

# Echoes of Eco



June, 2009

Vivekananda Kendra- **nardap** Newsletter

Vol:1 No:4

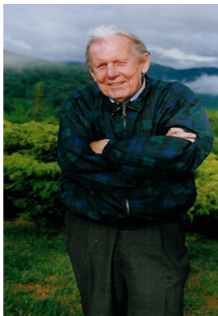
## Eco-Views

### In this issue:

- Echo-Views
- Varma Therapy
- Water Management
- Holistic Health
- Sustainable Agriculture
- Our Youtube uploads
- New Publication
- Visions of Wisdom



### Thomas Berry An Obituary



Thomas Berry (1914-2009) entered eternity on June 1st. A western theologian who studied Indian philosophy, he dropped his theo- for geo. His latest collection of essays is Evening Thoughts: Reflecting on Earth as Sacred Community (Sierra Club Books and University of California Press, 2006).

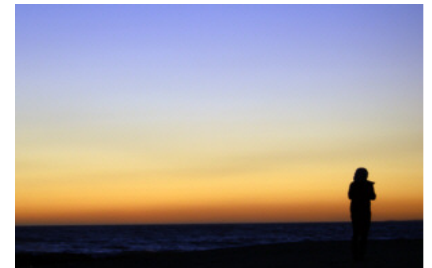
Berry's recognition of Earth as a sacred planet came from his study of Hinduism which according to him was based on "revelatory experiences of a spiritual realm both transcendent and imminent in the visible world about us and in the capacity of humans to participate in that world to achieve the fullness of their own mode of being." (The Great Work. By Thomas Berry, New York: Harmony Books p.189)

### Theologian to Geologist

While the damage done is immediately the work of the human, the healing cannot be the work simply of the human any more than the illness of some one organ of the body can be healed simply through the efforts of that one organ. Every member of the body must bring its activity to the healing. So now the entire universe is involved in the healing of damaged Earth, more especially, of course, the forces of Earth with the assistance of the light and warmth of the sun. As Earth is, in a sense, a magic planet in the exquisite presence of its diverse members to each other, so this movement into the future must in some manner be brought about in ways ineffable to the human mind. We might think of a viable future for the planet less as the result of some scientific insight or as dependent on some socio-economic arrangement as participation in a symphony or as renewed presence to the vast cosmic liturgy.

[From Thomas Berry's *The Meadow Across the Creek*, 1993]

## Path of Righteousness



***We will follow the path of righteousness like the sun and the moon. We will associate with the liberal; with the kind hearted and with the knowing. May we be good-hearted all our days.***

***-Rig Veda [V.51-15, VI 52.5]***

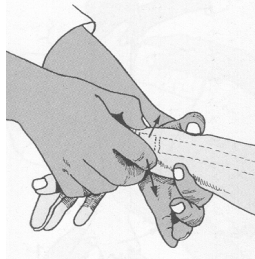


***Service to humanity is the highest form of worship – Swami Vivekananda***



## Varma Therapy Endangered science

Siddha Medical System (SMS) is one of the ancient systems of Indian Medicines and Varma therapy (VT) is a unique branch of this system. It is a holistic system, which covers a broad spectrum of ailments – both for chronic, acute and challengeable diseases – even forms part of martial arts. VT is widely used for treating a number of chronic ailments, bone diseases and fractures, etc. A number of traditional Varma Healers are treating many diseases, particularly, fracture, dislocations, sprains, muscular problems and traumatic swellings. Their methods of treatment have not been brought out in the form of case studies, so much so, except themselves and a closed circle none else knows their methods.



Today this system is facing extinction because of the extensive secrecy surrounding this system. A very popular form of indigenous medical



knowledge or the texts virtually a secret. Further its exotic nature has made the system highly varied and non-standardized leading charlatans to misuse the trust people have. So it has become a necessity to save this system from becoming extinct or worse losing the confidence of people.

