

Echoes of Eco



September , 2010

Vivekananda Kendra- **nardep** Newsletter

Vol:2 No:7

Feminist Science



In 1940s she discovered that genes are not statically coiled like pearls on a jewel in Chromosome.

Barbara McClintock discovered that the genes move. They jump around. They are involved in a dynamic dance of their own. The organism at every level is dynamic.

On the other hand the dominant paradigm in the fields of genetics and molecular biology at that time was that genes were static entities held in bound positions on chromosome. The whole machinery of molecular genetics resembled then a strict factory line with a strong bureaucracy. Challenging that dogmatic assertion of scientific orthodoxy itself was a taboo but that too by a woman? The establishment piously ignored her.

But in 1970s molecular geneticists re-discovered what she discovered decades ago. They called them 'transposons' Genes can move and change their position in chromosomes. The jumping genes which Barbara McClintock discovered are simply non-ignorable.

Grudgingly and belatedly the establishment accepted the truth that this lonely lady had stated decades ago. Geneticist Shapiro explains how this happened:

So first they said she is crazy; then they said it's peculiar to maize; then they said it's everywhere but has no significance; and then finally they woke up to its significance.

After almost four decades they recognized her discovery and gave her Nobel prize in 1983.

A woman, well versed in Tibetan Buddhist meditation techniques, she used the ignoring of her colleagues as an opportunity to learn how to work without expecting any recognition. She wrote to a friend about her feelings when her work was ignored by the establishment:

"...it did not bother me. ..People get the idea that your ego gets in the way a lot of time - ego in the sense of wanting returns. But you do not care about those returns. You have enormous pleasure working on it. The returns are not what you are after."

According to Beverly Jones an ecologist, McClintock stressed the need to have a 'feeling for the organism' and wrote of affection, love and kinship for her plants. This way of 'participatory knowing' results when all pre-occupation with self is given over to a state of complete attention. This idea of participatory consciousness in scientific research is a great leap forward and inward in the evolution of science.

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Hymn in Praise of Herbs



***Herbs rich in Soma, rich in steeds, in nourishments, in strengthening power,—
All these have I provided here, that this man may be whole again. The healing virtues of the Plants stream forth like cattle from the stall,— Plants that shall win me store of wealth, and save thy vital breath
-Rig Veda (Book 10: Hymn XCVII)***



Why Say No to Plastic Bags?: Plastic bags floating in the sea resemble jellyfish, a staple part of the diet of many marine mammals. Many thousands of animals die every year from choking on our discarded waste or getting entangled in it and drowning.

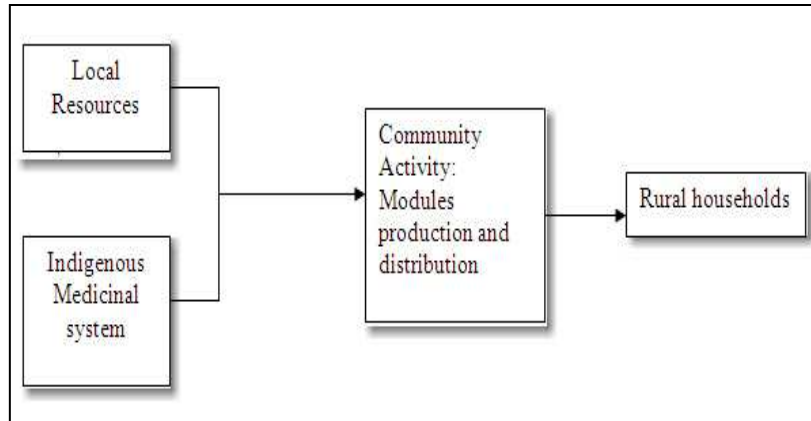


Can Siddha help solve Malnutrition problem?-II

This month...



