WFWO - SHH – Strategy Partnership Agreement for Development

Project Facility
Why Strategy Partnership Agreement for Development?

WFWO and the SHH have formally agreed to establish and work within this partnership agreement. The overall purpose of the partnership is to enable both parties to contribute to the realization of their mission, in particular as they relate to the development and implementation of projects relevant social housing programs and organizational strengthening to achieve their common objectives as per terms and conditions agreed to contribute to 2030 Agenda and UN Sustainable Development Goals SDGs 17.

WFWO and the SHH view partnership as a high quality, mutually trusting relationship between parties who are committed to sharing responsibility for achieving common goals; promoting learning from experience and seeking solutions together; and whose strengths complement each other.

WFWO project facility is committed and intends with the support of SHH to focus on housing strategies to realize the right to housing and infrastructural and basic services to fulfill commitments made in the 2030 Agenda for Sustainable Development and the New Urban Agenda.

Contents

1. Description/achievement of initiative
2. Partnership agreement for development
3. SHH Solution: First intervention buildings
4. Construction steps
5. Mass production of houses
6. Local job creation
7. Industrialized System vs. Conventional System
8. Other products
1. Description/achievement of initiative

Our contribution to sustainable sources of social housing and infrastructural for future generations is one of the great challenges of our time. Social housing and infrastructural facilities projects can underpin future prosperity by acting as critical pieces of infrastructure that support the wider socio-economic development efforts of developing countries. WFWO/SHH is a project facility to build a great quality of residents based on SHH own model-house method and to provide sustainable life for them. Starting from Peru, SHH has built a total of 10,000 houses, and is planning to expand into various regions. WFWO/SHH began this initiative to improve poor living conditions and residents and contribute to achieving SDG 1/7/8/9/10/11/17.

2. Partnership agreement for development

WFWO/SHH project facility is already working as pilot projects in 2017 in the following countries partners, Ecuador, Nigeria, Sri Lanka, Morocco, we are planning to expend this initiative WFWO /SHH project facility in developing countries around the world to contribute to the achievement of SDG 1/7/8/9/10/11/17.
WFWO selected to work as partner with SHH, which is part of Gaptek Group, a company specialized in manufacturing hangars, social houses, emergency, hospital, schools, airport, industrial warehouses, modular buildings and large span singular structures. SHH line of work includes the design, engineering, production, installation, maintenance and, above all, integral management.

Based on SHH’s high technology and experience, WFWO/SHH is solving the issue of social housing in local communities. In order to test SHH’s work, the SHH Project was successfully implemented in Peru in 2009 as a pilot project. In order to contribute to achieving UN SDG 1/7/8/9/10/11/17, WFWO/SHH is endeavouring to spread its sustainable social houses model all over the world, which will be used to build social houses and basic services such as hospital, schools, and infrastructural facilities, Eco tourism villages.

Additionally, developed high manganese anti-vibration steel that anti-vibration effect is efficient. With these methods, materials and technology, WFWO/SHH is applying them into various types of buildings and houses, guarantee delivered schedules, the system for all types (Models) of construction of hoses and building, is certificated by the top international institutions.
3. SHH Solution: first intervention buildings

From these harsh conditions...

To a brand new life.
4. Construction Steps

1. In the 6 months during which the SHH factory is built, the company hires and trains all the local necessary personnel.

2. The moulds are assembled using Upcrete® technology.

3. The structure is composed by concrete and manufactured using the moulds.

4. Regular quality controls are executed in order to ensure the pre-defined quality standard.

5. Once the structure is ready to be transported, it is elevated using bridge cranes in order to leave the site.

6. The house structure leaves the site to be transported to its destination.
7. The house is carried by a truck to its destination.

8. The house is located using a crane.

9. A variety of supporting elements are added

10. There are different options in terms of finishes.

5. Mass Production Of Houses

1. Quality
   We ensure a pre-defined quality throughout the production process. The company’s own construction system uses 900 kg/cm² concrete, whereas traditional buildings employ 240 kg/cm² concrete, making ours much more durable and safer. This concrete allows the possibility of future vertical expansions, due to its great strength. Our solution enables the generation of a durable real estate asset. The SHH system ensures that after 20 years the buyer will have a property that represents a strong investment.

2. Delivery times
   Deliveries are made on time thanks to our production system, which is similar to an automotive assembly line. The production rate is constant and not affected by weather conditions.

3. Better prices
   SHH offers better prices for the same specifications and materials. Raw material losses are 0.5% for concrete, and 0.2% for steel. How much would an economy car cost if it had to be assembled by hand?
6. Local Job Creation

The company would hire and train a minimum of 150 workers, in addition to generating 450 indirect jobst through subsidiary companies.

<table>
<thead>
<tr>
<th>Factory type</th>
<th>Factory surface area in Ha</th>
<th>m² built per year</th>
<th>House of 60 m²</th>
<th>People hired</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>1.5</td>
<td>60,000</td>
<td>1,000</td>
<td>150</td>
</tr>
<tr>
<td>Model 2</td>
<td>2</td>
<td>120,000</td>
<td>2,000</td>
<td>250</td>
</tr>
<tr>
<td>Model 3</td>
<td>3</td>
<td>240,000</td>
<td>4,000</td>
<td>600</td>
</tr>
</tbody>
</table>

7. Industrialized System Vs Conventional System

**Conventional System**
- It takes some 2 months to hire personnel and acquire the materials and tools to start the project.
- After 6 additional months the first set of houses is delivered. It takes the same amount of time to deliver the second set.
- Human errors can be encountered during the construction process, affecting the safety of the building.

**SHH Industrialised System**
- In the 6 months during which the SHH factory is built, the company hires and trains all the local necessary personnel.
- SHH makes continuous deliveries of houses sets.
- Construction rate is linear and without interruptions.
8. Other Products

Habitable Module

- Humanitarian Hospital in Remote, limited resource settings.
- Can be connected to other modular sections to create any medical structure.
- An effective solution where construction materials are not available.
- The modular buildings are scalable, which means that one unit can be constructed first and then other units can be added to the initial module.
- The aluminium structure does not require any protection due to its anti corrosion properties.
Uses

- Housing
- Pharmacy
- Canteen
- Sleeping quarter
- Hospital
- School
- Market

Modular Market

- Construction system allows to construct with local resources, as its machined joints without welding technology simplifies the assembly process without needing highly specialized labour.
- This system allows to construct in a short period of time multifunctional buildings in complex scenarios.

Industrial Warehouses

- The industrial warehouse could be used for the storage of multiple goods such as medical products and tools, food products or be used as a logistic center.