

# Reviving local health knowledge for self reliance in primary health care

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The Foundation for Revitalisation of Local Health Traditions (FRLHT) is a non-governmental organisation established in 1991, dedicated to revitalising India's rich and diverse health traditions. FRLHT's mission includes the conservation and sustainable use of medicinal plants, building databases on various aspects related to medicinal plants, setting up traditional medicinal clinical centres, and research on selected medical, sociological and epistemological aspects of the Indian medicinal heritage.

## Traditional medicines and their relevance to health security

The Indian subcontinent has a rich tradition of indigenous medical knowledge, including written medical systems like Ayurveda, Siddha and Tibetan medicine, and oral or folk traditions. Written or codified systems have formal traditions of training and many written documents. The non-codified or folk traditions, such as those represented by bonesetters, birth attendants, paediatric specialists, and veterinary healers, have been transferred as oral traditions through the generations. These folk traditions are specific to an ethnic community and ecosystem, and embody tremendous geo-cultural diversity. Folk medicine also includes household knowledge about primary healthcare, different health food recipes, seasonal health regimens, customs and rituals. This knowledge is embedded in the lifestyle, diet and health practices of thousands of local communities all over India.

Although India is endowed with such a rich medical knowledge and natural resources, health status is far from satisfactory. Over 80 percent of the need for health care is in rural areas, where only 25 percent of the existing services are located. The rural poor have difficulty obtaining primary health care due to ineffective government health centres and the high cost of private health care facilities. Furthermore, much traditional knowledge and many local health cultures are being lost, due to economic, political and cultural reasons. These traditional health care systems can address the primary health problems frequently encountered by rural communities. They can also complement efforts in poverty alleviation and can be a health and livelihood strategy. As biodiversity and cultural diversity go hand in hand, strengthening of local health cultures will also contribute to the conservation of local biodiversity.

## Health security through home remedies

The Home Herbal Garden programme was initiated by FRLHT in 1998 to promote positively assessed local health practices for

self-help in primary health care (PHC) among rural populations. The objectives of the programme were to increase awareness about the value of local health knowledge for managing PHC conditions using medicinal plants, to promote home gardens in rural populations, and to train women village resource persons in the cultivation and use of medicinal plants for common health complaints in the community. The programme started in the south Indian states of Kerala, Karnataka and Tamil Nadu, working through community based organisations (CBOs), non-government organisations, and State Forest Departments, along with many local communities. Key health problems were identified in selected villages as part of this participatory process. Common conditions identified can be seen in Table 1.

## Selection of local health practices and medicinal plants

Many local health traditions are sound, some are incomplete and a few may be distorted. One of the major challenges in advocating local health practices is to have clear documentation on the efficacy and safety of these practices. Finding out effective practices through elaborate pharmacological and clinical trials is a colossal task. For example, to validate a single practice would involve 5-8 years of laboratory research with a huge amount of capital investment.

FRLHT developed a methodology for documentation and participatory assessment to identify safe and effective practices and to promote positively assessed local health measures. After prioritisation, a comprehensive documentation is conducted with the healers and elderly women in the selected villages to know the health practices used locally for the prioritised conditions. These practices are assessed through a methodology called Rapid Assessment of Local Health Traditions (RALHT) to confirm their safety and efficacy. Subsequent to the documentation, a panel comprising of community representatives, local healers and "traditional" and "modern" doctors assesses each of the herbal remedies for the specified condition. Each herbal remedy is thus graded and recorded for its safety and efficacy.

In a workshop with the local communities and external experts, communities' experiences regarding the safety and efficacy of a specific practice are recorded. This has to be confirmed by local healers and traditional physicians. Parallel to this, literature evidence from the pharmacopoeias of the Indian systems of medicine and modern pharmacology are collected. Based on these, consensus is achieved through rigorous discussion before selecting any practice. In a typical village, around 15-20 health conditions and medicinal plants are selected through this process.

**Table 1. Example of some common complaints and remedies encountered**

Complaint	Medicinal plants used	Parts used	Form of home remedy used
Cold and cough	<i>Adhatoda zeylanica</i>	Leaves	Decoction
Fever with indigestion	<i>Tinospora cordifolia</i>	Stem	Decoction
Abdominal pain during menstrual cycle	<i>Aloe vera</i>	Pulp	Fresh pulp consumed internally
	<i>Asparagus racemosus</i>	Tubers	Hot milk decoction
	<i>Hibiscus rosa-sinensis</i>	Flower	Fresh flower without calyx
Joint pain	<i>Vitex negundo</i>	Whole plant	Medicated oil

### Establishment of nursery and herbal gardens

Once ailments are prioritised in a particular village, relevant plants are selected. A nursery with these plants is established by a CBO, who also chooses a woman from their group to act as a Village Resource Person. Together, they train households on how to cultivate and use the plants, supplying seedlings to households from the nursery for a nominal fee. The households themselves will then establish their own gardens, cultivating and using medicinal plants.

