



*Ola*



The Sri Lanka Conservation and Sustainable use of Medicinal Plants Project valued at US\$ 5.07 million and time-scaled for 5 years was initiated in June 1998, and completed in June 2004 with an extra 12 months permitted to formalize transfer of Project activities to relevant institutions. The primary objectives of the Project were conserving globally and nationally significant medicinal plant species, their habitats and genomes, and promote their sustainable use. The Project sought to achieve these objectives by promoting a series of designed activities for *in-situ* and *ex-situ* conservation of medicinal plants, and through the provision of information and institutional support. The Project identified local communities comprising all shades of people living in proximity to five specially selected Medicinal Plant Conservation Areas (MPCAs) as the target population and the primary beneficiaries.

The institutional framework, in the conservation areas, comprised Village Project Management Committees, (VPMCs) at the village level, Conservation Area Management Committees (CAMCs) at the MPCA level, and the Project Offices (POs). The Project was co-ordinated by the Project Management Unit (PMU) appointed by the Ministry of Indigenous Medicine (MIM), and was implemented in collaboration with other partner agencies such as the Department of Auyrveda, the Forest Department (FD), the Department of Wildlife Conservation (DWLC), the relevant Provincial Councils and the Divisional Secretariats (DS). The Country Office of the World Conservation Union (IUCN) provided operational support.

The socio-economic survey, the ethno botanical survey and the resource inventory survey led to the collection of very valuable data. Despite a few shortcomings in the survey process, the data collected has been considered to be of good quality. The processed information from these data sets is now incorporated in a new database established at the Bandaranaike Memorial Ayurvedic Research Institute (BMARI) which is one of the important outputs of the Project.

The baseline data facilitated mapping of resources and demarcation of forest zones. It was also the source of information for village micro plans. Various consultancy studies however, have reported that a stereotype planning process had been applied in all VPMCs, resulting in the preparation of near identical micro plans. It is also reported that planning had been largely project-driven, depriving the community of the opportunity of gaining self-confidence and a sense of ownership of the village micro plans.

The main contributions of the Project to *in situ* conservation of medicinal plants were enrichment planting of about 205 hectares, 45 kilometers of stream bank planting, establishment of fire lines, zonal demarcation of forests and substitution of wood stakes used in bean cultivation with synthetic cord. The studies on sustainable levels of harvesting were limited to 5 species as time did not permit a wider coverage.

Another successful activity was the plant propagation research, which led to the development of protocols for mass production of planting material for 22 widely used species. The publication and dissemination of information on plant propagati

significant outcome of the research component of the Project. These activities while indirectly contributing to *in situ* conservation intensively strengthen *ex situ* conservation of medicinal plants.

The project has attempted to address the issue of Intellectual Property Rights (IPR). Although legislation on IPR was drafted and approved by a Cabinet sub committee it is yet to be enacted in Parliament. Nevertheless, around 1200 *Ola* leaf manuscripts transcribed and published.

The education, training and extension activities met with unqualified success. The impact was at

The Sri Lanka Conservation and Sustainable Use of Medicinal Plants Project commenced in June 1998 and was to be completed by June 2003. However, the Project was extended by a year and came to an end in June 2004, after an implementation period spanning six years. The Project was valued at US \$ 5.07 million with GEF contributing a grant of US \$ 4.57 million and the Government of Sri Lanka (GOSL) providing the balance for specific identified activities. The operational strategy for the Project also specified a role for IUCN - The World Conservation Union, Sri Lanka, viz. to provide operational and technical assistance for the Project. The objective of this tripartite working arrangement involving the donor (GEF-World Bank), the beneficiary (GOSL) and a provider of specialized services (IUCN-SL) was to set in place a mechanism which would facilitate implementation of the Project.

The primary objectives of the Project are the conservation of globally and nationally significant medicinal plants, their habitats, species and genomes, and promotion of their sustainable use. The Project sought to achieve its objectives through the implementation of three components: a) *in-situ* conservation, b) *ex-situ* conservation and c) provision of information and institutional support. The project components were to be achieved through the following series of actions:

- Establishing Medicinal Plant Conservation Areas (MPCAs) in locations where there is active collection from the wild.
- Community mobilization and creating awareness
- Establishing Village Project Management Committees (VPMCs) and Conservation Area Management Committees (CAMCs).
- Baseline data collection, preparation of village base maps and participatory resource mapping and creating a database.
- Micro planning and preparation village action plans.
- Establishing Ayurvedic dispensaries and medicinal plant gardens.
- Agronomic research on selected plant species, extension and establishing nurseries and commercial plantations.
- Development of home gardens, undertaking sustainability studies and enrichment planting.
- Undertaking education, training and publicity programmes as well as promoting *Gurukula* education.
- Promotion of alternative village incomes linked to maintaining the integrity of reserves.
- Capacity building, institutional strengthening and establishing stakeholder linkages.
- Dealing with ethical and Intellectual Property Rights (IPR) issues, and promotion of an appropriate legal and policy environment.
- Undertaking promotional activities to strengthen social and institutional sustainability during the phasing out stage of the Project.

