperatures will greatly affect the development agenda in the county. Kakamega County's climate change adaptation plan for 2020-2025 reveals that the region is prone to several climate hazards, such as flooding, long drought, high temperatures, and changing rainfall patterns.

Liru (2020) indicates that gender-based disparities at every level of food production hinder women's access to food and nutritional security. The author reports that social support and government programs are important for women in adjusting to the uncertainties posed by climate change. Interventions that promote long-term adaptation by easing the transition to and diversification from vulnerable livelihoods, like those that increase assets, skills and incomes, are crucial. Therefore, it is important to design and execute adaptive social protection framework policies and programs, which make it easier to address unsafe living situations underlying causes of vulnerability and to help people become more tolerant of climate change (Arnall *et al.*, 2010). Self-help groups (SHGs) are community-based organizations made up of individuals with shared economic or social goals, primarily aimed at improving their livelihoods and fostering mutual support. These groups are commonly found in India where SHGs' role has emerged as an effective tool for poverty reduction

and women's emancipation through programs like the NRLM (Kumar et al., 2021). The same are found in Kenya, particularly in rural areas, where SHGs tend to promote food security and livelihood, implemented with financial backing from NGOs and governments (Bunning et al., 2020). The same appears in Bangladesh, where some institutions, such as the Bangladesh Rural Advancement Committee have forayed into adopting SHGs in association with micro-financing and vocational training with regard to the low-income section of society (Uddin et al., 2020). By fostering collective action and resource-sharing, SHGs play a vital role in building resilience among vulnerable populations (Swain, 2013).

Analyzing the effects of climate change that include frequent flooding, protracted droughts combined with rising temperatures, this study aimed to assess the application of self-help in the implementation of transformative adaptive social protection measures, hence aiding communities in South Kabras, Kenya, to deal with the impacts noted above.

Literature Review

This section examines the literature on adaptive social protection measures for climate change adaptation.

The Nature of Adaptive Social Protection Interventions

The adaptive social protection framework described in detail by Davies et al. (2009) was the first academic work to address the relationships between social security, disaster risk reduction and climate change mitigation. Subsequently, based on this framework, several other programs and processes have been observed, which include an integrated social protection program and community resilience plan. Tenzing (2020) found that low-cost adaptive social protection strategies are useful strategies for low-income households and groups to cope with climate change impacts. According to Perez and Vos (2021), social protection programs can significantly lessen the effects of climate change on the most vulnerable populations, such as the elderly, women, children and the poor. For example, cash transfer programs appeared to increase the resilience of households facing shocks, such as weather extremes or natural disasters, by providing them with the resources they need to cope and recover.

As pointed out by Ribot and Larkin (2012), cash transfers, though helpful for basic or initial requirements, can never offer a solution to what causes poverty and vulnerability in the first instance, such as inequalities in resource distribution and power relations. Furthermore, in settings with poor institutions and implementation capability, social protection interventions can fail to be targeted, coordinated and delivered to the intended vulnerable groups (Perez & Vos, 2021). To overcome these drawbacks, there is a need to improve governance systems, involve communities in the formulation of the programs and allocate resources fairly.

The Role of Basic Social Transfers

Basic social transfers refer to direct cash or in-kind assistance provided by the government or social protection programs for individuals or households to meet their basic needs, protecting them from poverty and vulnerability. These transfers are considered an adaptive social protection measure because they adapt to changing circumstances and help individuals and communities respond to various shocks and stressors, such as economic downturns, natural disasters and health crises. Cash transfers benefit not just the individual household but also the entire community. The regular and predictable nature of non-contributory transfers allows vulnerable individuals to plan and invest in productive activities. It also gives them the freedom to budget for immediate basic consumption (Banda & Ellis, 2009).

The Hunger Safety Net Program (HSNP) in Kenya always targets vulnerable households in the country as it is a permanent social safety net. It is composed of elements that are expandable horizontally in case of an emergency. The risks to the program can be managed effectively since protective measures have been put in place, and backup money has been provided from the beginning of the program.

In Ethiopia, the Productive Safety Net Program improved the institutional coherence by fusing disaster risk reduction, social protection and climate change (Hailu & Amare, 2022). The Productive Safety Net Program safeguards household assets and facilitates the movement away from emergency food by offering temporary employment in public works in exchange for payments or food transfers.

