GARDENIA: the garden education module focused on medicinal plants diversity for the use of rural communities in southern India

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1. Background

The Foundation for Revitalisation of Local Health Traditions (FRLHT) in Bangalore, India was instrumental during 1994-2004 in establishing 18 medicinal plants gardens at different places in southern India under the DANIDA supported program for conservation of medicinal plants diversity. Reflecting the regional diversity of medicinal plants and local health traditions, these gardens showcased different aspects of medicinal plants and the community's dependence on medicinal plants (FRLHT 2006)

Although these gardens were created with the major focus of showcasing the medicinal plants diversity of a given region, they also tried to meet the information needs of the local communities in a rural set up. Thus the gardens during 1995-2004 witnessed several educational events happening, meeting the information needs of different target groups. Accordingly, these gardens became the venues for different training programs, self help demonstrations and exposure visits. Several hundreds of Different Village women forum, Self help groups, Rural schools, Folk healer networks, students and teachers in many places, came to these gardens and obtained different levels of orientation on medicinal plants diversity and Local Health Traditions. These gardens during 1997-2004 also inspired the creation of chain of home herbal gardens in many places in south India (FRLHT 2006).

2. Botanical garden as a learning resource

Despite their strong potential to be the learning spaces on nature education in a rural set up, these gardens continued to conceive *ad hoc* programs for a diverse and wide range of visitors such as tourists, casual garden visitors, students and local communities with out addressing their specific learning needs. Thus one would find a single pack of learning contents being put to use for all the target groups, with out discriminating the learning needs. Although this was easy to do, we noticed that the contents being used were not fulfilling the information needs of all the target groups to a fullest extent. This development would eventually distance the target groups rendering the garden useless.

Thus arose a need to develop a **"target group specific"** learning module for use in these gardens in order to keep the garden in a position so as to attract the target groups.

Considering such a need, the Training and Education group and the Community Health Education and Outreach groups of FRLHT jointly conceived a project to develop a Model Educational Program (MEP) for two select target groups from the local communities – *School students and Village women groups* for use in the medicinal plants.

3. MEP and GARDENIA

MEP is visualized through two elements. Firstly by enriching the existing medicinal plants diversity on these gardens and secondly by developing an educational module for the trainers to orient the two target groups mentioned above. This educational module package under development is being named as GARDENIA.

The educational module package developed in the backdrop of the medicinal plants garden, aims to <u>educate</u> these target groups and help them develop enough appreciation towards the diversity of medicinal plants and revitalization of local health traditions. As a result, the target groups are expected to be better informed to contribute to the cause of conservation of medicinal plants and revitalization of local health traditions in their neighborhood.

Learning objectives:

GARDENIA is being developed to fulfill the following learning objectives.

- To help the target groups develop sufficient appreciation about the medicinal plants diversity and Local Health Traditions
- To provide the target groups a basic orientation about the usefulness of medicinal plants to address primary healthcare requirements, in a rural setup.
- To sensitise the target groups to contribute to conservation initiatives of medicinal plants and revitalization of Local Health Traditions.
- To contribute to the teaching potential and the usability of a medicinal plants garden as a learning resource.

4. Contents of GARDENIA

Unit 1: Diversity of Medicinal Plants

Subject included	What does the subject contain
Common understanding about medicinal plants, as seen among the target groups	Definition & understanding of a "medicinal plant" Familiarity with common medicinal plants
Overview of Medicinal plants diversity of the country	Diversity of medicinal plants in southern India Highlights- endemic, rare species Common medicinal plants in the neighborhood
Value & importance of medicinal plants	Multiple values of medicinal plants-medicinal & non medicinal Commonly used medicinal plants in a household for healthcare
Medicinal properties of plants	Medicinal plants as Drugs Properties of medicinal plants Plant parts used as drugs

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Medicinal plants in our daily life	Commonly used medicinal plants – for medicinal & non medicinal purposes
Medicinal plants as Drugs	Familiarity with medicinal properties of plants Plant parts used as medicine
Local Health Traditions – regional examples	Local health traditions- common examples Folk healers Home remedies Self help formulations for women health & family health

Unit 2: Significance of Medicinal Plants & Health Traditions

Unit 3: Conservation of Medicinal Plants

Threats to the survival of medicinal plants	Overview of different environmental threats
Conservation attempts elsewhere	Overview of conservation initiatives
Role of students& Women groups in the conservation of medicinal plants diversity and revitalization of Local Health Traditions	Importance of environmental consciousness in daily life Individual's role in Conservation of medicinal plants & revitalisation of Local health traditions

5. GARDENIA as a focused Educational module

Module units:

Two separate modules are being developed:

- One for the School Students
- One for the Village Women groups

These Modules are being developed as self contained packages with the following elements:

- Teacher instructions
- Subject matter notes & session contents
- Self exploratory activities & Games
- Field exercises & Worksheets
- Support material in the form of pictures, fact sheets and visuals.

The draft versions of the modules were made ready by January 2007 and were field tested with the Master trainers from the target groups.

Looking at the initial responses and the feedback provided by the NGO partners and the field testing sessions recently conducted with the master trainers, it seems to us that GARDENIA has in store an enormous scope

for effective and interesting learning sessions especially for the students through its games and field activities. Following are some of the interesting games/activities included in it.

Unveil a panacea plant (a participatory activity in which students construct a model of a panacea by pinning up different raw drugs on to a bamboo pole, which on completion displays all the different medicinal parts)

Medicinal mural (another interactive activity in which a panel constructed by gluing different medicinal tree barks side by side is presented to students and asked to feel the surface by touching and smelling)

Make a medicinal garland (another participatory and engaging activity in which the students are asked to string together different beads, seeds, root pieces, bark pieces and dried flowers and make a garland)

Medicinal marathon (a kind of treasure hunt in which students are asked to do the different activities in minimum possible time: activities such as such as collect 10 seeds, trace outline drawings of 10 leaves, prepare a medicinal juice, talk to a folk healer, sow 10 seeds in a seed pan, separate the chaff/shells of 50 seeds etc. activities are to be done in different places of the garden)

6. GARDENIA- next steps

The draft version of the module was put to field test with the NGO partners during January 2007. The same is being translated in to Tamil and Kannada for subsequent use by the master trainers at the NGOs The module has sufficient scope for adding different region specific activities. Considering the feedback by the NGO partners and after making necessary modifications in the module packages, we hope to extend the module to other medicinal plants gardens in southern India too. We would like to seek the views and opinions on the module by the other Garden curators under the BGCI network.

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References:

1. FRLHT, 2006, *Medicinal Plants Community Centre Model*, Foundation for Revitalisation of Local Health Traditions, Bangalore, India.