Empowering People through Healing the Landscape

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In the past century, our lives have changed remarkably as we have developed our capacity to modify the world around us. Much of this has been positive of course, but much also negative.

Certainly, never have we had and used such an ability to separate ourselves from Nature and its extremes, of hot and cold, drought and flood, tempest and catastrophe. We have been very clever to have managed this, but such separation carries a price we have yet to pay.

Never was the environment in such a precarious state, with pollution of air, water, and soil; with poisoning of plants, animals and people; with the extinction of vast numbers of species. This is continuing to happen. Some say we have already reached a point of no return, and we have already sealed our own doom. We do not believe this is necessarily so!

We have no accurate comprehension of the actual impact of our development, not only on the environment, but on our own human health, present and future, both physical and psychological. The effect on our capacity to interact with ourselves, with each other. We have never lived under such changed and changing conditions as today, and we cannot truly predict the consequences.

Permaculture is a response to these changes, a design framework to harmonise all the different elements in a living system for people (an apartment, a house and garden, a farm, a factory, a town). It is a marriage between people and place, and like a successful marriage, each is enhanced, the whole system grows, is productive, abundantly liveable for all elements. And it lasts, because their needs are met by the harmonious interaction with the other elements placed around it. It is also naturally beautiful. Permaculture is an empowerment tool, for exercising control over our lives while improving our surrounding environment.

This is highly significant at a time of depersonalisation of life, through globalisation, through increasing homogenisation through the growth of multinationals and large corporations at the expense of small individual enterprise.

We achieve this by observing and understanding the intrinsic characteristics of each element in our system, of their individual needs (inputs) and products (outputs). Then, with this awareness, we can place elements in relation to each other so that the inputs of one element can be provided naturally by the outputs of another.

Permaculture is a responsive design system applying specific principles appropriate to each situation. It's guiding principles are: ethics (care of the earth, care for people, dispersal of surplus, reduced consumption), relative location, maximum functions possible, multiple elements for single functions, zones and sectors (elevation planning to facilitate efficient energy flow), biological resources, recycling energy, natural succession, diversity, maximize energy, scale.

These principles are applied through selecting technologies which enhance the environment in question, while providing for the needs of the people associated with that environment. If we do not satisfiy the 'needs'

of the land, we cannot possibly create a sustainable long-term system for people.

We offer three diverse examples of projects based on Permaculture:

1. Argayall community, La Gomera, Canary Islands

A community of around 25 members, supported by a guest business of up to 40 visitors, occupied 1.5 hectares of land directly on the Atlantic Ocean, hemmed in by 400 metre cliffs. The land had been planted as a

Photo 1: Argayall Community, La Gomera, Canary Islands: pre-cut

Photo 2: Argayall Community, La Gomera, Canary Islands: post-cut sponges
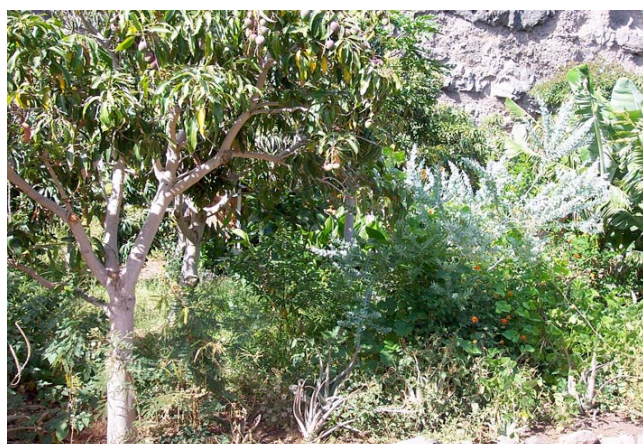

Photo 3: Argayall Community, La Gomera, Canary Islands: 2 years after_Privacy, Diversity, Beauty, Harmony.

mango plantation with the original owner intending to thin out the mangoes as they matured. The community had never done this, so that the mangoes produced little fruit, almost total shade, and little prospect of supporting diverse plantings. The resulting monoculture also ensured little privacy for the inhabitants, who had created fences around their small cottages dotted through the plantation.