The Possibility



Though forgotten today, in the knowledge base of indigenous medical system is preserved traditional food suppliers for nutritional deficiency which also takes into account the different stages of life which require different nutritional needs. These remedies are based on easily available local resources. Hence through a thorough study of such formulations the following possibilities have been identified by VK-**nARDEP**

a) A complete nutritional health drink which shall be a poor-woman's alternative for costly urban health drinks which are highly commercial and out of reach for the common villager or even an urban poor person.

b) A herbal indigenous iron rich tablet, that helps the rural women folk to prevent the prevalent anemia that is rampant particularly in rural Tamil Nadu

c) A herbal tablet that is very specific to the district of Kanyakumari which helps to increase the immunity (immuno-modulant)

But this is not just a technical product development based on age old knowledge. It can also bring some important social changes. For example this product when developed can

- make rural households nutritionally self-reliant
- effect holistic improvement of health
- provide cost-effective health care which is affordable for even poor rural households
- generate rural employment
- empower rural women as the nutritional modules are done through rural women self-help groups
- revive local traditions of food-diversity and nutritional balance.

A general improvement in health through removal of malnutrition can also boost work quality as well as functional efficiency of our rural population.

Green Health Home at Vivekananda Puram functioned for 8 days and treated 230.patients.



Done with DST core support



Water and Sanitation ...

- Workshop on "Grey Water Treatment" was sponsored by RuTAG, IIT, Chennai and was organized by Vivekananda Kendra – **nARDEP** at TRC, Kalluvillai on 18th September. 80 persons attended. Resource Persons were :
 - Dr.S.Pushpavanam of IIT, Chennai
 - Sri..S. Gopalakrishnan of RuTAG, Chennai
- Tested water from 14 wells in Kanyakumari Dist – programme of Central Ground Water Board, Chennai



What we label scientific knowledge is lots of fun. You get lots of correlations but you don't get the truth. ... Things are much more marvelous than the scientific method allows us to conceive.

– Barbara McClintock

Why Say No to Plastic Bags?: It is estimated that up to 1 trillion plastic bags are consumed worldwide each year, more than one million per minute



students Selvam Arts and Science College, Namakkal: study Azolla technology



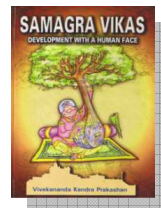
At Vivekananda puram students are having a field visit: Grey water treatment study



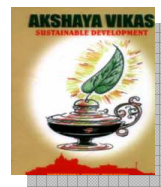
Awareness Programme on Shakthi Surabhi at Christian Mission Service Meeting



At Gramodhaya Park students study urban and rural rain water harvesting models



Handbook on Rain Water Harvesting



Vivekananda Kendra Prakashan
Kanyakumari - 629 702



This month... Networking



- INDOCERT General Body Meeting was held at Cochin on 22nd & 23rd. 50 persons attended this meeting. In this meeting, discussions on Organic farming certification were held. Dr.P.Kamalasanan Pillai also attended the meeting.

In future the water may be the most precious resource, How to start saving it for your posterity? Read our handbook. For copies contact the Secretary
Vivekananda Kendra-NARDEP
Vivekananda Kendra, Kanyakumari-629702



A section of students attending programme on Grey water treatment



Happenings: This month for Sustainable Agriculture

- Workshop on “Azolla Cultivation” was held for students and staff of Selvam Arts and Science College, Namakkal at Vivekanandapuram on 7th of this month. 56 persons attended this workshop. The Resource Person was Dr.P.Kamalasanan Pillai.
- Workshop on “Vermi Composting Techniques” was held for the students and staff of MET College of Education, Chenbagaramanputhooor, kanyakumari Dist. at Vivekanandapuram on 9th of this month. 7 students attended. Shri.S.Rajamony was the Resource Person.
- Workshop on “Azolla Cultivation” was held at Vivekananda Kendra - NARDEP at Vivekanandapuram on 25th of this month with S.Premalatha as the resource person.

Renewable Energy This Month...



