



Women Empowerment in Malawi through Sustainable Economic Development: Examples of South-South Cooperation

SUMMARY

The **South - South Technology Transfer: Low Carbon Building Technology project** is an example of an innovative project that set out to demonstrate green technologies that would arrest deforestation, and took an interesting turn of empowering women, through skill development and employment generation.

This paper explores socio-economic opportunities projects such as green technology for brick making can provide to women in Malawi. While the main objective of the project was mitigating GHG emissions and building capacities of the local people on the pilot kiln site, the project also led to entrepreneurship opportunities for women in the brick-making sector, a sector traditionally occupied by men.

Diversification of dignified employment opportunities that can contribute to the economic empowerment of women is welcome. The women in Malawi demonstrated tremendous willingness to use the opportunity to enhance and stabilise their incomes.

The project was implemented by Development Alternatives (DA), and funded by the Government of UK's Department for International Development (DFID) under its Knowledge Partnership Programme (KPP). KPP is managed by a Consortium led by IPE Global Limited under its Knowledge Initiative. From the Government of Malawi, the Department of Energy Affairs, Department of Environment Affairs, National Construction Industry Council were key stakeholders who expressed a keen interest in promotion of low carbon technology in their country.

The project assumes greater significance in the light of the focus on the Sustainable Development Goals (SDGs), wherein sustainable development which mainstreams gender and supports equitable labour force participation, is an area of increasing importance.

INTRODUCTION

Malawi, a landlocked nation in East Africa, is one of the most economically underdeveloped countries in Africa. According to World Bank data, Malawi's per-capita income (in PPP terms, international \$) of \$815 per annum is the [4th lowest in the world](#)<sup>1</sup>.

Women make up 52 per cent of the population. The problem of their underdevelopment is acute. On the Gender Inequality Index (GII) developed by the UNDP in 2015, Malawi ranked [140 among 155 countries](#). This is primarily due to the country's poor performance in key gender-specific indicators such as maternal health, education and wage incomes.

While the labour participation rate among women was high (84.8%) in 2012, there is [significant disparity between men and women](#)<sup>2</sup> in the nature of jobs and wages earned. The unemployment rate among women (2005) at 10.4% was almost twice that among men. Since Malawi is predominantly rural (85%), gender inequalities in rural employment are a major part of the problem. Most rural women work as subsistence farmers, with low wages and minimal land ownership.

The government of Malawi, is making significant efforts to change this existing situation. In addition to developing and implementing legislations and policies that promote women's rights, the government has welcomed enterprising collaborations that lead to dual gains of development and women's economic inclusion.

The DA project promotes non-farm based job creation for the economic empowerment of women and was made possible to a large extent, by the various government policies and initiatives for gender empowerment in Malawi. Some of the important ones are mentioned in the following sections.



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## CREATING AN EMPOWERMENT ENVIRONMENT

Following Malawi's adoption of a democratic government in 1995, the Government has created a conducive legal environment for the promotion of gender equality and women empowerment through the enactment of [gender specific and gender related laws](#)<sup>3</sup> that are guided by international human rights treaties (**See Box: Government Initiatives**). The Constitution of the Republic of Malawi (1994) also has specific provisions with respect to gender equality as a principle of national policy, and special rights for women.

### Government Initiatives

- In 1997, Malawi operationalised the Beijing Declaration and Platform for Action (BDPFA) by producing a National Platform for Action and organising a Bringing Back Beijing Conference hosted by the Civil Society.
- Implementation of the BDPFA using two main approaches, namely: mainstreaming strategies and affirmation action strategies (Malawi Country Report, 2014).
- Passing of the National Gender Policy (NGP) in 2000. The Policy was a guiding framework for the implementation of gender mainstreaming activities in Malawi until 2005 (MOGCS, 2003).
- Launch of the National Gender Programme in 2004 (2004-2009) to operationalise NGP. The programme describes a strategy of gender mainstreaming through the development process to bring about gender equality and the empowerment of women.
- Development of the Gender Mainstreaming Guidelines in 2005
- Passing of The Prevention of Domestic Violence (GBV) Act 2006 to combat violence against women in domestic spaces.
- National Response to Combat Gender Based Violence (2008-2013)
- National Sexual and Reproductive Health and Rights Policy (2009)
- Passing of the Child Care (Justice and Protection) Act in 2010.
- Passing of the Deceased Estates Act (Wills, Inheritance and Protection) Act, 2011 and the Gender Equality Act, 2013 to promote human rights of women
- Malawi Growth and Development Strategy II (2011-2016)
- National HIV and AIDS Strategic Plan (2011-2016)
- Malawi Gender Equality Act, 2013
- National HIV Policy, 2013
- Joint Sector Strategic Plan of the Gender, Children, Youth and Sports Sector Working Group.

