



RURAL WOMEN ENERGY AND SECURITY

A Publication of Women Environmental Programme (WEP)
September, 2013



**“Energy is central to
SUSTAINABLE DEVELOPMENT
& POVERTY REDUCTION EFFORTS...” - UNDP**



Irish Aid

Department of Foreign Affairs
An Roinn Gnóthai Eachtracha

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Dear Readers

Welcome to our maiden edition of Rural Women Energy and Security Newsletter!

It is estimated that close to 2.4 billion people in developing countries still depend entirely on traditional biomass fuels, which are detrimental for the environment and health. Over 2 million people, mostly women and children as they spend most time indoors, suffer from respiratory diseases caused by biomass burning. It is often women who are tasked with collecting and managing biomass fuel supplies such as firewood, dung and agricultural residues, leaving less time for productive activities.

This publication calls on the government and all other development stakeholders to help rural communities to adapt to the impacts of climate change by making available clean energy technologies that are affordable, accessible, reliable and sustainable especially for the rural women and unemployed youth.

WEP in her quest to compliment government efforts in the development of renewable energy is partnering with the Federal Ministry of Environment; the National Renewable Energy Programme, the UNDP/Bank of Industry on providing alternative sources of energy to rural women in Nigeria through designing and constructing/provision of *solar dryers* and *briquetting machines* to address rural energy

challenge in rural communities of Nigeria. These technologies are indigenous and proud initiatives of WEP and partners to facilitate actions in renewable energy technologies.

We wish to appreciate Engr. Joel Nwakaire for his expertise in the designing and production of the machines. We are most grateful to Irish Aid for their funding and moral contributions towards the provision of the solar dryers, which is being scaled up by other organizations and communities.

We call on all stakeholders for the scale-up of these actions in all the rural communities of Nigeria to ensure rural access to clean energy. Take positive actions that will promote clean energy access in the country and save our sisters and mothers from dying due to respiratory diseases caused by biomass burning.

Your 'little' role and support is critical to make this happen.

Priscilla Achakpa



WHO WE ARE

History/Background: Women Environmental Programme (WEP) is a non-governmental, non-profit, non-religious, and voluntary organization. WEP was established in 1997 by a group of grass root women in Nigeria. WEP programs compliment the efforts of government and other organizations who strive to promote, respect, protect and fulfill the rights of Women, young people, and excluded/marginalized groups. WEP has United Nations ECOSOC Special Status, Observer Status to the United Nations Environmental Programme (UNEP) Governing Council/Global Ministerial Environment Forum, and United Nations Framework Convention on Climate Change (UNFCCC). With the Observer Status, WEP can participate as a major group organization in contributing to the intergovernmental decision-making process in the UN-System.

Structure & Governance: WEP is today governed by a 5-member Board of Directors and 3-member advisory Board while her programs are administered by a 13-member Programmes and Administrative staff. WEP strongly believes in the active participation and involvement of those we work with/for, therefore, encourages the contribution of our volunteers and community members in the design, implementation and monitoring of her Programmes.

Board of Directors

- Mr. Yakubu Aliyu – Chairman
- Ms. Priscilla M. Achakpa – Executive Director
- Prof. Kabiru Isyaku – Member
- Prof. David I. Ker – Member
- Ms. Anne-Marie Abaagu-Member

Advisory Board

- Mrs. Sarah Jibril
- Festus Okoye (Esq.)

Rural Women Energy & Security

- Mrs. Veronica Garba

Vision: WEP envisions a society where the environmental, economic, social and political rights of women and youth are protected.

Mission: WEP is committed to empowering Women and youth to effectively address the environmental, economic and political issues that affect them

Goal: The overall goal of Women Environmental Programme (WEP) is to promote a sustainable society while addressing issues of gender Injustices relating to environmental, economic and social rights of women, children and youth

Our Thematic Areas:

- Environment
- Governance

Our Strategies:

- Advocacy
- Capacity Building
- Community Mobilization
- Research and Development
- Publications (books, newsletters)
- Networking

Our Values:

- Accountability and Transparency
- Team Work, Hard work and Commitment to work
- Honesty and Integrity
- Gender Justice and Fairness
- Trust and Confidentiality
- Excellence and Cost Effective