While there was abundant water, little productivity resulted, with virtually all food being imported from outside. The soil was sandy, almost void of organic material.

The Permaculture solution: gradual removal of up to 80% of the mango trees would increase the light diversity enormously, offering the possibility of an explosion of varied plant possibilities. At the same time, the huge volume of leaves and branches from the culling of mango trees offered the organic material lacking, to be decomposed in 'sponge' pits which at the same time would be diverse microclimates of moisture and fertility, oases in the former desert of mangoes. Since recycling of biomass in tropical and sub-tropical fertility patterns is essential, the increased light would enable the cultivation of an abundance of plants that could be constantly thinned to provide that biomass.

The solution was adopted: food production soared; the huge new variety of plants able to be planted provided beautiful live fences for privacy, attracted a profusion of birds and other creatures, and created a much greater range of intimate spaces and also open recreational areas. The community was richer in every aspect, including the atmosphere, social harmony, and economy.

2. Reforestation Project, Tiruvannamalai, Tamil Nadu, South India (1989-1998)

The aim of this project was to reforest a sacred mountain, in an extremely dry region of degraded agricultural land. Straightforward; plant the trees? No, far from simple. The population of the town at the foot of the hill scavenged the few sparse vegetation for firewood; grasses were cut for thatching and the mountain torched to encourage the regrowth, to discourage the competition of competing plants.

If the needs of the population could not be provided off the mountain, the chances of a forested mountain were slim, especially given the scepticism of the people for any possibility of a forest growing on the barren scorched slopes. An intensive education programme was essential, woodlots for the villagers and townspeople needed to be established, nurseries set up to provide for the massive planting program.

Temples in India are the heart of the Hindu community, as well as occupying a central position in the town. They are also often located on springs. The project nursery was not popular while townspeople were queuing for hours for

a bucket or two of water for domestic use. However having approached the authorities of the 10hectare temple with the offer to regenerate their gardens, the project gained a different profile.

The project needed an organisational structure, project aims, operational strategies, and implementation of a reforestation and environmental regeneration project. This included nursery establishment wasteland

Photo 1: Reforestation Project, Tiruvannamalai, Tamil Nadu, South India_ Before: 1990, people did not believe a forest was possible.

Photo 2: Reforestation Project, Tiruvannamalai, Tamil Nadu, South India_After: Now, people believe they can do it

regeneration, mountain afforestation, demonstration farm establishment, employee training, workshops and courses for farmers, women, extension workers and students, creation of village co-operatives and credit schemes. A significant part of the work concerned in seeking and obtaining funding for the project, which employs up to fifty full-time workers as well as seasonal casual workers. After a first period in which the project needed the activating intervention of the project co-ordinator, the project was run entirely by local people, had created dramatically successful examples of sustainable farming, wasteland regeneration, mountain reforestation, and continues to play a significant role in the environmental uplift of a semi-arid district suffering from poor land management and diverse socio-economic problems. Of the project regeneration, demonstration farm and afforestation sites, it has often been said that people did not believe such potential existed on such degraded land. This has been achieved with a total use of local resource available to all, without any synthetic chemical use.

While raising 400,000 seedlings each year for reforestation and wasteland regeneration, one of the largest temple gardens in India was created, and a public association between the practical work of re-greening the mountain, and the spiritual life of the community was forged. This in turn opened up the availability of other temple and village public land for wasteland regeneration projects, to demonstrate that through conserving every drop of water, and protecting their lands, the people could be masters of significant improvement to the their environment and resources.

Demonstrating low-tech methods for reforestation and agriculture, as well as social initiatives such as micro-credit and self-help groups the confidence of the local people was won, and this was converted into significant co-operation to protect and increase the mountain reforestation.