## VK-NARDEP Varma workshops



Identifying the practical hands on wisdom of traditional knowledge base



Collecting the local traditional wisdom



Conducting workshops for Siddha physicians on Varma Therapy



Conducting rural health camps to create awareness of Varma Therapy

## Varma Points chart



Vivekananda Kendra - NARDEP has conducted a series of workshops to disseminate the knowledge of Varma Therapy particularly with reference to traditional bone-setting techniques currently practiced and to create awareness for application oriented approach for this economic but effective treatment for various ailments.

Apart from this VK-NARDEP also conducts free health camps in the villages where the village communities become re-aware of the traditional cost-effective indigenous medical systems and this leads to the rejuvenation of the system as well as the general health and economy of the village communities. The series of workshops as well as the village health camps have paved the way for proper dissemination of the system at all levels of the society: hereditary physicians, Siddha students and young Siddha doctors and general public.



## Water Management

The annual precipitation of 1100 millimeter that India gets is adequate enough to meet all our basic needs. In fact, through the micro watershed development, even areas with 300 to 400 mm. Rainfall can have enough water to meet all the basic needs, is demonstrated by water conservation experiments in Alwar, Mandvi, Sukhimajri, Ralegan Sindhi etc.,

The need of the hour is to adopt alternative Holistic approach, which gives go-by to the water-squandering mode of production and the consumerist life styles. Holistic approach stands for both ecological and ethical and considers water as a life resource. What is required is "Water literacy and Water culture" which will pave the way of sustainable development of water resources.



Although all natural water resources are replenished through the natural hydrological cycle, their renewal rate ranges from days to millennia. The average renewal rate for rivers are about 18 days - that is to renew every drop taken out - while for large lakes and deep aquifer they can span thousand years. The world's oldest reserves such as the Nubian aquifer in North Africa were filled when water infiltrated the earth's subsurface in past geological years. When we refer to fossil water in an aquifer, it is water trapped since the ice age and there is no certainty how long it would take to replenish them, thus it safe to conclude that mining their water is only a temporary solution.

[A Lecture by Adel Darwish- Geneva conference on Environment and Quality\_of Life June 1994.]

## Water Management

1. Water will be the region's most contested resource.
2. Current projection on the migration of water-starved refugees forebode significant changes in the demographic profiles of nations.
3. Conflicts will arise between villages, states and may lead to wars between nations as well.



The former United Nations Under Secretary, Prof. Ramachandran., addressing delegates at the inauguration of a three-day symposium on "Restoration of lakes and wetlands" at the Indian Institute of Science (IISc) stated that the Water wars will be inevitable worldwide in the next 25 years,

Closer home, Prof. Ramachandran pointed to Karnataka as another likely target for "water wars". "You have farmers in Mandya opposing the supply of fresh water to Mysore," he said.

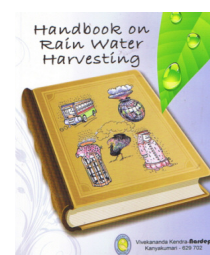
He also criticised India's water management system saying that it was controlled by too many departments - Irrigation, Agriculture, Public Works and Dams Authority. He believed that a uniform water policy had to be evolved to cater to all sections of society - farmers, industrialists, domestic consumers and so on.

## Our Programme



VK-NARDEP method of combining traditional wisdom, building social capital and modern science in reviving the traditional water harvesting and management systems.

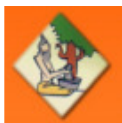
1. Reviving traditional management systems by enabling farmers to own, control and manage their bodies.
2. Instead of using machines provide employment to the people by spanning the programme over 3 years and building their institutions.
3. Designing silt application programme instead of desiltation for enhancing productivity.
4. Planning holistic treatment of small scale water bodies, bunds, sluices, spill ways and feeder channels.
5. Thus treating a chain of tanks as an integral whole.



All pictures shown here are from Gramodaya Park Panels.

You can see all the panels in multi-color in the handbook on Rain-water Harvesting.