The main target groups of the Project included the local communities living within the selected MPCAs, Community-Based Organizations (CBOs), organized women groups, local forest users (wood cutters, home builders, farmers and firewood collectors), traditional medical practitioners, commercial collectors and traders of non-timber forest products. State functionaries of Line Agencies of the Central and Provincial Governments (such as Forest Rangers, Beat Forest Officers, Agricultural Field Officers), Non-Governmental Organizations (NGOs)

Sri Lanka's efforts to conserve its medicinal plants resource and the related indigenous knowledge base have fallen short of expectations. The failure to control illicit land clearing and encroachments and the use of destructive and wasteful methods of extraction from the wild are responsible for the depletion in our medicinal plants resource base. And the rich indigenous knowledge, held by practitioners of traditional medicine, is being progressively eroded in the absence of a determined effort to document and preserve it for posterity. In this context the project objectives are meaningful from both national and global perspectives. The proposed project components and actions seem to be well tailored to address the above noted deficiencies in Sri Lanka's conservation efforts.

The Project was designed with in-situ conservation through sustainable management of medicinal plant species in the wild, as the main thrust. It also supported the cultivation of medicinal plants as a means of ex-situ conservation and for providing avenues for income generation. Appropriately, the Project identified local communities, especially those inhabiting villages bordering the five selected conservation areas, and including women, poor households, indigenous people and practitioners of traditional medicine, as its target population. They are the primary beneficiaries.

The objective of sustainable extraction or the cultivation of medicinal plants will enable the communities to attain a reasonable standard of living. This view is embedded in the following two quotations from the PAD (our bold type):

1. *"The primary objective of the village development program is to provide alternative income generation opportunities to those who are currently dependent on MPCA resources for their livelihood and to find substitutes to currently destructive activities. In this respect, the village development programme would be directly focussed on investment activities that demonstrate a direct linkage to the conservation of biological diversity and medicinal plants in the conservation areas. **Activities that are typically of a rural development nature would not be eligible for financing unless they can justify a conservation objective.***
2. *"Benefits at the local level **will include increased choices of livelihood and better income opportunities for people who will be involved in home gardening and plant cultivation.** Further ethno botanical reserves will attract an increase in income. The project will also broaden people's choices of livelihood by promoting alternative sources of income generation."*

The implications of these comments are that there would be substantial increases in income generation through sustainable harvesting and cultivation of medicinal plants, whilst the concept of conservation is sustained.

The Project involved a complex programme of activities with inter-sectoral and multi-stakeholder involvement that needed an exceptionally effective co-ordination and collaborative effort. In a project of this magnitude and complexity unless all operational systems function effectively and efficiently, it would be an extremely difficult task to achieve the intended objectives and goals. However, despite these complexities, the project has achieved significant outputs, that have resulted in observable impacts. Consequently it could be



availability of funds or facilities for the project staff, but to the skills and capacity of the social mobilizers and the leadership of VPMCs.

As conceived in the Project, the Executive Committee of a VPMC comprised of 10 to 12 members, including representatives from stakeholder groups and village organizations as well as representatives of State Agencies. The Project envisaged that around 30 percent of the office bearers of a VPMC Executive Committee would be women. This objective has certainly been achieved and even surpassed expectations. In fact in our own interactions, it was observed that young women played a very active role as office bearers. This can be considered one of the most impressive outcomes of the Project.

The VPMCs were registered with the respective Divisional Secretariats, which gave them recognition and also enabled them to open bank accounts. Towards the end of the year 2000, a confederated apex or umbrella body, the Conservation Area Management Committee (CAMC), was constituted in each MPCA, except at Ritigala.

Data collection started in mid 1998 with commencement of the socio-economic survey, which was virtually the starting point for the social mobilization process. This was followed by phase 1 of the ethno botanical survey, phase 1 of the resource inventory and phase 2 of the ethno botanical survey. The surveys were conducted with active community participation, by project staff facilitated by national and foreign consultants. Delays were experienced at different stages and the surveys were completed only around mid 2000.

The ethno botanical survey was designed to salvage, as much as possible, the traditional knowledge on the use of plant species in healthcare and medication, and to preserve this knowledge for the greater benefit of future generations. It is well recognized that elderly people in remote villages are custodians of a storehouse of invaluable and time tested knowledge for leading a healthy and contented life. This survey did, in fact, retrieve such information, in ample measure, and has made a substantial contribution to meet the project objectives.

