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CLIMATE CHANGE ADAPTATION AND RESILIENCE BUILDING BY RURAL WOMEN IN THE NIGER DELTA COMMUNITIES - THE CASE OF DELTA STATE

By

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PROJECT PROFILE

Project Title: “Empowering women as key leaders in promoting community-based climate change adaptation and disaster risks reduction initiatives in Niger Delta region”

Funding: International Development Research Centre (IDRC)

Implementing Partners: Centre for Population and Environmental Development (CPED), Intervention Council for Women in Africa (ICWA) & Delta State Ministry of Environment (DMoE)



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PREFACE

This policy brief is the fourth in the series of communication to policy and decision makers on the on-going research project of the *Centre for Population and Environmental Development (CPED)* titled “empowering women as key leaders in promoting community-based climate change adaptation and disaster risks reduction initiatives in Niger delta region” funded by the *International Development Research Centre (IDRC)* under its climate change program.

CPED’s policy brief series is designed to draw attention to key findings and their policy implications as projects are being executed. This edition which focuses on climate change adaptation practices being led by rural farmers, particularly women and girls, in the Niger delta communities is based mainly on the reports and outcome of the intervention activities in ten target communities where the climate change research project is being implemented in delta state.

We are very grateful to IDRC for the support to implement this project. We are particularly grateful to the Programme Officer in charge of our project, Dr. Melanie Robertson, for her support to CPED which has enabled the Centre to continue implementation of the research project and the publication of this policy brief. We also appreciate the cooperation of leaders of various groups and community-based organisations in the target communities for their collaboration with CPED in the on-going implementation of the project.

INTRODUCTION

Developing Literatures have shown that the environment is the basis for the sustenance and survival of man (Emeribe, 2000:29; Thurlow, 2008). The people of the Niger Delta depend mostly on the environment for their livelihood and thus, are very susceptible to changes in the environment (Ikelegbe & Onokerhoraye, 2017). Unfortunately, over the past years environmental impact arising from climate change have led to unprecedented economic deprivation in the region. The region is highly vulnerable to the impacts of climate change, particularly as it relates to agriculture and rural livelihoods. In the oil host communities of the Niger Delta, the main patterns of livelihood are mainly fishing, hunting and craft making (Emuedo, 2010). The problems of coastal erosion caused by sea-level rise, leading to problems of flooding, intrusion of sea-water into fresh water sources affecting agriculture, fisheries, settlements and general livelihoods, have become a recurrent challenge. Although these impacts affect both men and women, however, women and girls in the rural communities of Niger Delta are most at risk. For many decades, their gender makes them more vulnerable in their capacity to cope with such events because of lack of access to information and early warnings, limited asset base, and reduced access to adaptive measures. Most of the women who practiced crop farming depended heavily on crops whose value chains were sensitive to climate.

BUILDING THE CAPACITY OF WOMEN TO BE MORE RESILIENT TO CLIMATE CHANGE IMPACTS

In recent years the *Centre for Population and Environmental Development (CPED)* and other partners working in the region have been engaged in collective actions to strengthening the adaptive capacity of women and girls to the impacts of climate change through life-skill building and income diversification models as well as advocating for women inclusion in decision making, access to farmland and other resources. For example, in order to strengthen women adaptive capacity to climate change in Delta state, women and girls in ten communities, spread in three ecological zones namely; the *Mangrove Swamp*, the *Freshwater Swamp* and the *Forest Lowland*, have organised themselves in groups/committees to increase their knowledge on climate change adaption and resilience building. These committees of women and girls numbering 15-20 in each group, who rely on agriculture mainly for their livelihood, have been trained and empowered by CPED project team on different climate change adaptation strategies such as:

- Crop Diversification
- Planting of Drought Resistant Varieties of Crops
- Change in Cropping Pattern and Calendar of Planting
- Practicing Mixed Cropping
- Use of Improved Irrigation Techniques

- Adopting Soil Conservation Measures that Conserve Soil Moisture
- Tree Planting, especially tree crops

Women and girls who are mainly livestock producers were introduced to different livestock adaptation strategies in the various communities. They were trained to adapt to climate change impact by 1) Practicing mixed livestock farming system 2) Identifying and strengthening local breeds that have adapted to local climate stress and feed sources 3) Improving local genetics through cross-breeding with heat and disease tolerant breeds 4) Integration of pasture management, livestock and crop production etc.

