



FEED THE FUTURE

The U.S. Government's Global Hunger & Food Security Initiative

RURAL RESILIENCE ACTIVITY

November 2022

CLEAN ENERGY INTERVENTIONS

CREATING INCOME GENERATION OPPORTUNITIES FOR WOMEN IN RURAL, CONFLICT AFFECTED COMMUNITIES IN NORTHEAST NIGERIA



Women's group showcasing charcoal briquette after training by Biu Women Castor and Jatropha Farmers

Background

Climate change and conflict are two key drivers of fragility in Northeast Nigeria. Climate change is a complex global challenge that impacts regions, generations, ages, classes, income groups, and gender differently. Based on the findings of the Intergovernmental Panel on Climate Change (IPCC), most vulnerable and marginalized people will also experience the greatest impacts of climate change. Women are increasingly regarded as more vulnerable than men to the impacts of climate change, mainly because they represent the majority of the world's poor and are proportionally more dependent on threatened natural resources. In Northeast Nigeria, women represent a high percentage of poor communities who are highly dependent on local natural resources for their livelihood, particularly in rural areas where they shoulder the major responsibility for household water supply and energy for cooking and heating, as well as for food security.

Charcoal and firewood remain the primary sources of cooking energy in Nigeria, particularly in the Northeastern part of the country. The northeast region is prone to frequent crop failures due to several economic and environmental factors, including flooding and the poor climatic conditions, caused by the continuous cutting of trees for charcoal and firewood and burning of fossil fuels (like coal, oil and gas). Unfortunately, the huge demand for charcoal and firewood has no end in sight.

The main reason for the consistent increase in demand is that, apart from being a cheap source of energy for limited-income communities, the business of charcoal and firewood employs a good number of women and youths.

The Rural Resilience Activity, in line with its objective to uplift vulnerable households, communities and market systems, promotes



Solar Sister's Entrepreneurs (DSAs) holding a sisterhood meeting in Yola



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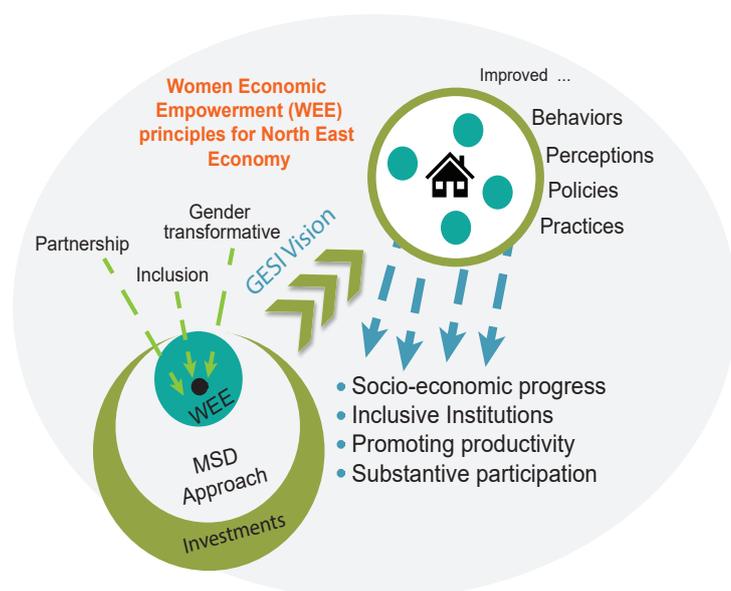
Natural Resource Management in its implementation of on-farm and off-farm interventions. This entails investment in partnerships and initiatives that facilitate access to climate smart inputs, safe agronomic practices, promotion of clean energy products, and conflict sensitivity dialogues amongst market actors of different socio-economic factions. This is strongly complemented by its Women Economic Empowerment special purpose approach.

This factsheet outlines the Rural Resilience Activity's climate-smart interventions aimed at changing participants' behaviors towards the adoption of clean energy as a way of adapting to climate change.



A Solar Sister Entrepreneur (DSA) with her starter-kit in Yola

Rural Resilience Activity's Climate-Smart Approach for Empowering Women



Charcoal briquettes produced during the training by Biu Women Castor and Jatropha Farmers

The Rural Resilience Activity applies the Women Economic Empowerment framework to strengthen access, agency, and control of economic and productive resources, by recruiting women as climate change ambassadors, at the same time recruiting them as commercial agents for climate smart products. We partner with economic and social enterprises to influence systems around women's participation in the marketplace. We design specific interventions to use the Commercial Agency Model (CAM) / Direct Sales Agents (DSA) to reach last mile communities, many of whom are in remote rural areas of the Northeast.