Source: [Malawi Gender Gap Report, 2014](#), [MALAWI: Country Gender Profile, 2007](#)



## ADDRESSING DEFORESTATION, EMPOWERING WOMEN

The demand for bricks is high due to increasing urbanisation. Unfortunately, bricks produced through conventional use firewood for the firing process. Around [20 Metric Tonnes](#) (MT) wood is consumed to fire 40,000 bricks. Thus, forests are facing unsustainable pressure. Bricks produced are also not of uniform quality.

*Estimates indicate that 1.7 billion units of burnt clay bricks will be annually required for walling alone. This volume will be produced at the cost of 850,000 MT of wood. At this rate, Malawi was staring at [complete deforestation](#) in 30 years.*

Keeping this in mind, the idea of technology transfer of the **Vertical Shaft Brick Kiln (VSBK)** for Malawi emerged.

DA identified local partners in Malawi for technology support (TARA machines) along with a partner to produce bricks at a commercial scale (Eco-Bricks Ltd) along with a local management support partner in the form of Enterprise Development Holding (EDH). The project also had the support of the Malawi government (Ministry of Environment, Ministry of urban Housing and Development), Small and Medium Enterprise Development institute (SMEDI) and the National Construction Industry Council (NCIC).



### Technical highlights of the Project

- The introduction of VSBK with a Specific Energy Consumption of 0.8 MJ/kg has led to an energy reduction by 75%
- Vast improvement in green brick quality. The density improved from 1.46 to 1.72 gm/cc due to adoption of the moulding technologies.
- Use of alternate fuels (from fuel wood) like coal. There is further potential to explore a low CV and volatile coal, and thus lower price
- Introduction of Internal fuel like tobacco dust in green bricks (5% by weight) for extremely reduced energy consumption
- Reduced breakage from the prevailing to 50% to less than 15%

Source: 'South - South Technology Transfer: Low Carbon Building Technology', Final Narrative Report, DA-TARA, March 2015) – [http://www.ipekpp.com/admin/upload\\_files/Report\\_1\\_18\\_Final\\_18036\\_37742.pdf](http://www.ipekpp.com/admin/upload_files/Report_1_18_Final_18036_37742.pdf)

Upscaling of this South- South Technology Transfer between India and Malawi in Low Carbon Building Technology can lead to several benefits:

- Annual saving of fuel wood: 850,000 tonnes
- Reduction and saving in embodied energy
- Creation of more than 1,000 small to medium scale enterprises
- Improved quality of housing and around 40 per cent cost saving from bricks and mortar alone
- Poverty reduction through job creation
- Reduced exposure to smoke and exhaust gases: Improved working conditions for kiln workers

The Kiln was inaugurated on [Jan 26, 2015 at Salima](#), Malawi in the presence of senior officials from the governments of Malawi, Germany, DFID and India, and the local partners. Through planning and preparation accompanied financial and technological transfers. This was done through (a) Conducting a market assessment (b) Capacity building (c) Transfer of building material technological innovations viz. VSBK; (d) Awareness creation among the local stakeholders to adopt and promote new building technologies; and, (e) Anchoring of technology in local context to ensure sustainability.

Representatives from Technology and Action for Rural Advancement (TARA), Deutsche Gesellschaft für Internationale (GIZ), EcoBricks Ltd, Housing Company, Enterprise Development Holding (EDH) and Centre for Community Organisation and Development (CCODE) were present.

An awareness workshop on cleaner brick technologies was held [on 27th February 2015 in Lilongwe](#), Malawi to introduce the Vertical Shaft Brick Kiln (VSBK) to interested stakeholders as well as disseminate the results of the pilot kiln that was set up. Representatives from the Technical, Entrepreneurial and Vocational Education and Training Authority (TEVETA), National Construction Industry Council (NCIC), Ministry of Land, Housing & Urban Development attended the workshop.

This technology has the potential to transform the housing sector in the country by creating supply of Improved and consistent quality bricks as well as extended brick production. Moreover, this technology also gave **opportunities to train women and deepen their engagement in the construction industry.**

***VSBK is an energy efficient technology covering the entire brick production system. Greenhouse gas emissions are less, making it an obvious choice for the carbon market. No burning of wood is required.***

*The technology gives an opportunity to train women and deepen their engagement in the construction industry.*

## GENDER AND SOCIAL IMPACT

Economic and cultural factors, coupled with institutional factors dictate the gender-based division of labour in Malawi. Women have a negligible role to play in sectors such as construction, housing and urban development. This is unlike the experience in India. India's construction labour force is estimated at [30 million people](#)<sup>6</sup>; about half are women.

