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Ecovillage

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Abstract:

With the increasing urbanization, the pressure on the natural resources is increasing at an even higher rate. It has now become imperative to adopt more sustainable strategies in the urban as well as rural lifestyles to conserve, manage and optimize the existing resources. Concept of permaculture is seen as the ideologies adapted in the day to day life. This paper talks about the concept of permaculture which is manifested in the form of ecovillages. The paper highlights the various aspects of eco villages, the components and the relationship with the sustainability. The paper showcases few case studies and analyze them with respect to the perception of sustainability. The paper also attempts to examine the various reasons for participation in the permaculture and related activities.

Keywords

Ecovillage, Permaculture, Sustainability, vernacular, lifestyle

1. Introduction

An Ecovillage, is a purposeful or conventional group utilizing nearby participatory methods to comprehensively incorporate biological, economic, social, and social measurements of maintainable quality so as to recover social and regular situations.

In the first place, ecovillage is a vision, an ideal, and an objective. Aside from some native towns that have held their aged maintainable societies, there are no samples of completely acknowledged ecovillages as of this composition. Those utilizing the term are portraying a promise or plan to live all the more economically, reintegrating their lives with environment.

Past an imparted duty to manageable quality, ecovillages are differing from multiple points of view. They exist in provincial, urban, and suburban ranges and in all parts of the world, among a mixed communities. They can be inserted in a bigger human settlement, for example, an area in an extensive city (Fellowship for Intentional Community, 2014).

2. Ecovillage – An elementary concept of permaculture design

Ecovillage is a ideal permaculture design. It is also assumed as a component of permaculture, in which every family would have its private green area and whatever remains of the group's territory would be held in a trust. Every group would have establishments to appropriate access to land among individuals in the group. It would be workable for more than one individual to utilize distinctive regions of area in the meantime for different sorts of work.

In Social dimension, ecovillages are groups in which individuals feel upheld by and capable to those around them. They give a profound feeling of fitting in with a gathering. They are little enough that everybody feels sheltered, engaged, seen and listened. Individuals are then ready to partake in settling on choices that influence their own particular lives and that of the group on a transparent premise.

In Ecological dimension, ecovillages permit individuals to encounter their individual association with the living earth. Individuals delight in day by day collaboration with the dirt, water , wind, plants and creatures. They accommodate their every day needs –

nourishment, garments, safe house while regarding the cycles of nature.

In Cultural/Spiritual dimension, most ecovillages don't put an accentuation on specific profound practices in that capacity, however in their own particular ways ecovillages appreciation and backing – the Earth and all living creatures on it, social and aesthetic improvement and declaration , and otherworldly assorted qualities.

In Economic dimension, the Ecovillage economy is very powerful and brimming with essentialness contrasted with other neighborhood economies. Economic Vitality implies:

- Keeping the money in the community,
- circulating it through however many hands as would be prudent,
- earning it using it, and putting it in part – possessed retail and administration organizations,
- Saving it in home-grown financial institutions.(Global Ecovillage network, 2014)

3. Use of permaculture in ecovillages

The principles and techniques of permaculture can be used in both rural and urban settings their use won't just encourage both the looked for after practicality of assets and sound ways of life, yet it will likewise make a feasible human progress by restricting the dependence on expansive organizations and government, whose enormous power, so inclined to debasement, has so frequently been conflicting with mankind's best advantage.

In rural settings, eco-villages, such as the ones referred to beneath, as of now exist where groups of individuals live totally, or about thus, off of the area. They develop their sustenance characteristically, reusing hundred percent of the waste. Domesticated animals can be raised for utilization and as a help to making manures. These assets and yields, when in abundance, can be sold off or exchanged request to acquire things that the city does not create itself. Vitality can be acquired through regular assets, for example, wind, sun based, hydro powers, or even through the characteristic exothermic responses that happen while composting.

Sharing of resources is one of the simplest, yet, at times, one of the most difficult things to do. There are such a large number of assets that we use without anyone else present that we could have imparted to another person, eliminating costs and different resources.

Renew the resources. We are the consumers who are continually expending and disposing of things that we don't need or need. There are numerous items went for the consumer which delivers contamination among their generation, so by not utilizing them we promptly assist nature. So utilize a greater amount of the sources we can recharge and less of the ones that we can't, hence making less waste. Among these things, we have a tendency to throw regularly are nourishment scraps. Anyway there is an approach to reuse these scraps ourselves. Typically, if left out in nature, they will break down about whether and transform into rich fertilizer. Be that as it may, there is an approach to chop this time down extraordinarily, yielding rich manure that can be utilized, sold, or doled out, and it can be down inside a condominium.. This manure can that be used by our plants (see Fig.4.1), which we can consume or put to other great uses, and afterward in the end cycle again to wind up fertilizer. It is an exceptionally renewable and compensating cycle.

4. Case studies

The following primary and secondary case studies are studied on the basis of permaculture philosophy which includes all the basic parameters comes under its part such as environmental/ social/ cultural/ economical sustainability to attain sustainable development. The projects are of various types and from different locations, but result of all gives the same ideology known as permaculture. The main criteria of selection of these case studies is to just knowing the basic principles of natural methods which helps to improve the better quality of lifestyle in sustainable way.

4.1 Case study 1

Project Type: Urban, Residential

Location: Art of living foundation in India, Bangalore, Karnataka, India

Project Description: Making a Bamboo and Mud Yurt (an nomadic structure utilized by Mongolians) at the Art of Living Permaculture Centre, Bangalore, India.

The group needed to make a regular building out of bamboo and mud on the site, as this venture included learning encounters as well. They thought of a basic Mongolian yurt outline. They drew pictures and made notes about its proposed structure. Migrant structures are currently being assembled as changeless structures because of its straightforwardness in outline, and are economical and quick to manufacture with common materials that are normally promptly accessible.

They cut bamboo from the site, gathered dirt, straw and bovine excrement and cut the tall grass close-by and after that started their development. These materials cost

nothing to them because they didn't purchase them, yet assembled them from around the site.

They started with the approximate structure, and then utilized slender bamboo parts to make the divider. At that point they blended earth and compost and took strands of straw and plunged them in the mud/waste blend and glued in the gaps made in the bamboo divider. They took a shot at making windows and everybody's creative ability brought about nine separate states of windows. The top was made utilizing bamboo before being secured with grass covering.

They painted the structure with a water-sealing compound and put the shade of mud on it. Somebody thought of the thought of drawing rustic Indian wall paintings on the dividers along these lines wall paintings came next. Presently the yurt is solid, and looks great from inside and outside. It cost nothing to them, aside from the labor and creative energy.

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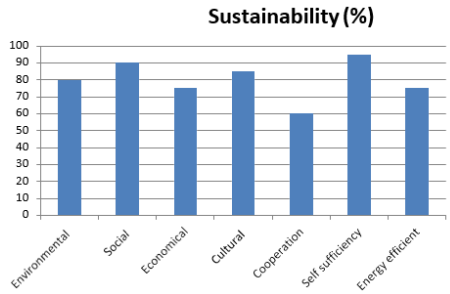

Figure 1 Perception of Sustainability (Case study 1)

The above visual data reflects the meaning that if the project follows the parameters of permaculture then side by side it attain sustainability too, which helps in improvement of project result and life quality of people attach with the project.

This is an example of building where ideology of sustainability played a major role in the planning of overall project. By using the old traditional lifestyle/culture of Mongolian, the experts experiments and learns new techniques. For construction materials, they didn't spend money from their pocket because instead of purchasing them they assembled it from around the site which was somehow waste. This implies that the project follows the permaculture principles and attains sustainability too.

4.2 Case study 2

Project Type: Rural, Residential, Demonstration, Educational

Location: Quinta do Vale, Benfeita, Arganil, Portugal.

Project Summary:

Quinta do Vale is a finally – run permaculture smallholding of around 2.5 hectares in the mountains of Central Portugal. It's in the early stages of transformation from a somewhat neglected traditionally-cultivated farm to permaculture demonstration and education site which will include forest gardens, raised beds, medicinal gardens, off-grid renewable power generation, waste recycling, indigenous forest restoration , natural buildings, passive solar earth-sheltered greenhouses and various land – based crafts.

Project Description:

The steeply-terraced mountainside area exhibits some difficult demands to permaculture finishing and outline, so the specific stress is on planning to the current microclimatic varieties over the site. The site has a scope of diverse viewpoints and territories to work with, characteristic springs and, for the most part, year-round running water. Numerous leafy foods trees/bushes are as of now settled and these plantings will structure the premise of woods enclosure style development intended to enhance soil quality, water maintenance, fire safety and give inevitable independence in nourishment.

Various natural and traditional techniques are being used in building restoration and new construction, sourcing a considerable lot of other local materials on location. Work is thoughtful to the novel conventions of the locale.

In new construction, a wide range of natural building techniques is being used such as, timber framing, cob, straw-bale, cordwood, earthen plasters.

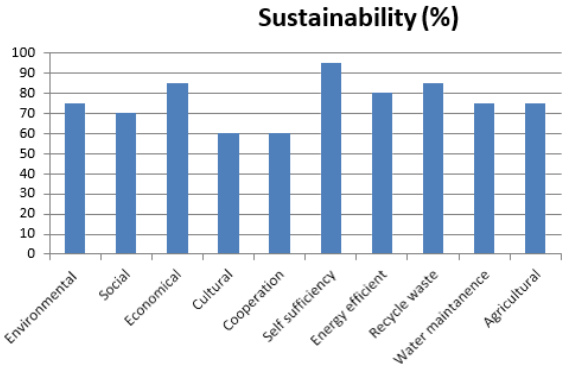

Figure 2 Perception of Sustainability (case study 2)

The above visual data reflects meaning that the project already runs the permaculture smallholding but the main focus is on outcomes from the parameters which are considered. Through the available data, one can say that the project is totally involved in permaculture movement and on the right path of sustainable development.

Conclusion: This project is an example of rural residential building which becomes a part of demonstration and educational building type also but there is one parameters of permaculture which is missing and that is community interaction. I think because of this reason the other parameters are lacking behind to attain the full sustainability. Otherwise the project delivers the perfect terminology as an example of permaculture for further learning and useful for other projects related to natural, environmental design.

4.3 Case study 3

Project Type: Rural, Residential, Demonstration, Educational

Location: Viluppuram, Tamil Nadu, India

Population: ~2,228 Landscape: Rural Worldview: Spiritually focused

Auroville is a global rural community with a philosophical destination to characterize the ideal human solidarity and its natural work comes as a result.

Established in 1968 upon an extremely dissolved level in south India, the first request of business for

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the pioneers was to revitalize the area. Three million trees later, Auroville is home to in excess of 2,000 individuals from 43 separate nations and is one of the few places on Earth where biodiversity is really expanding.

The group is likewise a world pioneer in compressed-earth building methods, rainwater harvesting, plant-based sewage treatment, solar and wind energy, and Effective Microorganisms. (Lifin,2014)

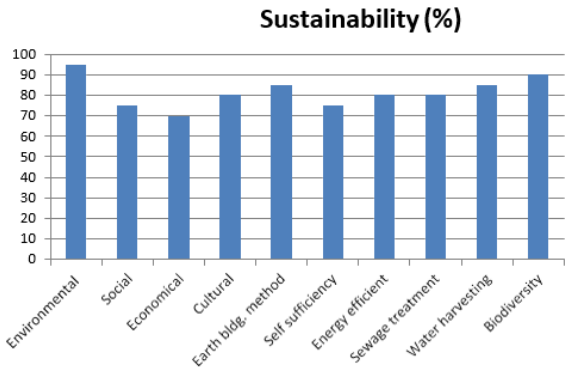

Figure 3 Perception of sustainability (Case study 3)

5. Outcomes

The following outcomes can be declare on the basis of analysis and conclusion from all case studies.

- Improved versatility and confidence for people and groups in these times of declining, resource struggle, environmental degradation, and worldwide financial insecurity.
- Long-term cost reserve funds through cautious arranging that arrangements with manageable outline and situation issues, utilizing an entire frameworks configuration approach.
- The components of a permaculture are associated in ways that are commonly helpful, in this manner helping the customer, the land, and future generations.
- Design or retrofitting of the built environment, including houses, stables, sheds, nurseries and streets, and combination of structures into the current scene in ways that are climatically proper, vitality and asset rationing, and biologically and stylishly delicate.
- Provide a living, working, motivating sample of biologically based land development and management.

6. Reasons for Participation in permaculture

From the available case studies, it is recognized that few practioner/trainers and common people like farmers, PC villagers are participating intentionally in permaculture. The reasons for participation are :- daily food, increased yield and plant diversity, environmental protection, cheaper, less work, beautification, holistic development, medicine, care of people. The concept is same for the trainers and PC villagers but participation in each concepts may varies. The visual data below gives clear idea about the involvment of trainers and PC villagers in each concept, and the variation in the column range shows that, the concept important for PC villager may be less important for trainer.

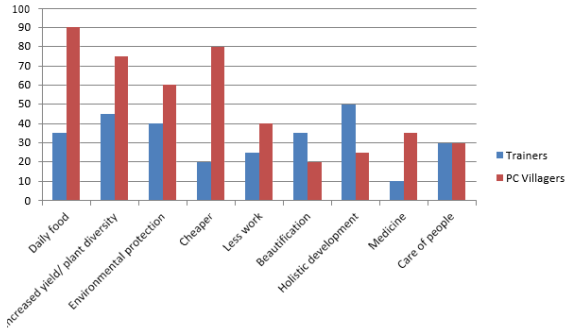

Figure 4 Reasons for Participation in permaculture

7. Conclusion

For sustainable development, an individual needs to be improve independently. Independent improvement can also be said as self reliant development. Self reliant development means being mindful regarding expecting obligation regarding workshops and projects in permaculture and that their individual destinations are achieved. The main way that one will attain this obligation is the place individuals at the most reduced financial level can take part. Community participation in urban and sub urban regions will likewise be valuable simultaneously and give people in general included an awareness of other's expectations.

Independent improvement additionally goes for giving individuals control over their own particular surroundings. In a urban range one should look at what fulfillment one would have by supplying and instructing individuals in essential human needs, for example, food production, food mining, water supply and overcoming social issues.

On the off chance that a community assumes liability for their activities they would be related to coordinated improvement in the economy and getting particular social and cultural perspectives in that particular region. All community should attempt to cooperate to support each other in creating their own particular range for the better, for example, promoting food/community gardens back to urban cities as the larger part of urban areas have open spaces that could be utilized.

Permaculture might be fruitful when all gatherings are eagerly included; however, people with the support of local groups can make smaller sustainable environments especially in devastated regions.

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