3. Private Garden, Piedimulera, Piemonte, Italy

A Dentist wanted a garden to complement his magnificent villa, with minimum maintenance, and offering a positive impression on visitors. The area was very small, defined by the ugly walls of neighbouring buildings.

The limitations of space could be largely obscured by removing the straight lines of the walls, covering them with creepers, planting sinuous 'weeping' trees rather than straight ones, designing perennial flower beds with curves and twists rather than sharp lines and corners. The plants were consciously selected to ensure colours throughout the year, and with the intention of highlighting with particular colour themes the different parts of the garden: rich reds, browns and purples in shady corners; golds and oranges in full sunshine; creams and whites and pastels where dark and light

merged. A small hillock and a tumbling cascade into a pond also transformed perspectives with its reflections. Arches with rambling roses and delicate jasmine enriched the new garden with colour and smell.

The result was more than a beautiful garden for the villa; each day on his way to his dental practise next door, the dentist walked through his garden, noticing the frogs and birds and butterflies. No doubt he arrived for work in a better state of mind, and presumably his patients benefited too!

Each of these examples represent very different situations, with diverse problems and needs. Although the actual responses and designs adopted were specific to

Photo 1: Private Garden, Piedimulera, Piemonte, Italy_Before: Dentist's house/office with ugly walls and tiny garden.
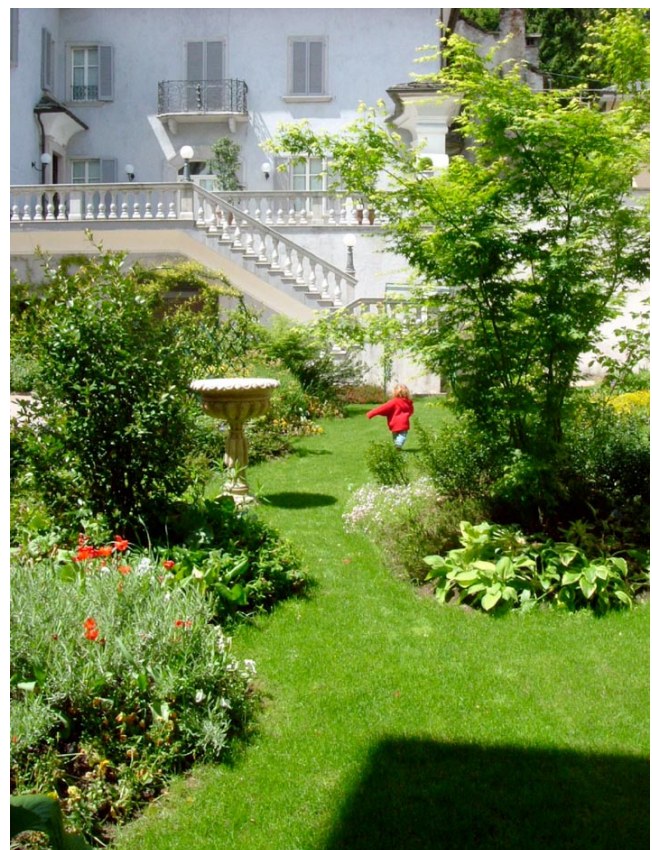

Photo 2: Private Garden, Piedimulera, Piemonte, Italy_After: The walls have hidden the space appears bigger.

Photo 3: Private Garden, Piedimulera, Piemonte, Italy_After: A garden fit for a villa, also Permaculture design.

each place and its people, the attitudes and principles applied were very comparable, and the solutions reflect the relevance of applied Permaculture to the many problems we face.

That change will happen, we can be sure. Whether we are silent, passive victims of the chances, or active dynamic participants in creating a positive change process, is a matter of our choice. Permaculture is a significant practical response to achieve this empowerment, and create a better world. Change, or be changed!