The Role of Livelihood Diversification

According to Ellis (2000), livelihood diversification refers to measures that enable rural households to

meet their needs and enhance their quality of life. A study by Gebru et al. (2018) reveals that smallholder farmers in Saesietse Emba achieve their goal through On-Farm Diversification Strategies. The primary rationale of diversification is to improve survival prospects. Using the data from the study, it was determined that households with multiple sources of income were better off than those with a single source of income. A significantly small proportion of the studied households had less than three income sources, where only 9% fell under this category. The study also showed that non-farm activities are essential in those areas where farming generates inadequate income, especially in the zones with rain-fed farming practices. Demographic characteristics, including dependency ratio, family size, time to extension agents, market distance, livestock ownership and agroecology, constraint the diversification decision. However, income, cooperative membership, remittances, access to farmland, irrigation and credit have positive impacts on diversification.

The Role of Weather-Indexed Crop Insurance

Weather-indexed crop insurance acts as a protective wall for farmers and offers support to the farmers whose crops have been under the fallouts of erratic weather. World Bank's Global Index Insurance Facility (GIIF) provides risk mitigation tools and scale-optimized insurance to smallholder farmers, micro-entrepreneurs and microfinance organizations in developing nations (Holm et al., 2021). In the context of Pradhan Mantri Fasal Bima Yojana, an Indian crop insurance program, Rai (2019) explained that the amount of risk coverage helped farmers lessen their risk aversion by 41%. When the weather affects the predefined index, the insured farmers will be paid back to cushion themselves from loss. Osumba and Kaudia (2015) agree that weather-indexed insurance (WII) works in mitigating the effects of climate change as it provides a form of relief in the occurrence of climatic shocks. According to Sibiko et al. (2018), changing the target of insurance to regional organizations instead of individual farmers may enhance insurance penetration. When farmers experience insurance, they are able to invest in measures that make them less vulnerable to climate shocks, like using drought-resistant seeds or fire-resistant irrigation interventions.

Access to Credit in Climate Change Adaptation

Credit factors significantly influence climate change adaptation. Access to credit enables groups that are

susceptible to shocks mitigate adverse effects by offering monetary support for managing the negative effects, including dry spells floods, and climate-sensitive disasters.

Downie et al. (2018) concluded that the formation of Village Savings and Loan Associations (VSLAs) boosted the capacity of Somali households to cope with the challenges by enhancing food security. Credit enables communities to construct climate-responsive infrastructure, acquire off-farm and non-farm assets and use appropriate farming technology – for instance in buying seeds resistant to drought and advanced farming implements (Börner et al., 2015). Such measures enable an increase in production and a reduction in exposure to climate-related adverse events.

The Role of Access to Common Property Resources

"Common pool resources" are renewable resources that are shared by many people, and this includes forests, rivers, lakes and pastures. According to Palanivelu and Manikandan (2018), these resources play a significant role in sustainability in the context of developing countries' communities. Rural communities largely seek resources for items such as firewood, fodder and manure. However, strain through climate change limits the availability of these resources and, as a result, the economic standing of the rural poor.

The Role of Social Funds

Social funds like human capital, social capital, financial capital and physical capital play a transformative role by providing vulnerable populations with diverse forms of capital they need to adapt to changing climates effectively. An illustration would be the Kyoto Protocol's Adaptation Fund, an international pact that set legally enforceable goals for developed nations to cut their greenhouse gas emissions. Climate risks and equitable development cannot be tackled as single entities but as coordinated processes that stress the interconnectedness of different actors in the construction of resilient communities. Public and private funds, including loans, grants, equities and savings support the financing of adaptations and mitigation measures while shielding the vulnerable categories of people (Wise et al., 2014).

The Role of Minority Rights

The effects of climate change touch most vulnerable persons and communities, including Indigenous

peoples, people of color and other disadvantaged groups. Such communities that reside in climatically exposed areas, including coastal or flood-prone regions, have limited access to facilities and might wield some political power to mitigate climatic changes (Denton, 2014).

In order to formulate effective climate policies, all parties involved, including national and international governments, must respect minority rights in their respective farming regions. That is why practicing anti-discrimination is crucial when working to drive out unfairness in climate change adaptation programs. They support policies that call for nondiscrimination and cohesion among the minority groups to form leverage in advancing their cause (Tanner & Phathanothai, 2014).

