











# **Cost-effective Construction Technology**

Amuthasurabhi Self Help Group Federation is a dynamic group of rural women who are self-reliant, through such eco-enterprises like the making of herbal medicines, maintaining herbal nurseries etc. They needed a building for the

preparation and storing of the medicines under a project from the Department of science and technology (DST).

In the case of conventional building technology the cost of construction will be Rs 450 per square feet. But in the case of cost-effective eco-friendly construction the cost comes to Rs 300 per square feet. The building is named after Auvaiyar, a mystic

Tamil Poetess and social reformer. Auvai Agam exhibits many salient features of the cost effective construction technology in terms of:



#### Walls:

Bricks made of FAL-G (Flyash, Lime and Gypsum bricks) First quality bricks with compressive strength 120 kg per square cm.



### Flooring:

Traditionally polished with red oxide.

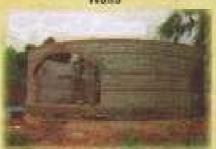


Ferro-cement doors which are aesthetically pleasing and eliminate timber-saving the trees.

Roofing:

Ferro-cement roofing channel with one-side width more than the other.





Doors



Rooling





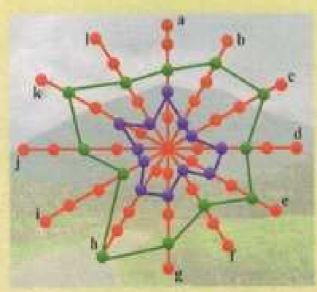






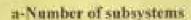


# Sustainable Agriculture





Before intervention by VK-NARDEP



b-Diversity elements in each system

e -Inter-subsystem linkage : Resource Flow

d-Intra- subsystem linkage: Resource Flow

e-Water recycled in the farm & household

f- Reduction of external farm input

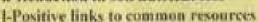
g-No Non-surplus produce sold in market

h-Number of bio-digestors

i- Reduction in external vegetable dependency

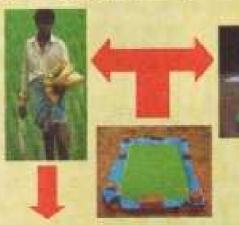
j-Reduction in external animal protein dependency

k-Reduction in soil nutrient loss





After intervention





What does VK-NARDEP aim to achieve, when it introduces an organic farming intervention like Azolla or vermicompost or biogas? It aims to expand the web of farming activities. Thus when the backyard Azolla bed is introduced, it becomes feed for livestock whose dung becomes input for biogas from which slurry gets back to vermi-compost tank and Azolla bed. When Azolla is introduced into the paddy field it reduces urea input and increases soil fertility. Azolla entering the irrigation channels improves the common resources quality.

Sri.Kasi Ramalingam a farmer in whose field of 45 cents Azolia was introduced from his own Azolla bed, saved about Rs 2000 in fertilizers. His yield also increased significantly. DST officials visiting the field were impressed by beautiful green bed Azolla formed in the field.

**Expansion** is life











### Renewable Energy



When VK-NARDEP provided biogas facilities to farmers, it also provides them, an effective package for biogas slurry usuage package. Thus biogas slurry enriched Panchagavya is used in their fields by Biogas users. Its positive results have created a cascading effect.



Sri. Manichavasagam a veteran farmer initially did not want biogas plant even though he had 3 cows. Subsequently he also sold his livestock. But when he saw the effectiveness of slurry enriched liquid fertilizers & growth promoters, he was impressed. So he bought back the livestock in order to build a biogas plant.



Today Sri. Manichavasagam is a proud owner of a biogas plant constructed by VK-NARDEP. He is looking forward to use the biogas sturry enriched organic inputs in his fields. Not only that, he also wants to set up a commercially viable unit to sell these products. He says that he has already been contacted by interested farmers wanting to switch over to organic farming.



Dissemination of renewable energy technology through allied value added products has been very successful in rural farming communities.





The innovative use of slurry-based organic farming inputs for the dissemination of biogas technology, as being done by VK-NARDEP, won Vivekananda Kendra the prestigeous Ashden Award for renewable energy technology (2006).







