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Construction of floating houses or house boats in India or foreign countries at cheap rate 1.5 lakhs to 6 lakhs for poor, middle and upper class during flood, cyclone etc due to environmental pollution

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Abstract : In this article we are facing environmental problems in day to day life. We want to take the necessary steps to protect the future. The environmental problem creates more danger to our life we want to save 819 crores people and nuclear war in nature. We want to construct floating houses in future during flood cyclone at a cheap rate
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I. INTRODUCTION

Introduction
"Floating" term in the establishment designing is utilized when the dirt underneath the balance encounters no additional heap, as the heap of the construction is equivalent or not exactly the dirt uprooted. Drifting houses are comparative in idea and can be characterized those houses which are developed on water such that the heap of the design is equivalent or not exactly the elevate power of the water which helps in drifting the house on water. Customary houses like houses on boats have versatility while now drifting houses are viewed as those houses which are utilized as residing spaces on water that are negligibly portable other than moving upward with the tide. Not at all like a houseboat, a float house isn't self-pushed however some more modest float houses can be moved by connecting a detachable engine to them. Holland has many float houses as they have begun involving water as an asset for development of houses.

Conventional drifting houses, ordinarily houseboats, were underlying different nations in the spots inclined to floods, close to shorelines and on the lakes and streams. In Australia, particularly on the Murray Waterway and the bright shore of Queensland, there are many mechanized barge based houseboats with at least two bed rooms, some of them even have multi-storeyed construction. Houseboats are likewise in Lake Eldon in Victoria and in Hawkesbury Waterway close to Sydney. Comparatively drifting houses/houseboats are accessible in Canada, Germany, Hong Kong, Laos, New Zealand, Serbia, UK, USA, Thailand and India. In India, houseboats have been customarily developed in Kashmir, Kerala and in Assam. Houseboats are additionally extremely famous for sporting exercises for gatherings of any age however for private purposes, it is Holland where houses are planned, developed and are sought after

Floating houses are currently developed which float just during floods. In this manner, there are two sorts of drifting houses, one which forever float and other that float just during rising waters else get put on ground, especially during dry season when there is no water. A few houses which were built on braces or heaps because of wellbeing prerequisites during floods in many regions of the planet and in India as well, as in West Bengal, Assam and different parts, are not really drifting houses in evident sense. Drifting houses are in obvious sense are those which don't need establishment and depend on the standard of lightness

subsequently are additionally called light homes. Subsequently the foundation of the design should be with the end goal that it helps in drifting also ready to take the dead heap of the house, live burden and different burdens to be experienced by the house. In this manner the house might be built on boats, empty lines, light weight cushions and comparative materials which help in the drifting too taking up loads. Buoyancy Frameworks presently being utilized incorporate log floats, strong Styrofoam encased in elastic, froth filled steel barges, positive concrete, substantial ferrocement boats, cement and froth, wood and froth, polyethylene shell with strong center polystyrene block formed inside, fiberglass and so on.

Houses which get inspire during floods and drop down during conditions when no water is there are directed upward, adjustably. A steel outline that holds the buoyancy blocks is connected to the underside of the house. There are four 'vertical direction' posts not a long way from the edges of the house. The highest points of the posts are connected to the steel outline. The posts telescope out of the ground, permitting the house to go all over.

Need of Drifting Houses

In low lying nation like Holland, arranging was centered around isolating and keeping up with the division among land and water by recovering area from the ocean by building dams and elevating embankments. In any case, the need to develop protected and financial houses where 66% of the populace lives beneath ocean level, Dutch organizers began hoping to utilize water as an asset itself. Issue turned out to be further intense somewhat recently because of a worldwide temperature alteration prompting rising water combined with a few strangely dry summers. The ocean level is said to have ascended by 20 centimeters somewhat recently and is supposed to ascend by multiple times that sum in the 21st 100 years. Consequently drifting houses is turning into a need before very long.

