

*A workshop on Cleaner Brick Production Technologies was organised on November 10, 2015 at Ufulu Garden Hotel, Lilongwe, Malawi. This workshop aimed to showcase alternate brick production technologies and other green technologies introduced in Malawi to attract and facilitate entrepreneurship development. Large scale adoption of these technologies can help reduce the pressure on the fast depleting Malawian forests.*

*In addition to government participation, over 80 entrepreneurs and contractors were present.*



Technology for the first TARA-EcoKiln was transferred to EcoMatters Ltd, which is running successfully in Mythoka, and supplying bricks to Lilongwe for close to a year now.

The TARA-EcoKiln is an eco-friendly process for making fired bricks replacing burning of wood with agricultural and industrial residue and coal. This technology transfer took place under the aegis of the Knowledge Partnership Programme (KPP) supported by DFID in partnership with IPE Global.

Jones Nyirenda, Chief Executive Officer, EcoMatters Ltd opened the workshop with a welcome address, presenting an opportunity to venture in clean technologies, essential for the growth and progress of Malawi. He further invited the participants to see the demonstrated success of the technology and products for uptake and replication.

Soumen Maity, Chief General Manager, TARA informed on the history of brickmaking globally and the technical aspects of the TARA Eco-Kiln along with the adoption of this technology in Malawi. He stated the advantages of this technology which included prevention of fuel-wood burning and a reduction in CO<sub>2</sub> emissions and a close to 80 per cent saving of energy. He further informed that all equipment and materials required for the technology could be manufactured in Malawi with necessary support.

Peter Schramm, Technical Director, Eco-Matters presented the business case for the technology, proving its techno-commercial viability. He highlighted the operational aspects of the Eco-Kiln in terms of investments required for people and money. He also presented different scenarios for establishing different scales of the TARA EcoKiln enterprises.

The envisaged surge in demand of building materials and technologies due to increasing population and rate of urbanisation, can be met without stress on Malawi's resource base.

The annual estimate of 21,000 housing units required to meet the urban housing demand with the current rates of urbanisation, will in turn require around 1.7 billion units of burnt clay bricks annually.

Charles C Kazembe, Chief Executive Officer, Small & Medium Enterprises Development Institute (SMEDI) highlighted the enterprise opportunities in the brick sector stating that the market was ripe in the country. He inspired the Malawians to invest in SMEs and especially in the brick sector given the potential. He elucidated that the construction sector can only bloom if it is backed by robust supply of materials by efficient SMEs.

Gerald T Khonje, Technical Director, National Construction Industry Council (NCIC) reiterated the need for exploring eco-friendly technologies, given the massive current resource consumption and subsequent depletion of limited resources. This situation called for innovative construction and material production and entrepreneurship development on the same.

Highlighting the importance of product quality, Willy Muyila, Deputy Director General, Malawi Bureau of Standards, elaborated on the need for quality and performance standards for bricks in Malawi. He informed on the role of Malawi Bureau of Standards (MBS) as a standard code of practice for red clay bricks. The MBS tests and certifies the building blocks and local authorities need to ensure that projects only use certified products. The MBS has collaborated with NCIC to register and certify contractors, material suppliers and developers. The TARA-EcoKiln delivers quality bricks that also reduces the amount of cement consumed, thus bringing down the overall cost of construction.

“In order to promote and accelerate the adoption of cleaner brick production technologies, the Ministry of Natural Resources, Energy and Mining intends to submit a cabinet paper on the phase out of the use of burnt bricks and to promote the use of alternative materials, including the Eco-Kiln, to control the degradation of the environment and natural resources. It also intends to open up the infrastructure sector in the next decades and create favourable investment opportunities.” ~ Dr. Yanira Ntupanyama, Chief Director for Environment and Climate Change

Dr. Yanira Ntupanyama, Chief Director for Environment and Climate Change, Government of Malawi, the workshop chair stressed upon the need for introducing such technologies that can mitigate the effects of deforestation, flooding and loss of life and property.

A visit to the EcoKiln was organised to enable potential entrepreneurs to observe the unit in operation and interact with the staff. This also provided an opportunity for buyers and developers to place orders for the purchase of energy efficient bricks.