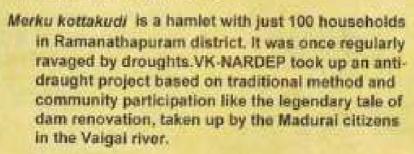






# **Water Management**







Oorni- the traditional water harvesting structure was renovated and made functional by the entire village. As community volunteers worked for the village welfare, Vivekananda Kendra took care of the village children,taking them Indian culture classes. Every one in the village -young and old-contributed physical labour in the true spirit of service and sacrifice, as envisaged by Swami Vivekananda.



This community spirit was inculcated into them through collective celebration of Sri Krishna Jeyanthi festival. Kendra brought together the entire village as one family through Deepa Puja Bhajans etc. The Oorni, thus became not only the solution for the acute water problem, but it also recharged the latent community spirit.

Subsequently, the community worship which, Kendra planted almost a decade ago, has flowered in to a beautiful Sri Krishna temple. When the temple was consecrated in the presence of H.H. Jeeyar, a Garuda (Brahmini Kite) appeared in the sky. That was the very moment when every villager remembered Vivekananda Kendra for bringing the water of life -physical and spiritual - to their village.

















### **Holistic Health**

A dreaded epidemic of 'Chickungunya', swept across the region in 2006. Allopathy essentially had no effective medicine, to treat the ailment or so it seemed, as many became disillusioned with 'English' medicine.

This boy suffered from excessive medication

and came to one of the green health camps conducted by VK-NARDEP. However



after obtaining Siddha treatment from the free green health home his condition significantly improved.

Further green health camps been organized in rural areas have helped rural households to become self-reliant in health care. Green health camps in villages are accompanied by traditional physicians identifying local herbal plants and teaching how to use the herbs



for common health ailments. Today many rural communities where this approach has worked, possess household herbal gardens with atteast 14 locally available herbs.







Apart from home herbal gardens the herbal plants are integrated in to the food habits of the people thus expanding their shrinking food basket. With the food basket expanded in a herbal way, the health of the people also improves visibly, proving the old Tamil proverb that when food is medicinal, you will not need medicine separately.











# **Inner Sustainability**

This is an important part of all the activities of VK-NARDEP. It is also the manifest-theme in the motivation camps as well as other eco-technology camps, that are held frequently at our campus. This novel and holistic approach to inner sustainability has won the appreciation of many government agencies as well as NGOs.

So this year also several such motivation camps were held. For example between 6th to 9th September 2006, the motivation workshop for the officials of TilC - Tamil Nadu Industrial Investment Corporation was conducted by VK-NARDEP at its Technological Resource Centre (TRC). Here are some of the feed backs from the participants...

Here purification of our hearts took place...
-Sri.Murugesan

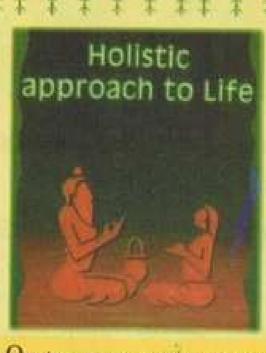
Vivekananda Kendra is like our mother's home full of love, affection and freedom...we understood that real motivation comes from within and not from external sources. - Sri. Ganesh Rajan

In the night assembly games my eyes were blind-folded for five minutes, I realized what is the kind of suffering blind people undergo, in those five minutes.

-Sri Selvaraj







One day a saint disputched his disciple to bring a few leaves from a tree. When the disciple broke a whole branch and was taking it, the saint stopped him and said: "Don't you know, you fool that if any part of this is destroyed, you too will become less to that extent? When this tree stood before us, full and green, we too in a manner were also full and green. Today, its wound has caused a scar within us also. We are not apart from each other."

The saint said further: "If there is an attitude of friendship, of companionship amongst various parts of Existence, if there is a feeling of oneness with each other instead of overpowering each other, a wonderful munic is created in life".

This very music is Religion-Spirituality and is Rit. (Cosmic harmony)