The technology transfer with its built in capacity building has led to the training of unskilled labour and provision of local jobs. Being a decentralised technology, such enhanced opportunities can be created in every constituency.

Under the project, women were trained in the use of the soft mud moulding machine. Twelve women were initially trained in green brickmaking both through hand moulding and through use of the Soft Mud Moulding machine.

When the Minister of Land, Housing, Urban Development visited the kiln, he particularly appreciated the fact that women were an integral part of the trained cadre at the kiln. He encouraged the women to learn to make the perfect brick, using the machine and promised to be back to check on them and their progress.

The decision to build schools, hospitals and community centres in every constituency is expected to mainstream this technology as the government is now suggesting that bricks for construction of all donor and government projects be sourced through use of VSBK.



## WAY FORWARD

A scale up which is beneficial for women could keep in mind some broad recommendations:

- The training at kilns could focus on women, perhaps with a built in requirement of choosing at least a certain percentage of female employees as a policy
- Training support to include a component of gender awareness
- Linking trained women to women federations to facilitate government linkage and entrepreneurship development
- Possibility of women owned cooperatives running the kilns
- Linking this project to other initiatives focusing on economic empowerment of women in Malawi. These could include bank linkages and microfinance projects, educational and vocational training, sustainable livelihood and urban development initiatives etc.

All women are paid a monthly salary of around MK 45,000, which is three times the usual wage rate. They are regular staff members of Eco Bricks Ltd and enjoy all the social security benefits of the business.



Women sorting bricks in the VSBK- Lilongwe, Malawi

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## Women's Narratives: Voicing a Vision for a Better Tomorrow

The following narratives have been put together by DA to capture the voices of women associated with the project.



There is no limit to the excitement of an individual employed for the first time. Elita Kwisongole's happiness is therefore natural. To acquire a job in a country where the Human Development Index is 0.414 (UNDP, 2013), Elita considers herself to be fortunate and blessed. Through her salary, she

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*"I am 27 years old and this is my first job. I really like to work with machines and want to explore the brick sector."*

supports her family and takes care of her grandfather. Her life exemplifies the increasing number of women preferring to work in the construction sector. Brick making in Malawi has always been male centric.

Women are seen working on fields or at small road side shops, besides their daily household chores and responsibilities. What is notable is that this South-South Development Cooperation project, introducing the VSBK has employed 40 women amongst their 100 employees. Breaking the gender bias in the construction sector and (by) getting trained in a new technology Elita testifies the efficiency and capability of women in this domain.

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Ruth aged 37 works at the Vertical Shaft Brick Kiln (VSBK) in Mthyoke, Malawi. "All my life I have been engrossed in taking care of my family. I was married at the age of sixteen...this is my first job," says Ruth. Explaining the giant leap forward she reaffirmed, "Today I am economically empowered and take my own decisions in life. I have been investing in agricultural fertilizers and buying construction materials to build a house of my own." She is also happy that she has paved a way for her children to move beyond using wood as fuel and explore the opportunity of using other domestic energy resources like coal.

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*"I have been associated with VSBK since the time the foundation was laid. I have seen it grow gradually. It is now an integral part of my life, supporting me and my family"*

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**Iness Chimpeni** says "Prior to VSBK I had a business of my own where I used to sell doughnuts and earn MK 5,000 per month." With the introduction of the VSBK technology, 21 year old Iness

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*"I would like to have my own brick business, but not the regular type of kilns that I see. There are for men. In the future I will have my own small VSBK, producing and selling bricks and even building houses"*

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earns MK 45,000 per month. Residing with her family at Satzima village near the VSBK site she further explains, "I live with my parents, seven sisters and one brother. Although I did complete my primary school I couldn't pursue secondary education as it was expensive." Today she not only supports her

family but also invests in agricultural fertilizers. She grows tobacco, groundnut and other vegetables in her field. "I invested in fertilisers and rearing pigs to generate extra income. It helps me lead a life of independence" says the budding entrepreneur.

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*KPP is a South-South cooperation programme promoting knowledge sharing in the areas of Food Security, Resource Scarcity and Climate Change; Health and Disease Control; Trade and Investment; and Women and Girls. KPP is funded by the Government of UK's Department for International Development (DFID) and managed by a consortium led by IPE Global Private Limited under its Knowledge Initiative. The main objective of KPP is 'Gathering and uptake of evidence on issues central to India's national development that have potential for replication in LICs and impact on global poverty'.*

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