Methodology

Design

The study employed a descriptive research design and correlation analysis, which, as noted by Mugenda and Mugenda (2008), is ideal in gathering viewpoints, sentiments and understanding of occurrences. This design enabled the researchers to provide a detailed description of how social protection interventions have assisted individuals in adapting to climate change. The study effectively illustrated the impact of these interventions on community resilience.

Population and Sampling

The study took place in South Kabras, located in Kakamega County in Kenya. This locality was chosen due to its unique challenges related to climate change, its proximity to Kakamega forest, a crucial sink to greenhouse gases and the presence of Self-Help Groups funded under the climate adaptation fund that are critical for social protection interventions (Kakamega County Integrated Development Plan 2023- 2027). The population comprised 1,240 potential primary respondents, drawn from the Kenya Climate Smart Agricultural initiative. This initiative, supported by the World Bank, seeks to build resilience to climate change risks in the targeted self-help groups in Kenya, and in the event of an Eligible Crisis or Emergency, to provide immediate and effective response. The researchers drew a sample size of 302 individuals through the Tora Yamane's (1967) formulae through simple random sampling procedures

Instruments

The study utilized a semi-structured questionnaire, a format that combines both closed and open-ended items. This approach allowed the researchers to gather quantifiable data through standardized questions while also capturing in-depth qualitative insights from respondents. The questionnaire was developed based on a thorough literature review and it was pre-tested to ensure clarity, relevance and appropriateness.

Validity and Reliability

To ascertain the validity of the research instruments, the researchers subjected them to expert review and judgment by experts from the Department of Criminology and Social Work at the Masinde Muliro University of Science and Technology. This evaluation aimed to determine how well the instruments represented the demands of the study, ensuring that the content was appropriate and relevant.

Reliability was assessed using the test-retest method, which involved administering the same instrument to the same group of respondents at two different points in time. The test yielded the Cronbach's Alpha of 0.832, which indicates a high level of internal consistency among the items in the questionnaire.

Ethical Considerations

The National Council of Science, Technology and Innovation as well as the Masinde Muliro University of Science and Technology provided permission for the study. The researchers did prior communication with participants before the start of the study, which ensured the upholding of voluntary and informed consent.

Results and Discussion

This section explores the extent to which SHGs in South Kabras engaged in various social protection practices, shedding light on their activities, reach and effectiveness in supporting vulnerable populations in climate change adaptation.

Research question 1: To what extent do self-help groups practice various social protection interventions in South Kabras, Kenya?

The researchers requested respondents to indicate whether they had practiced various social protection interventions grouped into four categories: provisional, preventive, promotive and transformative as it appears in Table 4.

Table 1: Nature of the Adaptive Social Protection Interventions

SN	Categories/ Response Options	Yes	No
1	Provisional		
	Public health education	57.7%	42.3%
	Food banks	78.0%	21.2%
	Secure shelter	90.4%	9.6%
	Linkages and Referrals	25.0%	75.0%
	Public Work Programs	26.3%	73.7%
2	Preventive ASP		
	Access to Credit	76.9%	23.1%
	Asset Transfer	78.3%	21.3%
	Starter Packs	58.9%	41.1%
	Access to common property resources	85.0%	15.0%
3	Promotive ASP		
	Livelihood diversification	87.3%	12.7%
	Weather based-crop insurance	49.2%	50.8%
4	Transformative ASP		
	Social funds	58.8%	41.2%
	Promotion of minority rights practice	76.6%	23.4%

Food Banks

A significant majority (78.8%) of the respondents adopted food banks as an adaptive strategy while 21.2% of the respondents did not. Food banks help mitigate food insecurity, particularly during extreme climate events, by reducing food waste and promoting food storage (Kuriakose et al., 2013). Therefore, a few individuals who did not use it need to be sensitized to do the same.

Secure Shelter

The result indicates that 90.4% participated in the construction of secure shelters while 9.6% reported not to engage in construction in secure shelter. This finding implies that secure shelter is a critical component of climate change adaptation as access to adequate housing build members of Self- Help groups resilience to withstand climate-related shocks. The necessity for secure shelter is further underscored by the work of Baird et al.,(2019), who argued that resilient housing must incorporate features that withstand climate-related stresses, including proper insulation, elevated structures and access to sustainable energy sources. These adaptations not only improve safety but also enhance the overall quality of life for residents. Additionally, Adger et al. (2018) emphasized the importance of community engagement in the design and implementation of secure shelter solutions.