One Dutch development organization, perceiving the developing shortage of land in the Netherlands began to assemble houses on water. Ooms Bouwmaatschappij has assembled the initial eight of 500 arranged drifting houses on the edges of Amsterdam, the capital of the world's third most thickly populated country. The houses, which are intended to endure storms, are based on drifting stages. Frits Schoute, a previous teacher at Delft College, is dealing with a settling stage that would allow networks to live in the center of seas, unaffected by waves. He anticipates that colonization by these drifting urban areas should happen in the following 20 years.

Fundamental Standard of Development

By and large there are two fundamental standards for making drifting houses. First is the boat standard where one makes a strong stage, lighter than the water and the other in view of the boat in which an empty substantial box is made which is open on the top. The boat guideline has the advantage of its utilization in shallow water, contrasted with the empty substantial box while the substantial box has the advantage of higher space use inside as a piece of the structure. Both kind of drifting houses are associated with an adaptable association with the quay, so the houses can ascend with the water when the tide changes. At the point when required the drifting framework can be moved somewhere else at short notification without passing on any scar to the climate. Rather another house can be set in to the old circumstance which makes it the most supportable and sturdy method for building. The drifting houses worked by +31architects depend on the empty substantial box.

The house is sited inside a wet dock including holding walls and base section. While flooding happens the dock loads up with water and the house rises in like manner. Likewise when water dies down, houses descend. Every one of the lines, channels and wires for water, gas, power and sewage removal in such "land and/or water capable" homes are adaptable, intended to stay useful in any event, when the house rises a few meters from its typical position. Land and/or water capable homes that lay ashore are likewise worked for rising circumstances. According to the originators, Component Architecten, when the stream has the flooding conditions, their homes will drift however much 18 feet and floats down as the water dies down.

Offering types of assistance in a drifting house is a test which incorporates water supply, power and latrines. Subsequently, green structure idea must be continued in the drifting houses which utilize non traditional assets for energy, utilize side-effects, and reuses the water. Net zero energy structures are more valuable as they don't need extra energy from outside source and all out energy request is met from on location age power. Regularly sun powered chargers are accommodated the energy necessities. Because of tasteful requiurements too energy productivity, rooftop garden is likewise becoming famous. Different measures like incinolet latrines to consume squander, geothermal lake circles into the floor, and filtration unit for drinking water gathered from rainstorms. 'New Water', Netherland made arrangements for utilizing 25% less energy than a customary structure because of the utilization of water cooling methods.

Life in a Drifting House

In the event that somebody is partial to loosening up climate, sentimentalism and residing on the water, there are a lot of motivations to reside on a drifting home. Repeating cost on power and water however high, might be diminished through giving non-regular energy sources. The quieting idea of residing on the water removes such house proprietors from the buzzing about of city life however the primary benefit is the security during floods being a need in a portion of the areas like in Netherland. Likewise such houses can be incorporated with lovely scene and solace conditions with least energy bills and a little carbon impression. These can be studio made excellent homes conveyed to site total with required inside and outside gets done, windows, entryways, apparatuses, and machines.

The most noticeable con of life on the water is the uncommon changes in the way of life. There is restricted space especially for capacity in this way assets must be kept to a base. Primary issue is the expense and burden of warming in the colder time of year time and support and fix whenever required.

Floating Structures

Though there are several floating structures now existing and in planning stage, few planned big structures are mentioned here.

Floating island Seoul: In Han River in Seoul, South Korea, the floating island has the stunning structure includes a 700 seat convention hall, restaurants and arcades - all powered by solar energy (http://inhabitat.com/worlds-first-solar-powered-floating-island)

Floating hotel: The connecting bridge is planted with trees, giving the impression of land projecting into the sea and is designed by the Giancarlo Zema Design Group for an Arabian commission. www.giancarlozema.com

Floating city: Planned for 2015 completion in the Maldives. The green covered star-shape building symbolizes the Maldivian innovative route to conquer climate change. This will become a location for conventions about climate change, water management and sustainability. Architect Koen Olthuis--Waterstudio.NL. Developer Dutch Docklands--www.dutchdocklands.com.

