Amphibious dwellings in informal settlements, Lagos, Nigeria

Project description by author

Lagos is experiencing a population explosion creating the enormous challenge of providing decent and sustainable housing. An estimated 6 million people live in the informal settlements within the city, resulting in chaos and deplorable living conditions. Out of this seething mass emerges an urban Darwinian ethic. The resulting maximization of ingenuity and energy utilizing materials at hand and unfettered labors provides an insight into the human will to survive.

The utilization of amphibious dwellings in informal settlements like Makoko on Lagos Island and Barriga on the Lagos of Lagos offers a means of locating residents closer to their source of income. Residents depend on markets in the inner city areas for income. Buying and selling anything of value for minimal profit margins in a daily struggle to survive. Rags, discarded plastics, paper, and glass are recycled, reused and sold. Shelters reflect the ebb and flow of opportunity and are built incrementally with materials considered as trash, such as recycled wood from construction sites, plastic foils, used sheet metal, reeds and thatch. In order to assure minimum sanitation, the dwellings will be equipped with rainwater catchment, purification units, and dry compost toilets. These dwellings on the other hand abandoned and contaminated coastal strips will be legal, cheap and easy to maintain. Since the dwellings are not too far away from the city center, they provide multiple opportunities for day labor and small businesses. This project has been commended due to its fresh and simple approach to a globally-present problem in urban areas.

Relevance to target issues by author

Quantum change and transferability

The proposal embraces informal urban settlements and relocates them on amphibious platforms as a legitimate housing solution. The utilization of low-cost or no-cost (found) materials drives a sustainable approach to housing squatters. This low-tech answer is compatible with climate change and transferable to urban areas located near waterways, rivers, and coastal areas worldwide.

Ethical standards and social equity

Amphibious dwellings provide solutions rather than just relocating problems. Responsible housing solutions are offered to “invisible” members of our society. Through transfer of knowledge, residents will be empowered to build shelter for themselves. The resultant communities and cottage industries will enhance quality of life.

Ecological quality and energy conservation

Low tech and inexpensive technologies provide rainwater collection and solid waste treatment for low ecological impact. Proliferation of disease and degradation of the environment are mitigated. The use of otherwise neglected areas for housing delivers high land use efficiency.

Economic performance and compatibility

Utilization of the abundant human energy and resourcefulness already available maximizes the potential feasibility of the project. Squatters will be able to build shelter as their resources permit. Micro-credit and community based support ensure a growth of infrastructure and cottage industries.

Contextual and aesthetic impact

The aesthetics of cultural identity and traditions are reflected in the ability to artistically personalize façades of amphibious dwellings, just like is often the case in conventional shelter. The synergy created by ingenuity and necessity will result in a multifunctional, vibrant, and ever changing colorful addition to the urban fabric.