The resource survey provided valuable plot data on the location and frequency of occurrence of valuable plant species. The resource inventory data formed the basis for resource mapping, boundary demarcation, and for the preparation action plans. As with the other baseline surveys, here too there were signs of an inflexible approach. While forest resources of much local significance such as bean stakes, construction poles and timber were overlooked, all medicinal plants whether they were locally important or not, were recorded. This is probably due to medicinal plants issues being dominant in the mind-sets of persons inducted to the surveys.

In general the baseline data collected was of good quality. Apart from the massive amount of data collected, these three activities provided opportunities for a large number of nationals at various levels to receive invaluable training and experience in such field activities. The participation of community members enabled them to identify valuable and threatened plant species occurring in their natural habitats.

Although excellent inventories were prepared, the information was not of much importance to FD and DWLC, because the inventories placed an emphasis on medicinal plants. Better planning and coordination of this exercise



The reports available also show that plans had not been properly documented and presented with an operational strategy to facilitate implementation by the VPMCs. Further it has been claimed that the planning process had been directed rather than facilitated by the Project staff, which tends to deprive the community of a sense of ownership and could dampen their interest.

A greater effort to integrate or complement project activities with other village level activities undertaken by State functionaries and NGOs would have paid dividends. Such linkages would have strengthened the recognition and sustainability of VPMCs as action-oriented institutional structures. Even the chance for two GEF funded projects, operating in the Kanneliya Forest buffer zone, to work closely went a begging. CAMC business activities need to be planned carefully. Driers purchased for Rs.200,000/- each remains idle at Kanneliya and Naula due to lack of power and raw materials. Attempts at value addition in most instances had failed, largely due to lack of business acumen and marketing strategies. At the Naula processing centre aiesegiesl3inabilig0.2646 .26 0 TDTDO





main thrust of the Project. But it is evident from the range of activities undertaken, that *ex-situ* conservation overshadowed *in-situ* conservation. However, now at the closing stage of the Project, a pilot study on participatory conservation management is to be tested in Kanneliya and Bibile. FD has agreed to participate and MOUs have been prepared.

Many of the medicinal plants are over-exploited. In extracting medicinal plants from forest reserves, communities often employ destructive practices. Acknowledging that a total ban on extraction is not feasible and communities cannot be denied the traditional benefits from their forest resources, the Project planned to promote harvesting at sustainable levels. Accordingly, the Project proposed scientific investigations to provide information on sustainable levels of harvesting and for sustainable management of populations. These studies aimed at collecting information on growth and yield were initiated only in late 2001. The time available was hardly sufficient for studies of this nature and work was initiated only on the following five species: Veniwel (*Coscinium fenestratum*) Goraka (*Garcinia quaesita*), Binkohomba (*Munronia pumila*), Aralu (*Terminalia chebula*) and Nelli (*Phyllanthus emblica*). Good progress has been made during the 20-month period available but there is much more to be done.

With the phasing out of the Project in June 2004, BMARI has apparently agreed to continue these studies in collaboration with FD. However, BMARI currently lacks the necessary human, physical and financial resources. DoA will need to make a strong commitment to raise BMARI to a level adequate for continuing this work.

### *Ola*

Responding to a request made during project preparation by the donor, and to the concerns expressed by NGOs, MIM appointed an Advisory Group to review the IPR issues that may come up during project implementation and to recommend measures to ensure that there is no infringement of IPR in any of the activities caused by the project.

The Advisory Group recommended the formulation of legislation to safeguard traditional knowledge relating to the use of medicinal plants. This was implemented by the Project in two phases. In phase one, the current status of legislation on IPR relating to the project activities was reviewed. The second phase involved the formulation of legislation to establish an adequate legal regime to safeguard traditional knowledge relating to the use of medicinal plants. This was done through a comprehensive consultative process.

The proposed legislation was to be enacted as a separate Act of Parliament, rather than as regulations under the Ayurveda Act. This was a decision made by the then Minister in charge of Indigenous Medicine. A draft legal framework was prepared, again through a wide consultative process that involved civil society and the general public at large. This process also involved specific reviews by a “Resource Committee”, the IPR Committee, and also by what has been referred to as the “Extended Resource Committee”.

The draft laws were then reviewed by the Director of the National Intellectual Property Office (D/NIPO), and then circulated to the relevant Ministries for their views. Following this consultative process the draft laws were published in the print media and the public was invited to respond.