Awareness programmes on Shakti Surabhi Bio-methanation plant under (RIF) NABARD, Chennai were conducted at :

- Maitreyi – The Vedic Village, Aliyar, Coimbatore District on 7th of this month. 29 persons attended. (Resource Person: Shri.V.Ramakrishnan)
- Christian Mission Service, Azhagiapandipuram, Kanyakumari Dist. on 17th of this month. 80 persons attended. (Resource Person: Shri.G.Vasudeo)
- S.T.S. Kamala Marriage Hall, Nagore, Nagai Dist.on 19th of this month. 40 persons attended. (Resource Person: Shri.V.Ramakrishnan)
- Thanthai Hans Roever College, Perambalur on 21st of this month. 200 students attended. (Resource Persons: Shri.G.Vasudeo, Shri.V.Ramakrishnan)
- Vivekananda Vidyalaya, Tiruppur on 23rd of this month. 35 persons attended. (Resource Person: Sri .V.Ramakrishnan)

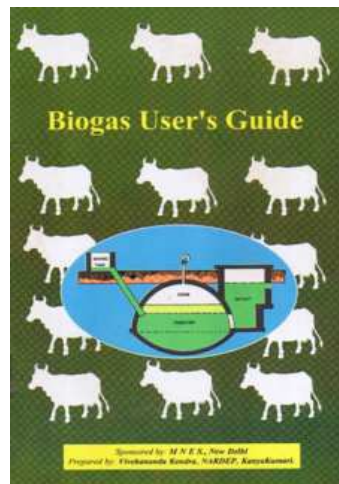
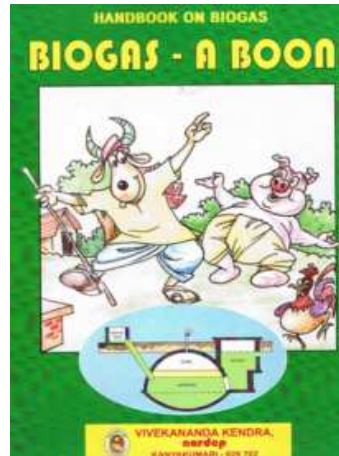
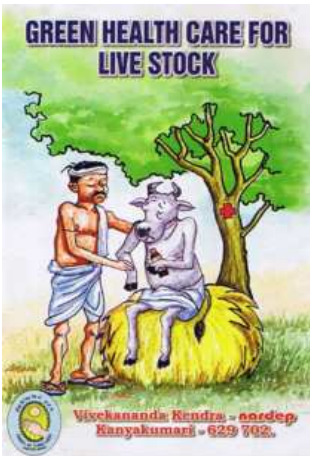
Shakthi Surabhi training programme was held at Vivekananda Kendra-NARDEP TRC, Kalluvilai on 25th of this month. 21 persons attended. (Resource Persons: Shri.G.Vasudeo, Sri.V.Ramakrishnan)



Shakthi Surabhi awareness programme at Nagore with a section of audience



Why Say No to Plastic Bags? Research shows that every person would normally use a total of 167 carrier bags per year; averaging to about 6 bags a week



How Shakthi Surabhi tackles the waste-disposal problem in a multi-faceted way:

Alternative fuel for cooking gas

Waste disposal - very good for bio degradable waste management system

Hygienic - no odor and flies

Arrests green house gas

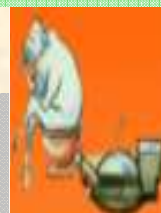
Digested outlet slurry is good as organic manure

**How to feed the future humanity?
How to make development sustainable?
Some of the best publications on the subject for layman and professionals alike, are from VK-nardep.
Contact: The Secretary, Vivekananda Kendra-NARDEP
Vivekananda Kendra, Kanyakumari-629702
Tamil Nadu
Phone: 04652-246296 Email:vknardep@gmail.com**



This month... Shakthi Surabhi

- This month Commissioning of five Shakti Surabhi plants were done under RIF scheme of NABARD, Chennai



Evolution is a tightly coupled dance, with life and the material environment as partners. From the dance emerges the entity Gaia – James Lovelock





From Our Publications



Indian culture is a culture of songs. India's most sacred hymns are songs. India's Epics are songs and ballads. Every walk of life has a song in it. Fishermen sing songs while fishing. Farmers sing songs when farming. Weavers sing songs. In fact two great poets India produced – Thiruvalluvar and Kabir are weavers.

Songs are the best way to convey the vision of life to people. This understanding has led VK-**NARDEP** to produce a book of songs which inspire and inculcate sustainable way of living. There are 56 compositions broadly divided under four categories.