Fertilizers are very common in these villages. But during trainings, it is made clear that the effects of fertilizers or pesticides on the active ingredients of the medicinal plant are not known. So villagers are expressly told not to use them. Most species used are easy to grow and traditional cultivation practices are followed. Many of these households already have a small vegetable/fruit garden. But this practice is rapidly eroding as people move towards a market culture. FRLHT is consciously bringing back the idea of having a kitchen garden, where children enjoy helping their mothers to take care of these gardens. FRLHT also works with many landless households. In such cases it is difficult to establish household gardens, so the concept of community gardens is promoted.

We have observed that some households have improved the cultivation practices. Water is a real problem in many villages, so plants like *Bacopa*, which need more water, are grown in pots. Many households cultivate plants near where the wastewater flows from the kitchen. This gives really good growth in certain species like *Acorus*. But we are not sure whether this wastewater will have a negative impact on the medicinal plants. These are unexplored areas. From such initiatives we are getting a clearer idea of which medicinal plants can be grown in such places, as agronomic details are available for only a very few medicinal plants in India. Many of the medicinal plants are regarded as common weeds and available on common lands.

### Difficulties and impacts

One of the main difficulties was monitoring how much these plants were actually used for health purposes. The programme did not have baseline data, but FRLHT has started to gather some documentation to understand this. We are also monitoring individual plants and their efficacy through what we call a "participatory clinical study".

In some of the locations, we found it difficult to keep up the momentum after the project period, as there is no continuous monitoring system. As more and more healers' associations and self help groups became involved, this was solved to a great extent. At the same time, another challenge has been to get an emotional commitment to the programme. Many drugs for treating common ailments are available in local shops at very low cost, so people tend use such easier solutions.

In spite of these difficulties, between 1998-2005, FRLHT implemented the Home Herbal Garden (HHG) programme in more than 6000 villages and hamlets across the states of Kerala, Karnataka and Tamil Nadu, promoting 150 000 home herbal gardens. Since 2004, the programme has been extended to other states such as Maharashtra, Andhra Pradesh, Chattisgarh and Orissa. An urban HHG programme has also been initiated in the city of Bangalore at the request of the city dwellers.

The average cost of a HHG package containing 15-20 saplings works out to Rs. 100 (US\$ 2.20). This includes the costs of

raising and supplying plants to the households, trainings, and the administrative costs of the CBO/NGO. On average, the one-time cost of conducting a RALHT exercise in a community is Rs. 30 000 (approx. US \$660), which can be recovered over a period of time through the sale of the HHG package to local households. The Village Resource Persons also earn at least Rs. 500 (US\$ 11) per month through the sale of saplings and by training households, which serves as an incentive.

Several assessments have shown that the HHG programme is adopted by the poorest of the poor, namely the landless (33 percent), marginal landholding (37 percent) and small landholding (21 percent) farmers. At least 85 percent of adopters belong to the socially deprived communities, while 72 percent of the adopters were affiliated to womens' self-help groups.

The programme contributes to poverty alleviation by reducing costs and indebtedness due to health expenditure. One study noted that the health expenditure incurred by non-adopters of HHG was around five times more than that by adopters. It can also support local livelihoods through small-scale nurseries and processing of medicinal plants. Network members (NGOs, CBOs and communities) confirm the economic benefits in the form of cost saving of health care related expenses. It is reported that in the areas where HHG programmes have been active, visits to doctors have reduced.

The benefits from one HHG can be reaped by not only the family members but by friends and neighbours as well. Non-adopters of the programme were using the raw materials from their adopter neighbours and were benefiting from it. Another interesting fact is that rural women with gynaecological problems particularly benefited from the programme as they were reluctant to approach male doctors.

### Future directions

The HHG programme is becoming integrated into a public health awareness and education programme through primary health centres and sub-centres in some locations. In a programme supported by the National Dairy Development Board, the same methodology to prioritise home remedies is used to prioritise health problems of cattle in areas of need. HHGs can easily be designed to include herbs for veterinary and agriculture care. Quite a lot can be done to improve the programme including refining the validation processes and standardisation of form and dosage of HHG medicines. Since regular clinical trials are prohibitive due to costs involved, novel, culturally contextual and sensitive "clinical trial" methodologies need to be developed to test the HHG solutions and rebuild confidence in traditional medicines. It is suggested that a long-term goal needs to be pursued for collective action by both the government departments, non-governmental organisations at national as well as international levels. ■

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