For more than a decade, research shows that development programs have partnered with the private sector to adapt CAM models - like those made famous by Avon and mobile network operators - to serve different sectors (e.g., agriculture, energy, health) and markets (e.g., rural, peri-urban).

The CAM model is a strategy a company uses to get its products to consumers in far-reaching or underserved areas, rather than selling a large volume to distributors and stores.

We partner with some social enterprises and companies to develop supply chains with poor women in Northeast Nigeria as suppliers or distributors. We believe this could alleviate poverty, create revenue streams, and help women save/cut costs.

To achieve our goal of stimulating a clean energy market that promotes a shift in risky environmental behaviors, the Activity partnered with Biu Women Castor and Jatropha Farmers - a group of female charcoal briquette producers; and Solar Sister - a social enterprise that identifies, engages, trains, and supports women to become clean energy entrepreneurs / DSAs of clean energy products in their communities. RRA's partnership with Biu Women Castor and Jatropha Farmers has enabled the organization to expand its charcoal briquette business line, increase customer base and to strengthen the supply chain, with improved group dynamics in terms of improved leadership and coordination. In addition, the partnership with Solar Sister has enabled the organization to reach last mile participants and remote communities with solar-products, expanding into more Local Government Areas.

In our experience, a woman is economically empowered when she has both the ability to succeed and advance economically and the power to make and act on economic decisions. That is why the Rural Resilience Activity's interventions push for women to participate equally in existing marketplace opportunities, have access to and control over productive resources, have access to decent work and income, have control over their own time and income, and increase voice, agency, and meaningful participation in economic decision-making at all levels, from the household to institutions.

Our Activities

Community entry and market scoping

To ensure community acceptability and ownership, the Rural Resilience Activity, through Solar Sister, undertook community entry and conducted market scoping activities. Solar Sister conducted household energy and lighting needs assessments to determine the potential market for solar products among underserved and vulnerable communities. It also determined the most appropriate market entry strategy using the CAM model to increase the chances of acquiring customers in the target areas that are mostly placed off-grid. Solar Sister conducted a massive sensitization reaching over one thousand five hundred women (1,500) across rural areas in Borno, Adamawa, Yobe, and Gombe (BAYG) states. Following the sensitization, 300 female DSAs were recruited across Adamawa and Gombe states to become retailers of clean and renewable energy products.

Sensitization
reached **1500**  Rural women
across BAYG
states

Seeding and continuous capacity building

To qualify as a DSA, one must subscribe to rigorous entrepreneurship training and commit an amount as capital. These female DSAs, known as Solar Sister Entrepreneurs, stock solar lights and cook stoves from Solar Sister, then sell and deliver them to friends, neighbors, community members and customers in neighboring states after the first training.

In May and June 2022, the team held a program launch and onboarding ceremony in Gombe, where 67 women from Akko, Billiri, and Funakaye Local Government Areas (LGAs), were formally supported with starter kits containing renewable products worth NGN40,000 to commence sales in their communities. An additional 180 women were onboarded at the community level, in Song, Mubi, Yola South, and North in Adamawa State, each supported with business kits containing four Pico lamps, two A2 lamps, one family sunshine cook stove, one happy stove, as well as marketing materials – branded t-shirts, branded hijabs, product bags, sight sellers, record booklets, receipt booklets, and purses.

The seeded female DSAs have made sales and realized profit from their products amounting to NGN 14 million, and have re-invested the profit by acquiring more products while also supplying products to locations facing low power supply like Maiduguri. The entrepreneurs have also been clustered into sisterhood groups and meet weekly with an assigned Business Development Associate who takes them through sessions on sales record keeping, key market strategies, and business management skills.

Sales & Profit
Worth **N14 million** 

Biu Women saving the environment by raising female climate change ambassadors

To facilitate economic opportunities for women and reduce the risks of carbon generating fuels in the kitchen, the Activity through its partnership with Biu Women Castor and Jatropha Farmers, trained women on agro waste to wealth charcoal briquette production in Biu, Hawul and Kwaya Kusar LGA of Southern Borno. The WEE intervention between March to May 2022 reached 1,848 women - 1,256 women between the ages of 15-29, 510 between the ages of 30-49 and 82 women within the range of 50 years and above. The trainees had indicated interest in the business during the community level sensitization and awareness carried out by Biu Women Castor. The trainers – production team of Biu



Magdalene Joseph is a solar product entrepreneur in Saminaka, Yola, Adamawa State. Her search for opportunities to increase her income led her to the Solar Sister's Agent Supervisor in Adamawa State.

