

Green Jobs in Asia Project



Employment Creation Model in Philippines

Promoting Green Jobs and Livelihoods in Environmentally Sustainable Construction of Social Housing

Background and Justification

Buildings put a tremendous strain on our environment, being responsible for a significant share of global energy use (approx. 40%), resource consumption (more than 30%) and waste generation (30% of solid waste). This is particularly the case in metro Manila and other cities where population densities are high. The Intergovernmental Panel on Climate Change 2007 report pointed out that relatively low-cost modifications to the buildings sector have the greatest potential to reduce greenhouse gas (GHG) emissions (the buildings sector accounts for 30% of GHGs).

The ILO's constituents in the Philippines have endorsed environmentally sustainable construction in the social housing sector due to its potential for poverty reduction by scaling up as a national employment model. This supports government priorities as national policies are already in place to support green jobs promotion within the social housing sector.



National Frameworks

The National Labour and Employment Plan (2011-2016) has identified social housing as a sector for decent work employment generation. The Philippine Development Plan for 2011-2016 includes decent and affordable housing as a means for inclusive growth. The National Climate Change Action Plan lists climate adaptive housing and climate-proofing of infrastructure as integral outputs. Furthermore, the Housing and Urban Development Council (HUDCC) accredits appropriate materials and technology for construction of housing facilities. HUDCC also comprises the National Housing Authority (NHA), which is the sole national agency mandated to engage in housing production for low income families. Amongst the private sector, the Philippine Green Building Council recently launched the Building for Ecologically Responsive Design through Excellence (BERDE), a voluntary rating system of sustainable/green buildings which guide member industries in their building construction.

Sustainable Construction Employment Creation Model

The construction of social housing is not typically considered a testing ground for green innovation. However, eligible residents of the Southville 8 housing project in Rodriguez, Rizal are learning the skills necessary for the production and installation of environmentally-friendly construction materials, improving their employment prospects and creating a healthier, more climate-secure community in the process. The employment model in sustainable construction for the Philippines establishes a strategy for the creation of green/er jobs. It does so by supporting innovative partnerships and developing curricula for skills, entrepreneurship and financial training to promote green jobs for low-income communities, with a particular focus on women. This strategy is based on the construction of new-build projects, involving a multi-tiered approach, with partners drawn from both the public and private sectors.

Application of Selected Green Products

Following a **feasibility study** two building products were selected on the basis of their economic viability, environmental sustainability and potential for supporting decent work. Through learning-by-doing skills trainings, modified concrete hollow blocks (mCHB) using recyclable materials including PET plastic for reinforcement and Coco Coir based erosion control systems (e.g. soil erosion nets along riverbanks) are being produced. The **application of products** is being promoted to prove their triple bottom line benefits and value throughout the supply chain with potential to scale up for wider-scale industrial production.

Capacity Building and Technical Training

A three-tiered training approach has been applied. It begins with lower skilled hands-on training for production of modified concrete hollow blocks (mCHB) and Coco Coir Nets (as well as laying the nets) for those living within the social housing community. A second tier involves multi-skilling of workers through curricular development of Green Masonry integrated into existing Masonry Curriculum. This is conducted in partnership with the Technical Education and Skills Development Authority, HOLCIM Ltd. and the Association for Construction Informal Workers. Finally, training for professionals has been arranged for private developers, architects and NHA staff via the development of a green social housing guide.

This guide, based on BERDE voluntary standards and other appropriate technology guides and standards, is currently under development by the project in partnership with the Philippines Green Building Council. The "green socialized housing guide" includes guidelines on decent work and is being developed as a voluntary framework for standards. Its endorsement by the National Housing Authority will further promote a green social housing sector.

Orientation seminars to explain **labour standards** have been conducted through training of community green enterprises and workers guilds (on minimum wage, right to representation, social dialogue etc.). Training on **Occupational Safety and Health** (OSH) for private developers and the NHA have been carried out.



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Green Community Based Enterprise Development

A Community Based Coco-net Enterprise is being formed through provision of business development support and registration with the Philippine Security Exchange Commission. Association building, technical trainings and project support for the formation of this community-based enterprise provides a key entry point for greening the social housing sector. Pilot interventions initially focus on the production of 1500 square meter of coco-net for soil erosion control, with expansion plans of the Department of Labor and Employment (DOLE). Support is being given to establishing workers' guilds and associations amongst community workers through assistance in organizational development, social dialogue and registration to DOLE through partnership with national affiliates of the Building Workers International (BWint).

Partners and Structures

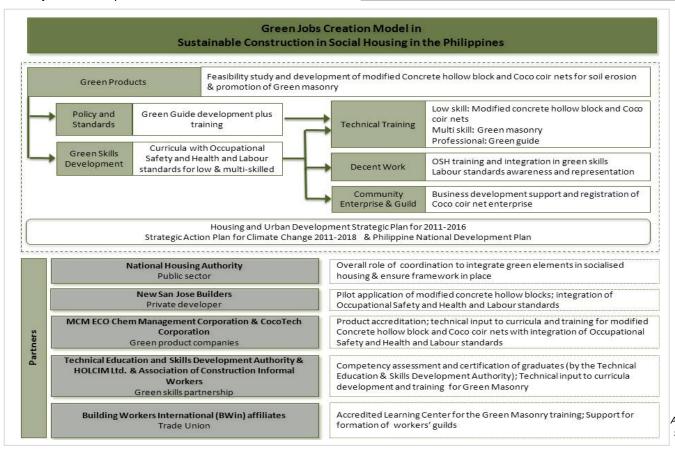
A public-private partnership has been established with the National Housing Authority, the private developer 'New San Jose Builders' as well as with two private enterprises marketing the mCHB and Coco Coir Net. The suppliers of the construction materials provide technical inputs for training which are used to replicate the community based enterprise model.

Through collaboration with the Technical Education and Skills Development Authority, HOLCIM Ltd., and the Association of Construction Informal Workers' Learning Center, a Green Mason Curriculum is planned for development. The project is cooperating with the National Union of Construction Workers (affiliated with BWint) for the formation of workers' guilds to support association building and community mobilization efforts.

Way forward

The National Housing Authority has expressed interest in expanding the use of sustainable building materials in future social housing development projects, creating an opportunity for the promotion of green public procurement through more concerted supply and demand side initiatives. Interventions will focus on up-scaling community-based training activities (Coco Coir Nets and mCHB) with national social partners to further drive the development of environmentally-friendly goods and services in the construction sector.

Efforts are being made to employ this strategy in areas affected by natural disasters, where reconstruction and recovery plans present options to generate more sustainable livelihoods through the production of green construction materials for the local market.



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9 July 2012

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