## Holistic Health

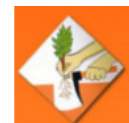


On June 23<sup>rd</sup> we conducted the workshop on Varma and the chief guest of the workshop was writer Jeyamohan. He comes from the family of traditional healers. He emphasized the need to standardize the traditional medicine and bring it within the purview of scientific study and the need for multi-disciplinary approach in Siddha. He asked the physicians to pay particular attention to medicines with mineral content. Further he saw workshops like this where traditional physicians can share their experience with others can pave way for further strengthening of these systems.



Dr. Imam Ali who is the president of Siddha doctors inaugurated the function.

## Sustainable agriculture System Rice Intensification



According to a World Bank report titled 'the More Rice with Less Water' the 'rice intensification' method (SRI) has helped increase yields by over 30 per cent - four to five tonnes per hectare instead of three tonnes per hectare - whilst using 40 per cent less water than conventional methods.

This method was initially developed in the 1980s in Madagascar and has been demonstrated to be effective in 28 countries. SRI is based on the principle of sustainable agriculture. Its aim is to have more crops with less seed and less water. The two major principles of SRI are: alternate wetting and drying (AWD) during vegetative stage and the use of organic inputs. Here, rice seedlings are transplanted early (8 to 12 days in SRI: 21 days in the conventional method).

During transplantation the seedlings are widely and uniformly spaced (up to 20, 25, 30 or even 50 cm apart). The fields are alternately kept wet and dry; they are not flooded until the panicle initiation stage (1-3 cm of water in the field during the reproductive phase). It has been shown that SRI recorded higher water productivity of 0.699 kg/m<sup>3</sup> compared to conventional farm water productivity of 0.253 kg/m<sup>3</sup>.



So VK-NARDEP helped in the dissemination of the SRI technology in Kozhikottupothai a village as part of a BIOFARM project, where the different eco-technologies are combined together to produce a good effect.

Initial deterrents were the need to have skilled labor cost and also the high labor cost. However subsequently SRI was also added to the basket of interventions made. The results on vital parameters are tabulated below:

	Season-I	Season-II	Season-III
Percentage decrease in water usage in paddy field	12	10	<b>35</b>
Percentage N	0.029	0.030	<b>0.0035</b>
Available K	29.78	30.04	<b>28.46</b>
Soil macro-fauna	0	20	<b>28</b>

## Our Youtube channel Our Youtube channel Our Youtube channel



### 7 minutes brief on Biofarm project:

This is the result of an all India coordinated project sponsored by Department of Science and Technology of Government of India, executed by Vivekananda Kendra - NARDEP (Natural Resources Development Project). This involves decreasing market dependency and increasing livelihood security, food security, nutritional self-reliance, economic empowerment and employment generation. This is done through the introduction and integration of alternative and eco-friendly technologies and community resource management. This also includes creation of social infrastructure suited for these technological interventions

URL:  
<http://www.youtube.com/watch?v=rY2apRJSfkk>



**Use of Pancha-gauya** in a village in Kanyakumari district: Introduced by Vivekananda Kendra NARDEP (Tamil)

URL:  
<http://www.youtube.com/watch?v=yUP5Toe3uYM>



**Crop diversity in the field:** Fodder grass without chemical fertilizers as inter-crop in coconut grove at the Biofarm village in Kanyakumari.

URL:  
<http://www.youtube.com/watch?v=WCt-zu83Me0>



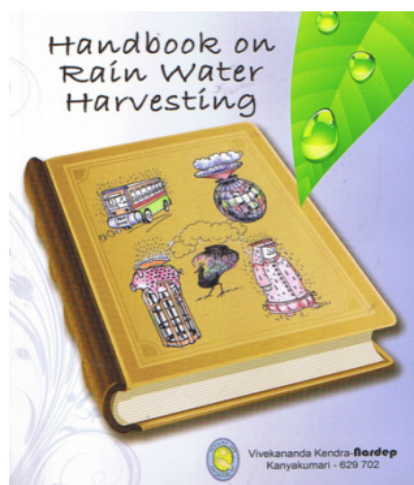
**System Rice Intensification** is a way of rice cultivation developed in 1983 and since then has been successful in creating good yields in terms of both grains and biomass. Here Vivekananda Kendra R&D scientist Dr. Kamalasan Pillai demonstrates transplantation of seedlings and also Sri.Murugan the farmer explains how it helps him.