Strategic Objectives

- To sensitize and raise awareness of the general public on the vulnerability and adaptation of gender to the impacts of climate change;
- To stimulate the management of natural resources within the framework of national and international policies/convention for sustainable development in the environment;
- To advocate for the rights of the rural and urban dwellers to land, housing settlement and basic social infrastructure within the framework of The International Covenant on Economic, Social and Cultural Rights (ICESCR);
- To build capacity of the general public on the management of environmental conflicts, renewable energy, water and sanitation and organic pollutants;
- To empower women and youths in their civic rights and responsibilities, electoral processes and democratic governance in Nigeria

Where we are

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ENERGY, CLIMATE CHANGE AND POVERTY

John Baaki

Just as food, shelter and clothing are the basic human necessities, so is energy. For me, energy is the number one necessity and every other necessity is secondary as they all depend on energy. Take for example; the food we eat would not have come about without the sun's energy that makes photosynthesis possible. The clothes we wear are produced using energy. To light up our rooms at night needs energy etc. This is how critical energy is to our lives.

According to the United Nations Development Programme, *“Energy is central to sustainable development and poverty reduction efforts. It affects all aspects of development -- social, economic, and environmental -- including livelihoods, access to water, agricultural productivity, health, population levels, education, and gender-related issues. None of the Millennium Development Goals (MDGs) can be met without major improvement in the quality and quantity of energy services in developing countries.”*

Rural Women Energy & Security

The world's demand for energy continues to rise by the year as more countries strive to place themselves among the top economies of the world. Remember that you cannot do without energy for industrialization and infrastructure development which spur economic growth of any nation. Energy is critical to bring out people from poverty, improve health, education and ensure gender equality.

As important as energy is, the choice of which form of energy has a direct effect on global climate. There are different sources of energy: nuclear energy, geo-thermal energy, hydro-energy, solar energy, wind energy, biomass, coal and fossil fuels. All these forms of energy have different implications on the environment and livelihoods of the people. While some forms of energy are finite (coal, fossil fuels, nuclear energy), some are not and renewable from time to time (hydro-energy, solar, wind, biomass)

Fossil fuels have been the most intensively used form of energy around the world. As popular and useful as they are, they have been proven to contribute to the changing climate. Burning fossil fuels releases carbon dioxide, a heat-trapping gas, into the atmosphere, which is a contributor to global warming. Emissions from the burning of fossil fuels are major contributors to urban air pollution and acidification of land and water. According to the IPCC Fourth Assessment Report, **the largest growth in GHG emissions between 1970 and 2004 has come from the energy supply sector (an increase of 145 per cent).**

Many fear that Global energy-related carbon dioxide emissions (CO₂) will increase by some 50 percent between 2004 and 2030 unless major policy reforms and technologies are introduced to transform the way energy is produced and consumed. It was in a bid to curtail the emission of Green House Gases (GHGs) that the Kyoto Protocol which set binding commitments on CO₂ emission reduction target for its parties, came into force in 2005 and extended after its expiration in 2012.

Panicked about the negative effects of fossil fuels on global climate and livelihoods, the United Nations have advocated for a shift to a cleaner energy: ***“...It is clear that we will not be able to meet the Millennium Development Goals and the development needs of the poor without increasing their access to energy. And without a shift to cleaner energy supplies it will be impossible to adequately tackle climate change...” (Ban Ki-moon)***

Yes, without a shift to cleaner energy, it will be very difficult for the poor to adapt to the impacts of climate change. ***“Current energy systems are***
Rural Women Energy & Security

failing to meet the needs of the world's poor. Worldwide, 2.6 billion people rely on traditional biomass for cooking and 1.6 billion people – about a quarter of the human race - do not have access to electricity. The projected cumulative investment required between 2005 and 2030 to meet energy needs is almost US\$20.1 trillion, but even if this investment is secured over the next thirty years, 1.4 billion people will still lack access to electricity in 2030 and 2.7 billion will still rely on traditional biomass for cooking and heating.”(United Nations)

The impacts of climate change are felt mostly by the poor especially in the developing nations and the above facts would exacerbate these impacts. Communities in arid regions are experiencing severe scarcity of traditional cooking biomass occasioned by desertification. In Sub-Saharan Africa, forests are giving way for grasslands as they have been intensively cut down due to increasing population in the region and the increasing demand for energy for cooking and heating. Because there are no cheap and accessible alternative energy sources, the women walk long distances in search of this cheap energy. This take away the precious time women would have given to other important activities. The scarcity of traditional cooking biomass does not only exacerbate gender inequality, it also exacerbates hunger and poverty of the rural population. Anything that would affect production and consumption of food in the rural communities definitely would shatter the rural economy. This is because food production is the bedrock of the rural economy. Sadly, the current impacts of climate change have shattered the rural economies, leaving them with no easy options to cope with the impact.