Miniature Taj Mahal: The most famous of the Sausalito houseboats, a miniature version of the Taj Mahal in India has been for the last four decades a private home, although it was a bed and breakfast for a few years, now it's a private home again. www.flickr.com

Moving Houses

There are mythological stories where it is mentioned that constructed houses were removed, taken somewhere else and thereafter again shifted at the same place. In Ramayana, Hanumanji uprooted the mountain so also the house of Vaidya Sushain. After the treatment, the house was reinstalled at the same place. There are stories of Sindbad in which houses were taken on the carpet and reinstalled. It only shows that it was possible to shift some of the houses though instances of flying houses are not available. Flying a house is feasible only if it is supported on mat having less dead weight and live load than the air pressure, if constructed on the theory of balloons.

Moving houses are comparatively easy to construct. In one of the case, an envelope of the floating house was fabricated at the fabrication yard and towed away for about 80 km on the lake, finally anchored. Thus there is a possibility where the envelope of the houses can be fabricated, shown to the customer and towed to the site. The whole structure will require to be anchored to the foundation. In future, if house owner wants to shift it, it can be dismantled and reinstalled at other place. Interiors can be placed as per the requirements through modular parts like kitchen, baths etc. Such structures have a considerable market as it will be possible to erect the house within days that too as per the sample selected by the customer. Such houses may be successful in small places or even in cities where one can afford. Such structures can also be joined easily. In fact if a plate is fixed at the bottom to the structure which can take load of the envelope, it would be easy to shift it, anchor and even dismantle it for re-fixing. Plate will act like carpet in the Sindbad stories.

Need of Floating Houses in India

India has a huge coastal area as well as large flood prone areas like Bihar, Assam and in many other states where almost every year, public face difficulty due to floods and loss of lives and property takes place. In case, the principle of construction of floating houses is adopted in which the houses would rise during floods and subside down during dry conditions, loss of lives and property can be avoided. Simple techniques based on telescopic arrangements should be designed for requirements. Therefore, research and development can be taken up as model projects for developing such designs. In the starting, life line buildings in the flood prone areas can be constructed with such techniques. These buildings will function even during period when they remain cut off due to floods and have no external electricity and water.

In the islands and coastal areas, such houses will certainly be adopted sooner or later and thus Indian architects and designers should start getting expertise in this field to design such houses. Floating houses can also be built for tourists who would love to stay in such houses and India can generate considerable revenue from the same.

Conclusions

Drifting houses might be the requirement for the future in seaside regions and flood inclined regions in India additionally and subsequently analysts, modelers and specialists ought to have limit in planning and building such houses to address the difficulty of coming time. Idea of movable prepared fabricated houses ought to likewise be begun especially for column houses and for government supported plans which would end up being quality expandable homes and can be developed in speedy time according to the spending plan accessibility. We want to construct the floating house in river,sea,oceans for the future environmental problem and construction of floating house at a cheap rate at 1.5 lakh to 6 lakh to provide and save 819 crores people from flood,cyclone and tsunami etc

References

- http://hausmanllc.wordpress.com/tag/floating-homes, buoyantfoundation.org, www.mos-office.net, http://www.floating-homes.co.uk/guides/floating_home_life.php, waterstudio.nl., inspirationgreen.com/floating-homes.html, www.kashmirhouseboats.com, www.rohmer.nl, http://www.ecoboot.nl/artikelen/floating_houses.php, www.vc-arch.com
- en.wikipedia.org/wiki/Houseboat, powellriverbooks.blogspot.com, buoyantfoundation.org,

- +31ARCHITECTS: Specialist in Constructing Floating Water House, MGS Architecture January - February 2011
- Soni, K M and Soni, Piyush (2013). Floating and Moving Houses, Journal of Indian Buildings Congress, XX (2), 17-22.
- Do it yourself book - Ferrocement Floating House. International Ferrocement Information centre Asian Instt. of Technology Bangkok (Thailand)