Being a Solar Sister Direct Sales Agent (DSA) helped Magdalene to increase and diversify her sources of income. She is now able to support her family (household spending) without much impact on her business.

Lessons Learned

The merits of establishing and building relationships with male gender champions in communities is enormous. It contributes to enhancing women's participation in economic activities considering the highly patriarchal set up of these communities as highlighted in the Activity's Gender Equality and Social Inclusion Analysis.

We have also learnt that Women's Economic Empowerment does not only entail facilitating access for women to participate in the markets, but also expanding and exploring economic streams that are suitable for all women, especially those linking women to other women. This is demonstrated by the CAM model which has availed clean and valuable energy and lighting resources for women.

Furthermore, leveraging existing capacities of local organizations foster the effective implementation of Women Economic Empowerment interventions. A true aspiration for sustainable women economic empowerment entails building the resilience of, and leveraging local capacities using innovative and solid approaches.

Women Castor - provided step by step theory and practical briquette productions.

Charcoal briquette production processes crop residues such as rice husk, maize stalk, groundnut shells, sawdust, corn cob, sugarcane bagasse, etc., and converts them into carbonized briquettes as fuel. The key actors in the value chains are the suppliers of crop residue such as farmers and agro-millers, product distributors, and end users of the product: households and energy-intensive industries. Briquetting of the abundant biomass in Nigeria represents one of the possible solutions to the energy challenge in the country; it can also act as a preventive measure to many ecological problems, such as deforestation and global warming at large. Charcoal briquettes are environmentally friendly in that they are immensely cleaner than other fuel alternatives because they do not contain any Sulfur.

The project is addressing the lack of access to clean energy at different levels and in different magnitudes, since briquettes can be made from unwanted bushes that inhibit the growth of forest tree plants and other agricultural waste. This smart alternative energy competes well with wood fuel and serves as a good substitute among communities that rely on solid fuel/energy. Its adoption will help the growth of more trees which would greatly contribute to maintaining the greenery or a better natural environment in a region already fraught with desertification. The limited structures for proper waste management in the Northeast present an easy opportunity for further access to waste that could be processed into briquettes for energy use.

Key Achievements

247 Women Entrepreneurs Raised in Gombe and Adamawa State

Solar Sister has established 247 female direct sales agents and supported them with startup kits worth NGN40,000 renewable energy products. This amounts to an income of US\$25,917.55, (NGN11,144,546.50) in sales of products. The linkage is one that is mutually beneficial for both Solar Sister and the DSAs as it translates to business expansion and jobs, and builds trust for long term business relations. One of the key highlights recorded in this business endeavor is crowding in.

1848 Women Trained, and 15 Women Groups Producing Briquettes



1,848 women drawn from across the three Southern Borno LGAs (Biu, Hawul, and Kwaya Kusar) were trained in the practical production of briquettes. Biu Women Castor facilitated state registration for 15 outstanding groups, who have been supported with 15 automatic machines and carbonizers to begin production and sales. The 15 groups were rewarded with their own machines because they started production after the practical training. This shows their willingness and interest in the business. Climate change mitigation measures must be inclusive to be wholesome. Engaging women as climate ambassadors and in waste to wealth activities are great moves that have helped the women to break biases, where cultural norms constrain them from participating in meaningful and innovative activities outside their subsistence activities.

247 Direct Sales Agents (DSAs) 


N40,000
Approximately Starter Kit

15 Briquette Producing Machines for 15 groups 

About the Feed the Future Nigeria Rural Resilience Activity

The Feed the Future Nigeria Rural Resilience Activity is a five-year, US\$45 million program funded by the United States Agency for International Development (USAID) to facilitate economic recovery and growth in vulnerable, conflict-affected areas by promoting systemic change in market systems. The Activity is part of the U.S. Government's global hunger and food security initiative. It is aimed at empowering vulnerable households, communities and systems to cope with current shocks and stresses, and to be prepared to withstand future ones.

The Activity is implemented by Mercy Corps, in partnership with the International Fertilizer Development Center (IFDC) and Save the Children (SCI), primarily in the Northeast states of Adamawa, Borno, Gombe, and Yobe. Through the COVID-19 Mitigation Response Program, the Activity's operational areas also included Benue, Kebbi, Niger and Ebonyi states, as well as the Federal Capital Territory. Using market-led approaches, the Activity will move over 600,000 individuals out of chronic vulnerability and poverty.

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