Finally by mid 2001, a Cabinet sub-committee, approved the draft and authorized the Ministry of Commerce to take over and administer the legislation through NIPO.

about 28 different types of medicaments, 5 types of cosmetic products and a few fruit cordials and sweets on a commercial scale. Although the Project was able to establish such enterprises in all MPCAs, their sustainability appears to be in the balance. A recent case study has recorded that two driers each worth Rs.200,000/- lie idle at Kanneliya and Naula MPCAs for reasons such as lack of electrical energy, inadequate supply of raw materials. There is also a stock of manufactured drugs worth Rs.146,000/- unsold at Naula due to the failure of the Ayurvedic Drugs Corporation to honour an assurance given earlier for its purchase.

Despite these drawbacks, the training, awareness creation and extension programmes at the two levels described above, directly benefited 4070 persons who received training in various areas such

who were also expected to continue with project activities, after the official phasing out of the Project.

The Project was launched in June 1998 and as noted earlier made a slow start. The new Project Director (PD), who took office in mid 1999, in his Report for 1999 states:

*“Some of the teething problems remained unresolved at the beginning of the year (1999) preventing the project activities getting off the ground. The mass media continued to cast doubts on the bona fides of the project due to the absence of a proper legal framework. The lack of a clear understanding of the project concepts, and the absence of an agreed framework for the implementation of the project components further confounded the issues.”*

This statement captures the problems encountered in moving the Project forward and emphasises the need for meaningful interactions among key stakeholders during project preparation.

The PD was the link between the national level implementing partner agencies and the Project. The PD as head of the PMU Secretariat reported to the Secretary MIM, and held the overall responsibility of overseeing, guiding, supervising and managing the Project. The PD’s task was not an easy one. This was compounded by certain issues which appeared to be beyond his control.

To begin with, the PD had two categories of staff at the PMU. Technical staff (the national consultants), was hired, commissioned and paid by IUCN (as per contract with MIM), while the PD, Programme Officer, Accountant and other support staff were hired by MIM. Technically, the national consultants served two masters, possibly with a higher allegiance to IUCN. The seeds of discord were inherent in this arrangement. And problems did arise, and seem to have been simmering and unresolved well into 2000. The IDA Review Mission in March-April 2000 observed:

*“The National Consultants and PMU have not been able to provide a collective and cohesive support and guidance to the field staff to initiate the micro planning process”.*

The same report also observed:

*“The hierarchical relation between different layers of staff, and the unclear functional lines between PMU and the national consultants inhibits the free flow of information and atmosphere in which mutual understanding can be built”.*

The PMU was established under the Ministry responsible for the subject of Indigenous Medicine. Unfortunately, this particular subject had no settled affiliation to a ‘parent’ ministry until recently. With each move of the Ministry, the project was ‘on hold’ until the new authorities came to grips with the project and this, no doubt, seriously affected progress. When the new Ministry was appointed in the recent past an “independent” committee to review the Project was appointed. Since this review was to be undertaken at a time when an extension was given to the project mainly to transfer ownership of the Project to the communities, this hampered the smooth transition of the

ownership of the project to VPMCs and CAMCs. Many respondents described this period as the most disastrous phase of the project.

The PMU also had to cope with a high turn over of Project staff, as well as of the heads of the principal executing agency (MIM) and the principal implementing partner (DoA). During the six years, June 1998 to June 2004, the Project had four Project Directors reporting to seven Secretaries/MIM and working with seven Commissioners of Ayurveda (see Annex III). Also, there was no continuity in the key position of Programme Officer at PMU. Three persons occupied this position in between long periods when it was vacant.

The PMU conducted its business in the MCPAs through a field Project Office in each MCPA, headed by a Project Officer (PO) assisted by a Project Assistant and a field staff of CDOs. At the outset, a major task for the PMU was to promote a keen understanding and appreciation of the Project concept among the Project Officers and CDOs, and to see that they had the knowledge and skills needed to interact productively with the community. This was necessary as it was the task of the CDOs/POs to carry the Project message, establish a continuing interaction with the community and create an awareness of project issues and benefits. However, this situation changed for the better in the latter half of the project. With additional training the CDOs made a valuable contribution, and all respondents were unanimous that the level of awareness of the project objectives, value and importance of medicinal plants and the need to conserve them was high among the communities.

As for coordination between the PMU and line agencies, two mechanisms were available viz. the Project National Steering Committee and the Project Monitoring Cell. Although the latter was for monitoring purposes it had the potential to assist in coordination as well. The composition of these two committees was detailed in section 4.2 above. Both committees had high level representation from all relevant agencies and were chaired by the Secretary and Additional Secretary of MIM, respectively. These committees were exactly what was needed to steer and coordinate a complex project. By the nature and level of representation, these committees had the capacity to ensure coordination and trouble-free implementation of the project. Had they functioned without interruption it would have been an enormous asset to the PMU.

The National Steering Committee (NSC) was established with a wide multi-sectoral and multi-institutional representation, and presided over by the Secretary of MIM. