COMMUNITY FORESTS Makli Villages, Pakistan

LARI BAREFOOT SOCIAL ARCHITECTURE Rights Based Holistic Green Shelters Project

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Map of Sindh province, Pakistan.



Excited to carry saplings for plantation.



BACKGROUND INFORMATION

PROJECT PERIOD March TO MAY 2018

Number & Size Six forests on 24'x36' lots

LOCATION

- ZC3 near Sarki Village
- Sarki Village
- Shikari Village
- Yar Mohammad Village
- Allah Village 1
- Allah Village 2

POPULATION

Average 45 households in each village. Total population 2,000+

NUMBER OF SAPLNGS PER FOREST

TREES: 280

BUSHES/HERBS: 55

PROJECT **T**YPE

Saline Soil Rehabilitation , Eco-enhancement, Tree Propagation

SPONSOR

Heritage Foundation of Pakistan"s Green Shelters Project

PARTNERS & PARTICIPANTS

Makli World Heritage Mendicant Communities

MAIN FEATURES

- Based on Akira Miyawaki method of forestation
- Greening barren land
- Regenerating biodiversity and ecosystem, use of local species
- Training and awareness., community engagement
- Self-reliance for food security
- Eco-enhancement





CONTEXT

The first community forests have been established in order to transform the desolate and dreary environment for the marginalized communities residing in the shadow of the Makli WH.

The assistance provided to the mendicant communities is in the form of prefabricated bamboo shelters (one per family), eco toilets (shared by 2 families), water handpumps (shared by 6 families), earthen fuel efficient Pakistan Chulahs (one per fam-



First Community Forest after 10 weeks.



ily), a Women's Community Centre. In return each household was expected to provide voluntary service for environmental improvement for community benefit.

As a result the communities have worked hard to transform their environment by removing all garbage and debris from their villages. By completing their shelters, toilets, handpumps and stoves, for the first time in their lives they believe they are able to live a life of dignity. Due to the trainings in green skills and low cost crafts, a majority has stopped seeking alms and are now able to lead a productive life.

These communities had been forced to live without access to even the basic necessity of water. Even though there was pessimism when the first borehole was made, miraculously the tests showed that the water was fit for drinking.

It had been assumed that due to the salinity in the soil, it was not possible to grow plants; however, the plantation of the community forests has belied that. Now the communities are enthusiastic in taking up plantation and even growing fodder and vegetables.

The Community Forests experiment has shown that regeneration of soil is possible and by following the present method, ecological benefits can be attained through community effort. Since there are vast areas similar to the one taken up in Makli where no plants seemed to be growing, such areas can also be taken up on a large scale to transform the desolate environments.



Such an endeavour will transform the environment, provide food security through edible forests and vegetable plantation, along with improved biodiversity in the area.

This effort has been among the most rewarding and successful ventures which has proved the efficacy of following a rights based holistic model devised under Lari's Barefoot Social Architecture.













PROGRAM DETAILS

The present project comprises the plantation of 6 community forests in villages that circle the Makli necropolis. These were largely mendicant (beggar) communities prior to the humanitarian Green Shelters project taken up by Heritage Foundation of Pakistan.

The creation of the forests was taken up in view of the desolate and barren state of the area. It was generally believed that in view of the salinity in the soil, plantation cannot be sustained.



First Community Forest participants gathered in ZC3 (Zero Carbon Cultural Centre.



After determining the size of each forest from the point of view of manageability and implementation a size of 24'x36' was determined. Native species of trees with easy availability were identified and planning of trees carried according to the Myawaki guidelines

The project has been designed with full participation of the community in planting as well as in maintaining the forests.

This strategy has given rich dividends as all household members including women and children have fully participated in the establishment of the forests. They are also taking good care of the plants. Inspite of very harsh and hot weather experienced in May 2018, there have been no reports of any losses of any of the plants.

The enthusiasm of the Green Shelters project grantees has been extraordinary. They have not only planted the community forests they have also begun plantation on the road side and close to their houses as well.

One woman Shareefan who showed great interest in looking after the plants has been pro-







vided assistance in setting up a nursery. She now sells saplings to the village households as an income generating activity.

After successful plantation of 6 community forests, it is envisaged that this methodology can be spread over large areas which are so far desolate and abandoned. Since local communities have now learnt the skills required for plantation, a Community Forest Barefoot Enterprise is being organized in order that the service could be provided to other areas thus spreading forestation in areas that are lying desolate.

Other greening activities include the following:

- a. Developing tanks for the propagation of Azolla in various communities which would help in providing green fern cover along with use as fodder, providing a source of income generation for poor villagers.
- Racks outside boundary walls for growing hydroponic green fodder for cattle.
- c. Edible roadside forests which are being planted and maintained by communities themselves, in order to provide banana and papaya etc. for local residents and children.









OUTCOME

S mall forest created by planting saplings very close together with a mix of shady and edible trees as well as medicinal herbs and flowering bushes.

- Provides opportunity for community effort in planting and maintening trees which are activities undertaken for common good.
- Fosters interest in plantation among adults as well as children which will enable communities to attain food



Roadside plantation carried out by the community.



Flourishing Community Forest.



security and shaded areas for recreation for their families.

- Provides protection against pollution and strong winds.
- Being a grass roots activity adopted by the masses, it can be scaled up in other barren areas, thus transform the micro climate of the area.
- Forests will attract birds, butterflies and other creatures leading to improved bio diversity of each area.

The soil has been replaced upto a meter with a mix of earth, organic compost and agricultural waste. Plantation is carried out after thoroughly drenching the new soil for several days. The entire area is divided into squares to provide points for plants which are planted at 3 saplings in every sqm. The combination of trees of varying heights and bushes have been placed in order to provide a canopy affect from the tallest to provide shading to lower height plants. After plantation the entire surface is covered with straw to minimize water evaporation.



Project Manager Naheem Shah encouraging women to participate.







TOTAL PLANTS IN 6 FORESTS

TREES

Banana	192
Morenga	180
Gul mohar	144
Jaman	18
Neem	24
Peepal	24
Khacha	96
Siris	96
Mango	72
Guava	150
Kaneelar	144
Papaya	132
Falsa	120
Buk chao	120

--Trees

1512

BUSHES

Nazboo	72
Tulsi	72
Coriander	120
Phitti	120
Bushes	384



Siris.



Neem.



Morenga.



Peepal

HERITAGE FOUNDATION TEAM

Designed by:

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CEO, Architect Yasmeen Lari based on research on the Akiro Miyawaki method.

Karachi Advisory Team:

Senior Architect: Ashfaq Ahmad Architect: Mohammad Mehdi

Field Implementation Team

Project Manager: Naheem Shah Supervisor: Moomal Memon Assistant: Hafeez

