

# Green Entrepreneurship

Successful business cases of Green Entrepreneurs in the Mediterranean



## ADAPT Egypt: Low cost housing and training for low income communities

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**Project Name:** ADAPT Egypt  
**City, country:** Cairo, Egypt  
**Name of entrepreneur/ founder:** Arch. Hany El-Miniawy

**Description:** Organisation developing low-cost, environmentally- friendly housing for squatter and other low-income/neglected remote areas in Egypt, reducing the cost of housing by 30 % and training low income groups to build their own houses. There are three main components to the initiative;

- 1) **Local materials;** reducing dependency on expensive imported, mass-produced, and environmentally unfriendly building materials by participating with local communities to test and improve the properties of local material, using simple non-polluting production and construction methods. Through experimentation with local ingredients used by the ancient Egyptians and the treatment of polluting materials such as rice straw, cement dust, and iron ash, Hany has been able to create low-cost, government-certified, environmentally-friendly construction materials.
- 2) **Affordable construction techniques;** techniques that are easier, faster, and more affordable than the techniques currently used to build homes.
- 3) **Training;** the know-how of building materials and techniques are transferred to the youth in low-income, illegal communities, adopting a participatory approach and a mutual-learning process that incorporates local construction knowledge and styles.

**Investment:** *Start up capital:* None.  
*Rate of return:* Not applicable.  
*Sources of funding:* Each project is started as a pilot with varying investment costs, and a consultancy firm is now being developed to generate additional source of revenue.

**Stakeholders:** Civil Society Organizations, Settlers in informal areas, Government and local authorities, Social leaders

**Employment generation:** Depends on the project, the numbers of workers in construction, urban upgrading, and rehabilitation of facilities vary, which includes on the job sustainability for the local community.

**Timeline:** 1976 Original team started in Algeria including late Arch. Hamdy Diab, Arch. Abdelrahman El-Miniawy, Arch. Hammam El Mistikawy  
 1998 ADAPT Egypt established with the team of Arch. EL-Miniawy and his wife Arch. Sanaa Tobah.

**Geo-social-economic setting:** Traditionally, the government has responded to the increasing phenomenon of informal housing by either “upgrading” it or by forcibly evicting residents and demolishing informal structures to accommodate new developments and/or high-income housing. The latter approach is the most common, as upgrading is extremely expensive. The displaced residents of the informal area either resettle to housing compounds even farther away or they are given compensation to seek other housing arrangements. However, in many cases the eviction is carried out without compensation or the securing of appropriate alternative shelter.

<b>Geo-social-economic setting:</b>	Egyptian shantytowns vary in quality from houses made of adobe and cement to shacks made out of sheets of metal, cloth, and even cardboard. According to Hany, mass-produced building materials such as red bricks and reinforced concrete are unreliable because their costs are tied to international markets. At the same time, local building materials used by indigenous populations in rural and desert environments are often not resistant to harsh environmental conditions such as earthquakes and heavy rains. Hany's work suggests that it is possible to develop building materials tailored to each local environment through a scientific process of testing and designing building materials, combined with construction training.
<b>Key features:</b>	Green construction / Low-cost housing / Employment generation / Efficient use of local resources.
<b>Overall rationale and motivation:</b>	The founder El-Miniawy, was driven by his passion for socially-sensitive architecture which he studied in Germany and chose to conduct his practice in Algeria, a place where he felt his knowledge would be needed. The brief stay in Algeria became a 15-year journey of development and growth until his return to continue in his home country Egypt.
<b>Strengths:</b>	Direct improvements to the living conditions of 13,000 individuals in Egypt.
<b>Challenges and constraints:</b>	No information given.
<b>Direct activities and impacts:</b>	<i>Social:</i> Han has trained hundreds of individuals to spread the idea of sustainable, local, and environmentally-sound building methods and improved the living conditions of roughly 13,000 individuals in Egypt. Some of the projects include: upgrading and rehabilitating rural houses and apartment buildings in Luxor, in the south of Egypt; upgrading informal settlements in Imbaba, a squatter area in Cairo; and upgrading home materials in Idfu, a city by the Nile. <i>Environmental:</i> Traditional building techniques used with use of renewable materials and minimal waste. <i>Economic:</i> The Egyptian Ministry of Housing has come to adopt Hany's strategy in a number of ways, including discussing the integration of youth employment and community participation within Hany's methodology.
<b>Use of innovative technologies:</b>	No information given.
<b>Evidence of a holistic approach/world view:</b>	Traditional Egyptian building techniques are being investigated and young people being trained in this field.
<b>Scale of benefits:</b>	Hundreds of individuals trained and 13,000 individuals have improved living conditions. Hany continues to receive international recognition for his work. In 2008, he was awarded with two international achievement prizes: the Vassilis Sgoutas Prize for Architects from the International Union of Architects and an award from the Tech Museum.
<b>Government policies, incentives and regulations needed:</b>	No information given.
<b>Lessons and recommendations:</b>	No information given.
<b>References:</b>	<a href="http://www.ashoka-arab.org/egypt/hany-el-miniawy.html">www.ashoka-arab.org/egypt/hany-el-miniawy.html</a> <a href="http://www.youtube.com/watch?v=1uyNSE_2_HM&amp;feature=player_embedded">www.youtube.com/watch?v=1uyNSE_2_HM&amp;feature=player_embedded</a>