Nigeria is one of the developing countries in Sub-Saharan Africa that is experiencing the impacts of climate change. In Nigeria, the two dominant impacts of climate change are desert encroachment in the northernmost parts of the country and torrential and prolonged rainfall in the southernmost and other parts of the country. This impacts agricultural activities, the economic mainstay of more than 70% of the population. Although the changing climate comes along with its advantages, it seems that the developing nations are experiencing the bitter part of it since they lack the resources and the technology to adapt. Yes, to some areas that before now never experience substantial rainfall for agriculture, climate change would be seen as a Messiah. Where the challenge would come from would be from the preservation and storage of agricultural crops produced at the peak of harvest. The traditional sun drying has never proved very effective for drying of food crops (especially perishable crops) at their peak production periods which often coincide with rainy season when the sun's intensity is low. It is worst experience for the northernmost communities of the country where the worsening arid conditions do not encourage intensive agriculture. These impacts coupled with decreasing access to energy by the poor are a big threat to food security and a big barrier to the achievement of the Millenium Development Goals (MDGs).

Ensuring energy security is the best way of alleviating extreme poverty and hunger of the rural population. A shift from the use of fossil fuels which is limited in supply, costly for the poor and harmful to the atmosphere to modern, clean, efficient and renewable energy technologies is imperative to alleviating the world's poverty. To a rural farmer, his needs are not much: is there enough moisture to till the land? How do I preserve my crops to ensure I have food to eat after harvest and sell some for money? Is there a reliable

and accessible energy for cooking, heating and other domestic activities? If all these needs can be assured, life would take a new meaning to a common man.

Ensuring energy security is not only the responsibility of the government but also that of Civil Society Organizations, Development Organizations, Private Sector and other critical stakeholders in the energy sector. Government is however expected to draw up a road map for all other stakeholders to key into for this shift to modern and clean energy technologies to be possible.

Governments at different levels should know that there is no other better way to alleviate poverty and hunger of its populace than addressing their energy needs. There is also no other better way of helping the poor population to adapt to climate change. Energy is at the core of mitigating the impacts of climate change.

Energy, climate change and poverty are interrelated:

- The burning of non-renewable fossil fuels emits green-house gases which causes global warming
- Climate change has caused changes in weather events which affect all sectors of the economy including agriculture which is the major occupation of the poor communities
- The poor becomes poorer as they try to cope with the impacts of climate change: water scarcity, water pollution, flood, desertification, conflicts. Flood destroy houses and pollute drinking water sources, desertification makes land unfertile for agricultural production causing food crisis.

Energy cannot be done without for climate change adaptation and poverty alleviation programmes. Renewables hold a great potential to ameliorate all the climate change impacts and catapult economies to the next level.

WEP TRAINS RURAL WOMEN ON INNOVATIVE FARMING PRACTICES

Frank Yawon

Drought, desertification and soil degradation are the major consequences of climate change on agriculture in sub-Saharan Africa. Many hectares of land have been lost to drought, desertification and soil degradation. More hectares of land are also being lost to urbanization due to rapid increase in population of the region. This has put pressure on the available arable lands. Continuous cultivation of these lands has greatly affected the soil fertility as witnessed from the decline in agricultural yields particularly in Nigeria.

The use of chemical fertilizers to remedy soil fertility has two implications on a rural farmer: apart from its high cost which cannot be afforded by many rural farmers, it also has a side effect on the soil unlike organic manure.

As WEP scouted for local ways of coping with the changing climate and ensuring resilience of the rural communities, they settled for innovative farming practices as farming is the major livelihood of the rural communities. Safeguarding farming as a rural livelihood means ensuring food security for the country and mitigating the impact of climate change.