The first category is about inner spirituality. It invokes Divinity that permeates the entire existence. Some of the classical Tamil hymns are also found in this collection. It also has invocations to Sri Ramakrishna, Swami Vivekananda, and Holy Mother Saradha Devi

The next and major part deals with environmental issues. Lucid eco-rhymes and songs fill the pages with beautiful small illustrations of line drawings.

One song brings out the enviable bio-diversity that our countryside has in the different number of trees. Another song shows how we have to save the trees. Yet another song speaks specifically how it is the duty of each boy and girl to plant a tree sapling and nurture it into a tree that benefits all. There are songs about different common medicinal herbs and plants.

A song portrays the tragic destruction our so called development is bringing to wild life. The beauty of the song is that it is told from the point of view of a small bird. This is good material for mono-act or a small eco-skits in a school function.

There are songs that promote natural indigenous system of medicine, A study recently revealed that a typical urban school boy knows at least 50 brand names of consumer goods but hardly 5 local plants. These songs introduce many common medicinal plants and how they are useful for our day to day healthy living. From eco-consciousness the book also advocates social and national consciousness. The need to live in harmony with each other is also brought out in many songs.

These are songs that can be taught to school children and college students. They can be sung as group songs and also can form part of stage plays and street plays on ecological themes.

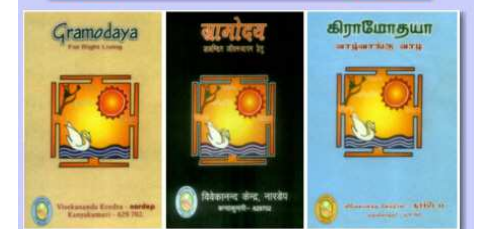
Aadduvome Pallu Paaduvome (**Let us dance and Sing: Tamil**)

Pages: 64

Price: Rs 20/-(subject to change)

**Secretary VK-NARDEP
Kanyakumari -629 702**

From Cough to Smile: An Eco-Journey



Visit Us at Cape

If you have a sincere and open heart, you naturally feel self-worth and confidence, and there is no need to be fearful of others.
 – His Holiness Dalai Lama



Feeling

Closeness to nature, and in particular a good relationship with an animal or animals, is an important element in the development of a psychologically well-adjusted child, who will, with luck, become a well-adjusted adult. But unfortunately, nature alone is not enough. First, society as a whole must reevaluate its attitude toward non-human life forms and the environment we all share. Even if a child is fortunate enough to have a mother with the understanding that mine had, the attitude of respect for life, fostered in early childhood will be at risk when, during a science class, the child is required to dissect a once-living creature killed simply as a teaching tool. This is even more shocking since the majority of the kids in the class will not take up careers in which the information gained at the cost of suffering will be even marginally useful....we have a choice. Will you, I say to young people, use the gift of your life to try to make the world a better place for all living beings - or not?

– *Jane Goodall*
 Zoologist



Knowing

Symbiosis is a physical association between organisms, the living together of organisms of different species in the same place at the same time.... In the search for genes outside the nucleus, I became more and more aware that they're cohabiting entities, live beings. Live small cells reside inside the larger cells.

Understanding that led me and others to study modern symbioses. Symbiosis has nothing to do with cost or benefit. The benefit/cost people have perverted the science with invidious economic analogies. The contention is not over modern symbioses, simply the living together of unlike organisms, but over whether "sybiogenesis" — long-term symbioses that lead to new forms of life — has occurred and is still occurring. The importance of sybiogenesis as a major source of evolutionary change is what is debated. I contend that sybiogenesis is the result of long-term living together — staying together,

– *Lynn Margulis*
 microbiologist



Learning

...I had to think myself into the role of an animal that lives in the sea. To bring this about I had to forget a lot of human conceptions. For example, time measured by the clock means nothing to a shorebird. His measure of time is not an hour, but the rise and fall of the tides — exposing his food supply or covering it again.

...It is essential that the beginning student should first become acquainted with the true meaning of his subject through observing the lives of creatures in their true relation to each other and to their environment.

To begin by asking him to observe artificial conditions is to create in his mind distorted conceptions and to thwart the development of his natural emotional response to the mysteries of the life stream of which he is a part. Only as a child's awareness and reverence for the wholeness of life are developed, can his humanity to his own kind reach its full development.

– *Rachel Carson*
 Ecologist