RURAL WOMEN AND ADAPTATION TO CLIMATE CHANGE IN THE NIGER DELTA

In recent times, having acquired the capacity and the right skills through CPED climate change project, rural women and girls in Niger Delta with special reference to communities in Delta state have engaged in wide range of measures to adapt to climate variability and change. Field reports on CPED on-going implementation research on empowering women as key leaders in promoting community-based climate change adaption and risk reduction initiatives in Niger Delta region, shows that crop diversification features prominently in the farming household climate change adaptation strategies. Through crop diversification, farming households spread

production and income risk over a wider range of crops, thus reducing livelihood vulnerability to weather or market shocks. Some trained rural farmers now adapt to the changing climate by changing the type of seeds they use in planting such as improved seedlings. Some of the rural farmers in Delta state, especially women, in the target communities indicated that there is a change in the type of Okro, Corn and Cassava they now plant compared to what they use to plant some decades ago and that this has yielded greater output. Also, a greater proportion of the farmers, especially rural women in the three ecological zones, currently plant early maturing crops as a strategy for adapting to climate change which they described as effective. While others in the region address risks by planting additional crops such as fruit crops.

Some farmers reported that they diversify their economic activities by doing both crop production and animal keeping. Other measures include change of new breed of animals that resist diseases and climate change impacts, construction of ponds and reservoirs for water storage.

Since the rainfall intensity is getting higher by the day in the Niger Delta region, erosion is also increasing thereby reducing soil fertility in the region. In order to restore soil fertility some of the local farmers use local manure from livestock, although not readily available. The use of fertilizers in improving soil nutrient is being done by few farmers. Access to farm inputs, such as seedlings and fertilizers is low due to high cost of purchase and bias against women. The few fertilizers provided by local authority are either shared

by men or rich farmers leaving the rural female farmers with nothing. However, efforts are being made by CPED research team in the on-going project to increase women access to improved fertilizers, and other resources for women in order to fully adapt to the effect of climate change, action which is planned to be led by the rural women.

OBSERVABLE RESULTS OF WOMEN EMPOWERMENT AND SKILL BUILDING INITIATIVES TO CLIMATE CHANGE ADAPTATION

More women now engage in climate change adaptation and risk reduction efforts. Many women have acquired more farmlands which play strong role in on-farm diversification. Although, this varies from one ecological zone to another as some communities are more receptive for women participation in household decision and land ownership.

The network of women facilitated by CPED on-going project on climate change have become the voice for women in these communities as they engaged community leaders, local authority and other relevant stakeholders advocating for women inclusion in decision making as well as improving the exchange of information among women and other actors concerned with adaptation, and quickening the pace at which they learn from each other.

CONCLUSION AND RECOMMENDATIONS

Historically speaking, women have played key roles in the struggle for environmental justice and sustainable development in the Niger Delta region. As the most vulnerable group to the impacts of climate change, many rural women in the Niger Delta are learning new skills that will help them build their resilience and adaptive capacity to climate change impacts.

There is urgent need to accelerate these local adaptation measures as most rural communities in the Niger Delta region rely heavily on agriculture for their survival. We strongly recommend an improved cooperation between researchers, community stakeholders, project managers, state and local government actors to work together to booster and share already existing mechanisms for empowering women and girls in this region to adapt to climate change impacts.

We, also recommend that these capacity building and empowerment initiatives be adopted by state, local government and other concerned stakeholders, and be replicated in other communities of the Niger Delta region. If these initiatives led by women and girls in rural communities of Niger Delta, are sustained, household vulnerability to climate change will reduce thereby increasing household income and other economic potentials.