It is based on the above that WEP with the support from Global Environmental Facility (GEF) trains rural women on innovative farming practices. So far WEP has trained women in Kyado, Naka, Adikpo, Tsar (Benue State) and Yauri (Kebbi State) communities on compost production. This training was hands-on and many women have reaped the reward of using compost on their farms.



The women of Adikpo community prepare compost, while WEP Staff (Male) supervises



GENDER *and* CLIMATE CHANGE

Ruth During

The world's poor are disproportionately affected by climate change and natural disasters. Climate change affects women and men differently. Women and girls face particular vulnerabilities resulting from cultural norms and their lower socioeconomic status in society. Women's domestic roles often make them disproportionate users of natural resources such as water, firewood and forest products. As these resources become scarcer, women experience an increased work burden and may fall further into poverty as a result. Increasing population growth puts further pressure on resources. Natural disasters also have gendered implications, killing more women than men. This trend is more pronounced the stronger the disaster (Neumayer and Plumper 2007). Despite the vulnerabilities experienced by women and girls, they are often unable to voice their specific needs. The exclusion of women's voices also means that their extensive knowledge of the environment and resource conservation is untapped.

Women and men are not helpless victims of climate change, but use various methods and strategies to adapt to climate change. It is increasingly recognized that empowering women, children and other marginalized groups is beneficial not only as a

policy in itself, but also as a means of strengthening the effectiveness of climate change measures. Often, strategies that are adopted are related to the social norms concerning what is acceptable for men and women.

There is evidence that since women in developing countries have primary responsibility of providing for their families, they are more reliant on natural resources and are thus more careful stewards of them and the environment. They have been engaging in various efforts that qualify as climate change mitigation and adaptation activities. While some argue that climate change worsens gender inequality as women and girls are more susceptible to the impacts of climate change, others argue that climate change offers opportunities to tap into women's traditional roles as carers of natural resources and link them with paid employment.

Vulnerability to the impacts of climate change depends on a number of factors including gender, age, socioeconomic status, caste and disability. Poor individuals, those with disabilities and those belonging to particular caste groups are more vulnerable to climate change impacts as their coping strategies may be limited both by social norms and stigma, but also due to issues of mobility, knowledge and lack of money.

It is generally acknowledged that women and girls face a heavier burden of domestic work as a result of resource shortages (food, water and firewood) caused by climate change. They are made to walk longer distances to fetch these resources and may as a result face increased security issues including harassment and sexual violence. Increasing workloads may also result in families withdrawing daughters from schools to help out at home, reducing their future opportunities. Boys may also be taken out of school and sent to earn money to help the family deal with poverty resulting from climate change impacts.

In addition, crop failure as a result of sporadic rainfall may result in the selective malnourishment or starvation of girls and women, especially in cultures where men are used to eating before women and girls. Selective

malnourishment of 'less important' members of the family can also be used as a strategy to ensure the family's survival. Women also often face the most negative economic implications of crop failure as they usually have fewer economic resources to fall back on in times of crisis. This also has implications for the health of many women and girls, as malnourishment increases the risk of contracting infections. Further, women and girls' lower socioeconomic status make it more difficult for them to access and pay for treatment.

The different experiences of men and women regarding climate change has led one analyst to argue that 'gender transformation is both an important condition and a potential end goal of effective climate change responses and poverty reduction' (Skinner 2011).

The Power of a Woman

Ruth During

The empowerment of a woman begins within herself,
if that woman loves herself;
she has that authority to love anyone she chooses.

The power of a woman becomes even stronger
when she finds herself and knows who she is;
and doesn't let anyone tell her otherwise.

The power of a woman can make her strong enough
to stand on her own two feet; and finally that woman is independent.
She will not be afraid to ask for help or help herself.

The power of a woman is stronger than the grip of a
lion's teeth when its prey is in its mouth.

The power of a woman is a power no man could live without,
because without a woman there can be no man.

The power of a woman is endless;
so stand tall, and represent all the women in the world. *"Your time is limited, so don't waste it living someone else's life... Don't let the noise of others' opinions drown out your own inner voice. And most important, have the courage to follow your heart and intuition..."* (Steve Jobs)

We often talk about what makes someone successful. We say; Follow your dreams, live the life.