URL:  
<http://www.youtube.com/watch?v=UGgwvmaWw7g>

**Subscribe to  
VKNARDEP channel  
at Youtube.com**

***“It is a right and duty of the wise ones to purify the strong by teaching them their duties and to strengthen the weak by teaching them their rights.. – Bharathi***

## **Hand book on Rain water Harvesting:**



This is a richly illustrated handbook on rainwater harvesting released by Vivekananda Kendra-NARDEP. [Book cover] The book contains two parts. The Part-I has all the panels of the water section of Gramodaya park. The Part-II has eight chapters each dealing with important aspects of water harvesting. After dealing with the importance of rainwater harvesting, the book deals with:

- \* domestic rainwater collection system
- \* design of a roof top rain water harvesting system
- \* ferro cement technology for the construction of storage tanks
- \* Comparative study of different water Sumps
- \* Cost effective storage technologies
- \* storage in subsurface (aquifers) and
- \* open-space methods

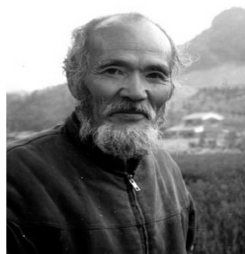
As stated earlier the book is rich in both technical detail as well as aesthetic content. For example the book provides almost 6 pages of step-by-step illustration of ferro-cement storage tank construction. It also richly presents traditional wisdom in the form of indigenous water harvesting structure as well as in the form of couplets from ancient Tamil spiritual-ethical work Thirukural on the importance of saving rain water. On the whole the book provides a wonderful insight for both lay person and professional into the world of rainwater harvesting. The book is supported by CAPART, New Delhi.

**Title: Handbook on Rainwater Harvesting**  
**Compiled by: G.Vasudeo & V. Ramakrishnan**  
**Pages: 80 Price: Rs 150/-**



The ultimate goal of farming is not the growing of crops, but the cultivation and perfection of human beings. Natural Farming is a Buddhist way of farming that originates in the philosophy of 'Mu' or nothingness, and returns to a 'do-nothing' nature." He writes about Mahayana Natural Farming (Mahayana is one of the two major schools or sects of Buddhism) as "... the very embodiment of life in accordance with nature... [it] is realized when man becomes one with nature, for it is a way of farming that transcends time and space and reaches the zenith of understanding and enlightenment."

**-Masanobu Fukuoka  
[Author of One Straw  
Revolution]**



With climate chaos and the rising price of oil, the ecological and economic non-sustainability of chemical fertilizers is evident.

Farming can only be sustained on the basis of ecological renewal of soil fertility. It is, therefore, irresponsible of the World Bank to use the food crisis to push more chemical fertilizers on the Third World as it did at the Food Summit in Rome in early June 2008. Like the addiction to oil, the addiction to synthetic fertilizers only benefits giant corporations. The same corporations who sell high cost fertilizers to farmers like Choori, also buy low priced commodities from them, thus profiting twice while farmers lose twice over. And while buying cheap from farmers, they are driving up food prices and fertilizer costs through speculation.

**-Vandana Siva  
Quantum physicist turned  
Eco-Feminist**



The development process is not purely an economic process. It is also a social, ecological, and ethical process—a multi dimensional and systemic process.

The primary actors in development are the institutions of civil society—NGOs and other associations based on kin, on neighborhood, or on common interests. Because people are different and the places in which they live are different, we can expect development to produce cultural diversity of all kinds.

**-Fritjof Capra  
Particle physicist turned  
Deep Ecology thinker**