Linkages and Referrals

The majority of the respondents (75%) reported that they did not practice linkage and referrals. Linkages and referrals are critical components in enhancing

climate change adaptation efforts, as they facilitate the collaboration between various stakeholders, including government agencies and non-governmental organizations (NGOs). Effective linkage strategies enable the sharing of resources, information and expertise, ultimately fostering a more integrated approach to adaptation (Mastrorillo et al., 2016). For instance, when local communities are connected with technical experts and climate information services, they can make more informed decisions regarding climate-resilient agricultural practices (Hassan & Raziq, 2019)

Public work programs

In the table, the majority (73.7%) of the respondents did not use public programs. This trend is attributed to unequal distribution of public goods, which exacerbates the suffering of the vulnerable and marginalized in climate change adaptation. Public work programs (PWPs) are increasingly recognized as effective instruments for climate change adaptation, particularly in developing countries, where vulnerable populations are disproportionately affected by climate changes (Silchenko & Murray, 2023). Public work programs are often designed to empower marginalized groups, including women and youth, by providing them with training and skills that improve their employability and promote gender equity in the workforce (Wise et al., 2014). By integrating social protection elements, such as cash transfers linked to participation in PWPs, these programs have been shown to enhance both economic stability and community resilience (Mastrorillo et al. (2024).

Preventive Measures

Preventive measures include access to credit, asset transfer and starter packs.

Access to Credit

Findings in Table 1 show that 76.9% of those surveyed said they had used credit facilities as a flexible social safety net. Börner et al. (2015) postulate that, access to rural credit facilities is associated with better asset-based coping strategies for shocks that concurrently affect a considerable proportion of the population. However, studies have established that this positive adoption rate is not always the case as many financial institutions lack adequate understanding of climate risks and their potential impacts on borrowers. Consequently, they may be hesitant to provide credit for climate change adaptation projects as they perceive them as high-risk investments (Dasgupta, 2017). Therefore, there is a critical need for targeted interventions to improve financial inclusion, particularly for vulnerable populations, who are at greater risk from climate change but have fewer resources to adapt.

Asset Transfers

Table 1 shows that 78.3% reported to have adopted asset transfers as an adaptive social protection strategy, reflecting a low uptake of this measure. According to Béné (2020), asset transfers refer to provision of physical or financial assets to vulnerable individuals or communities, helping them build resilience against climate-related shocks and stresses. These transfers are often part of social protection and livelihood enhancement programs aimed at reducing poverty and improving adaptive capacity. Examples of asset transfers include livestock, agricultural tools, seeds, irrigation equipment and small-scale infrastructure that helps communities cope with changing climate conditions (McCarthy et al., 2023). These findings underscore that there is need to expand this practice among self-help groups.

Access to Common Property Resources

Table 1 reveals that 85.0% had access to common resource properties. This finding suggests that the majority of respondents had strong access to CPRs, which play crucial roles in implementing climate change adaptation strategies. The term Common resource property refers to any type of natural asset that is used by multiple persons on a regular basis (not necessarily ownership rights). For instance, grazing lands, water bodies and forests play a crucial role in the livelihoods of members of SHGs,

especially those who rely on natural resources for subsistence (Khine & Langkulsen, 2023). Palanivelu and Manikandan (2018) noted that the natural world has a significant impact on human economic and social growth.

Promotive Measures

Promotive measures included livelihood diversification and weather index insurance.

Livelihood Diversification

Results indicate that majority 87.3% had capacity to diversify their livelihoods. This could reflect a recognition by members of SHGs on the importance of spreading risks, such as those occasioned by climate change. Livelihood diversification refers to strategies that help people spread risk by expanding their sources of income (e.g., combining farming with other income-generating activities). Snyman (2014) argued that diversifying income sources has the potential to reduce households' dependence on a single source of income, such as agriculture. While a moderate level of livelihood diversification is prevalent among the respondents, a significant portion still practices were not able to diversify their livelihoods. The eco feminism theory recognizes that because of social and Cultural factors, some populations may be hesitant to abandon traditional livelihoods due to cultural values, community norms or fear of change. This can prevent households from exploring new income opportunities, even when their traditional livelihood becomes unsustainable. Therefore, addressing these contradictions requires a multifaceted approach that empowers members of Self- Help Groups through access to resources, training, and decision-making roles.

Weather-Indexed Insurance

A majority (70.8%) did not practice weather-indexed insurance. Index insurance is a type of insurance used in climate change adaptation that provides payouts to policyholders, based on specific weather indices, such as rainfall levels, temperature or wind speed, rather than actual measured losses due to a lack of information (Singh & Kushwaha, 2023).

Transformative Measures

Transformative adaptive measures include access to social funds and promotion of minority rights

Social Funds

Results in Table 1 show that although the majority (58.8%) reported to have access to social funds as an adaptive social protection strategy, a little lesser than a half (41.2%) of the respondents did not have

access. This finding presents a worrying trend because social funds have been shown to play a critical role in supporting communities by providing financial and technical assistance to adapt to climate change. For instance, in 2021, the Governments of Kenya launched the County Climate Change Fund (CCCCF), which is widely studied as a successful example of localized approaches to climate finance. This briefing paper, an output of the Climate Investment Funds' Transformational Change Learning Partnership (TCLP), distils lessons from the CCCCf for climate finance practitioners wishing to achieve transformational outcomes in adaptation and resilience-building.

Promoting Minority Rights

Table 1 shows that 76.6% of respondents participated in promoting minority rights. This suggests that in some Self Help Groups, there is a significant focus on integrating minority rights into climate adaptation practices. These groups are likely making concerted efforts to ensure that marginalized and minority populations are included in decision-making processes and benefit from

adaptation initiatives, which is a positive trend toward more inclusive climate actions. Grillos (2018) observed that promoting minority rights is an essential social protection intervention that can help address negative impacts of climate change. For instance, indigenous communities in the Amazon basin face negative impacts of climate change, including deforestation and land degradation, which threaten their traditional livelihoods and cultural practices.

Research Question 2: Is there a significant relationship between social protection interventions and climate change adaptation?

This research question sought to establish the relationship between social protection interventions and climate change adaptation. The research question called for testing of the following null hypothesis, which was tested through the Pearson Product Moment Correlation Coefficient: There is no significant relationship between social protection interventions and climate change adaptation. The analysis appears in Table 2.

Table 2: Relationship between social protection intervention and climate change adaptation

		Social Protection	Climate Change Adaptation
Social protection	Pearson Correlation	1	.959**
	sig. (2-tailed)		<.0.01
Climate Change Adaptation	N	260	260
	Pearson correlation	.959**	1
	sig. (2-tailed)	<.0.01	
	N	260	260

With a p-value of .001, which is lesser than the critical value, there is a significant relationship between social protection interventions and climate change adaptation. Therefore, the null hypothesis was rejected. To determine the strength of the relationship, the researchers adopted the Guildford's (1973) rule of Thumb for the interpretation of the correlation coefficients (r) where; < 0.2 indicates a negligible relationship, 0.2-0.4 indicates low relationship, 0.7-0.9 indicates high relationship and > 0.9 indicates very high relationship.

Therefore, adoption of social protection interventions significantly affects the climate change

adaptation. A study by Tekwa and Adesina (2018) concluded that social protection interventions have the potential to enhance climate change adaptation, particularly in poverty alleviation and the transformation of social institutions. Similarly, Case studies from countries like Ethiopia and Bangladesh showcase how social protection programs like the Productive Safety Net Program and cash-for-work projects support both immediate needs and long-term adaptation efforts. Evidence shows that these interventions help reduce the impact of climate shocks on livelihoods, enabling households to recover more quickly and invest in adaptive strategies (Dicker et al., 2021).

Conclusions and Recommendations

The study concludes that Programs within the Transformative category, particularly those focused on minority rights and social funds, are viewed positively, suggesting that continued focus and investment in these areas could yield beneficial outcomes for members of self-help groups. To this effect there is need to foster stronger collaboration with local communities, beneficiaries and relevant stakeholders in the program planning and implementation processes of these initiatives. This can enhance program relevance and effectiveness by ensuring they align with community needs.

Most importantly, continuous monitoring and evaluation of these programs is essential to measure their impact and make necessary adjustments so as to maintain their effectiveness in helping communities adapt to the evolving climate change challenges. Furthermore, various forms of adaptive social protection, including provisional, preventive, promotive, and transformative measures, play a significant role in supporting climate change adaptation. Strengthening social protection improves the capacity of Self-Help Groups to adapt to climate changes. Therefore, there is need for an integrated approach that combines immediate relief, preventive measures, livelihood support and structural changes to ensure comprehensive adaptation to climate change.

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