PONDERING ABOUT THE FUTURE



Non-renewable fossil fuels in no distant future will be used up!

Pondering about the future pricks our minds to taking positive actions to forestall the danger that looms. The world is so addicted to fossil fuels which are finite in supply and a major contributor to global warming. What happens when all the fossil fuels reserves have been used up? What is it that will drive the transport sector? What is it that will drive the industrial sector? The earlier we start thinking about this, the brighter we will make the future of our world.



PONDERING ABOUT THE FUTURE



What do we do when all the traditional cooking biomasses disappear?

Traditional cooking biomasses are fast disappearing!

Vegetation cover is giving way for bare ground, forests are giving way for grasslands, and the degraded vegetation is exposing land to degradation making it unsuitable for agriculture or reducing the size of agricultural lands. Women are walking longer distances for fuel wood. When all the vegetation disappears, how will women cook? Gender inequality will be stretched to the maximum.

Does this ring a bell in our ears to start acting now?



WHERE ARE THE ALTERNATIVES?



Promoting access to clean energy is not guaranteed by placing a ban on crude energy sources. Many governments of countries have enacted laws that prohibit cutting of trees. Our experience in the field has revealed a blatant disregard to these laws. This is because, rural people especially has no alternative to fall back at. In situations where government introduces alternatives, they are not affordable by the rural population and not easily accessible. This has been a very big challenge. The question is, should hunger and poverty of the poor be exacerbated in a bid to promote their access to clean energy?

We beg governments of countries to think not just of alternatives, but alternatives that are AFFORDABLE, ACCESSIBLE, RELIABLE and SUSTAINABLE. It is not enough to place a ban without alternatives with these characteristics. We advise that all tiers of governments should take energy issues seriously as it is the backbone of rural livelihoods. Promoting access to clean energy is not about enacting laws only, but also setting a platform for investors, researchers and other players to compete in the clean energy market.

RENEWABLE ENERGY TECHNOLOGIES APPROPRIATE FOR RURAL COMMUNITIES

There are many renewable energy technologies. However, not all of them are appropriate for rural communities. While considering a technology for a rural community, the following should be taken into consideration:

- **Origin of the technology:** is the development of the technology based on the assessed needs of the community? Is the technology foreign or local? Could the manufacturers be contacted when the need arises?
- **Maintenance:** is the technology easy to maintain? Can it be maintained in the community by the community members?
- **Market:** is there a local demand for the technology?
- **Complexity of the technology:** How simple it is to operate?

We will discuss here renewable energy technologies WEP has championed in rural communities in Nigeria: Solar Dryers, Briquetting Machines and wood efficient stoves. These were produced using local technology to address rural energy needs.

TUNNEL SOLAR DRYERS

One of the energy consuming activities in the rural areas is the drying of food products such as fruits, vegetables, livestock products etc. Drying has evolved as a common practice, as it enables women to preserve perishable good for consumption in off-season when these products are not available, thereby providing a vital source of family nutrition, as well as for sale in market. In fact, there are many products, which fetch a better price in the market, when dried and sold.

The most commonly used method for drying of food products, fruits, vegetables, and livestock products is under the open sun. However, open sun drying is slow, has no quality control and collects contaminants like filth from birds and rodents, dust, dirt, and dead insects etc. At the same time, nearly 30-40% of the fruits and vegetables grown in rural areas get spoiled either due to lack of transportation, lack of storage facilities or simply over-production than the local people can consume. If only the excess can be stored and processed properly, there is an automatic activity and employment at the local level with excellent returns and a corresponding impact on livelihood as well. The answer to this challenge is **Solar Dryer**.

Solar Dryers are devices that use solar energy to dry substances, especially food and food crops. Solar dryers are also known as dehydrators. Basically, solar dryers will have a solar collector, air circulation system and a drying chamber. Solar dryers reduce the drying time of crops making it possible for more crops to be dried in a very short time. Solar dryers make maximum use of the solar radiation for speedy drying of agricultural crops.

Tunnel Solar dryers work on the following principle: heat from the sun is captured by the solar collector area of the dryer. The captured heat is retained by the transparent polyethylene material covering the dryer. The heat is circulated within the drying chamber by the air circulation fans powered by the solar panel. This heat concentrates on the crops spread out on the drying chamber of the dryer for speedy drying.

The advantages of using solar dryer include:

- Professional drying technology in the arid and humid regions
- Easy to assemble and dismantle
- Reduced drying time as well as hygienic drying conditions and improved product quality.
- It gives protection from insects, pests, unsuitable climate conditions and dirt.
- Applicable to all agricultural products
- low operation cost without the need for fossil fuel
- Self-regulating airflow depending on the solar energy intensity
- There is no need for continuous supervision
- Economic empowerment tool

Nowadays that some areas are experiencing cloudy conditions rendering the traditional sun drying ineffective, it is important that the use of solar dryers be employed to reduce spoilage of crops.



Tunnel Solar Dryer

BRIQUETTING MACHINES

Briquettes make a very good alternative to fuel wood for cooking and heating. Using fuel wood for cooking does not only bring health challenges to the women and the children, it also reduces the environment's capacity of absorbing CO₂, one of the major greenhouse gases responsible for global warming. Today, the trees which are the major source of rural energy are fast disappearing in our neighborhoods. Their disappearance has placed pressure on the women as they now go extra miles to get them. Their disappearance has also created for others, business opportunities as they go farther to get fuel wood and sell for money. The exploitation of the trees for fuel wood continues to rise as it still remains the biggest energy source for the rural and the urban poor. Briquette is one alternative that will reduce the overdependence on fuel wood.

Briquetting machines produce briquettes from bio-products such as rice husk, saw dust, groundnut pellets and other biomasses that could be compressed and bound together. Because of their high density, briquettes burn slowly, but effectively and efficiently. Lesser number of briquettes are used to cook a meal that more fuel wood sticks would be required.

One good thing about briquetting machine is that, it uses the raw materials available in the communities: rice husk, saw dust, groundnut pellets etc. good enough, these materials are available in almost all the rural communities of Nigeria.

Briquetting cottage industries could be set-up to provide for rural energy needs and create employment opportunities for the rural population. Briquettes save the environment from cutting down of trees and empowers people economically.

To promote the use of briquettes, WEP and partner, Engr. Joel Nwakaire of the Department of Agriculture and Bioresources Engineering, University of Nigeria, Nsukka, designed and produced locally, briquetting machines for the production of briquettes as alternative energy source for the rural and urban poor. WEP wants to see a country where a rural woman has access to clean energy.



Engr. (Mrs.) Bahijjahtu Abubakar, National Coord. Renewable Energy Prog. Federal Ministry of Environment and Engr. Joel Nwakaire demonstrating the use of briquetting machine during its exhibition by WEP as part of their Renewable Energy Programme that seeks to provide alternative source of energy to fuel wood in Abuja



ED, WEP and Nat. Coord. Renewable Energy Prog. Fed. Min. of Env. promoting the use of briquettes as alternatives to fuel wood

WOOD EFFICIENT STOVES

Where the alternative to fuel wood is yet to be introduced or where the alternative cannot serve the whole population, fuel wood should be used efficiently. Traditional wood efficient stoves could be constructed to reduce the number of fuel wood to be used for cooking. This could be constructed with local materials in such a way that the heat from the burning wood is conserved from the wind and is concentrated to the cooking pot. With wood efficient stoves, less wood is used.

Where it becomes inevitable that the use of fuel wood cannot be completely stopped, wood efficient stoves and the practice of households establishing private woodlots should be encouraged. In private wood lot, households plant and nurture trees in their surrounding where they get fuel wood for cooking and heating. The establishment of woodlot by households discourages exploitation of forests for fuel wood business and saves money that would have been used by families to buy fuel wood.

WEP has promoted the use of wood efficient stoves in many rural communities of Nigeria.



WEP trains rural women on the building of wood efficient stoves

WEP PROMOTES RENEWABLE ENERGY TECHNOLOGIES IN RURAL COMMUNITIES - Installs Solar Dryers in two rural communities of Benue State

Worried by the post-harvest losses of agricultural produce in Benue State, Women Environmental Programme (WEP), in collaboration with Irish Aid Nigeria and Buruku Local Government council of Benue State installed two solar dryers in two communities of Adogo and Tyowanye in Buruku Local Government of Benue State.

Speaking at the commissioning ceremony on Wednesday, 6th of March, 2013 in the communities, the Executive Director WEP, Priscilla M. Achakpa decried the post-harvest losses suffered by the communities in particular and North Central Nigeria farmers in general. She narrated a pathetic story of an encounter with a female farmer who told her that a basket full of tomatoes costs N50 less than \$1 US dollar. This is as a result of low market patronage during the peak period of production of tomatoes in the state. According to the farmer, “it's better for us to sell at a low price than for our tomatoes to perish for nothing.”

Touched by this, Ms. Priscilla said, she was moved to do something to address this challenge. Solar Dryer, she said is the way out of addressing post-harvest loses and empowering women. She encouraged the communities to take ownership of this project and use it to their advantage.

In excitement, the people of Adogo and Tyowanye communities poured encomiums on Women Environmental Programme and Irish Aid for coming to their rescue. The community members narrated their ordeals to WEP and Irish Aid: *“We do not fix price for our tomatoes, the buyers decide at what price to buy”* were the words of Kaga Gbeegh, the traditional leader of Shorov Community in Ityowanye. *“The traders wait for us to dispose of our rotten tomatoes, they then go to pick out the ones that are better”* complained the women leader in Adogo community.

Buruku Local Government is one of the local governments in Benue state that is known for large scale tomatoes and pepper production. They however suffer more losses than gains in this business due to the perishable nature of the products as they have no preservation facilities. The installation of solar dryers by Women Environmental Programme in the local government may see the end of rotten tomatoes in Buruku local government.



COMMISSIONING THE SOLAR DRYER AT ADOGO COMMUNITY



COMMISSIONING THE SOLAR DRYER AT TYOWANYE COMMUNITY



WEPED MAKING A SPEECH AT THE COMMISSIONING CEREMONY AT ADOGO COMMUNITY REP.



TRADITIONAL LEADERS OF ADOGO COMMUNITY APPRECIATES IRISH AID AND WEPED FOR ATTENDING TO THEIR NEEDS

WEP COMMISSIONS TWO SOLAR DRYERS SHE INSTALLS IN ADOGO AND TYOWANYE COMMUNITIES OF BURUKU LOCAL GOVERNMENT, BENUE STATE



IRISH AID REP., CIARA ROCHE MAKES A PRESENTATION AT THE COMMISSIONING CEREMONY IN ADOGO COMMUNITY



WEP ED, PRISCILLA ACHAKPA (RIGHT), IRISH AID REP., CIARA ROCHE (MIDDLE) AND JOEL NWAKAIRE (LEFT) AT THE COMMISSIONING CEREMONY IN ADOGO



SOLAR DRYERS INSTALLED AT ADOGO AND TYOWANYE COMMUNITY



"The traders wait for us to dispose of our rotten tomatoes, they then go to pick out the ones that are better" - Women Leader, Adogo community



"Our women do not fix price for their tomatoes, the buyers decide at what price to buy" - Kaga Gbeegh, the traditional leader of Shorov Community in Ityowanye.

SOLAR DRYER EXHIBITION



To facilitate the acceptance of solar dryer by policy makers, community leaders and other stakeholders, WEP modeled a solar dryer that is been exhibited at different conferences and forums. The pictures by the right show WEP ED answering questions relating to solar dryer and a model solar dryer during its exhibition in Makurdi, Benue State.

RUWES PROGRAMME LAUNCHED IN ABUJA

John Baaki and Ruth During

The Federal Ministry of Environment under the Renewable Energy Programme has launched the Rural Women Energy Security Project (RUWES) in Abuja. Speaking at the launch on the 22nd August 2013, at the National Universities Commission, the National Coordinator, Renewable Energy Programme, Federal Ministry of Environment, Engr. (Mrs.) Bahijjahtu Abubakar stated that the programme is targeted towards the underserved rural woman who is usually off grid, energy poor and has the highest incidence of health related issues from harmful energy practices.

According to her, the programme seeks to lower market entry barriers of the clean energy market at every step, from the design of clean energy products, to their commercial production and distribution. The RUWES project works with manufacturers, distributors, consumers of these products, as well as financial institutions and governments to build a lasting market for reliable, practical and affordable clean energy technologies. The RUWES project promotes:

- Clean cooking with the use of clean cook stoves and other clean cooking technologies
- Community based clean energy project implementation for Agricultural communities (Solar Dryers, provision of solar pumps for irrigation), lighting, heating and cooking.
- Provision of bio-digesters for the trapping of biogases for use in homes and business clusters.
- Entrepreneur Incubation.
- Skills Acquisition/Business Model Development

Women Environmental Programme (WEP) is coordinating the rural women to benefit from this programme.



Engr. (Mrs.) Bahijjahtu Abubakar, National Coord. Renewable Energy Prog Federal Ministry of Environment (Right) and the President of Nigerian Market Women Association (Left) at the launch of RUWES project in Abuja.



Cross section of participants at the event



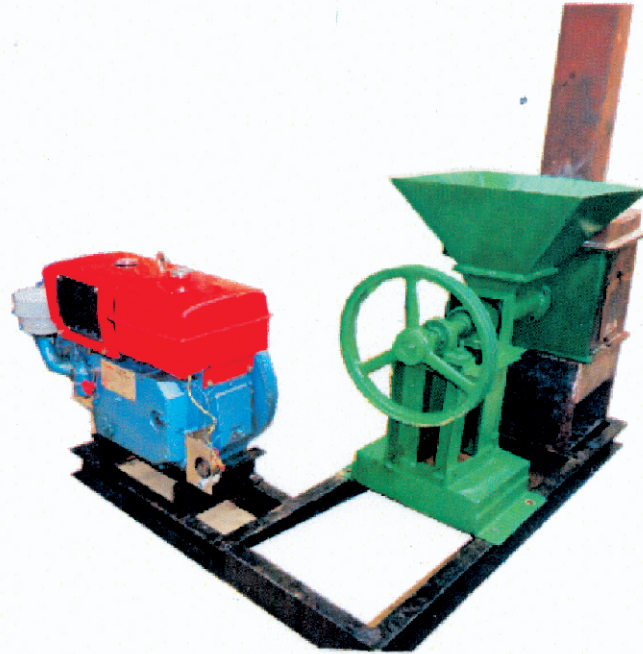
Market Women Association of Nigeria



Clean cook stoves showcased at the event

SAVE THE ENVIRONMENT

from cutting down trees for fuel wood



BRIQUETTES



*Burns slowly
but effectively and efficiently,
environmental friendly*

*The briquettes making machine processes
rice husk, groundnut pellets, saw dust into
a fine heating and cooking material.*



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Introducing



Charles & Doosurgh ABAAGU Foundation is a non-governmental, non-profit, non-political, non-religious and voluntary organization formed in 2010 but registered in 2011 with the Corporate Affairs Commission of Nigeria. The foundation has its head office in Abuja with a field office in Benue State.

The organization emerged in response to the rising waves of insecurity in Nigeria which mostly affects the young people who represent the working population and the anchors of change to the nation. Thus the foundation envisions a world where security and dignity of youth and children is guaranteed and aims at advancing the human security, dignity and education of youths and children in Nigeria. To facilitate this process, the foundation has developed strategies which include mentoring, mental and psychological counseling, talks and educational scholarships; provide platforms to connect young people to share experiences, issues and challenges of the society, foster creative thinking leading to innovative solutions, promote and develop cooperation, entrepreneurship and linkages among young people. The organization creates and sustains interest in socio-economic and political issues among women and youth in Nigeria.

What we do

Schools Without Walls (SWW): This is an initiative of the Foundation to build capacities of women and youth in the communities. This involves skills training and civic education in target communities. The programme identifies, harnesses and develops community resources that will promote educational development of the youth.

Project YES (Youth Empowerment Schemes): This programme engages youths in empowerment programs by providing education and vocational for in and out of school youths towards the acquisition of sustainable means of livelihoods.

Mentoring and Networking Program: This program brings experienced and outstanding personalities in the society in contact with the youths and create the platform for positive influence.

Advocacy for Policy Dialogue: The Foundation through its strategic partnership channels information and experiences from the community level to policy makers and other key actors in youth development to facilitate policy formulation that touch positively on the lives of the youths and women and other community people

Scholarships: The Foundation has so far given scholarships to 6 Nigerian youths to study in higher institutions of learning in Nigeria.

For more information log onto www.abaagufoundation.net

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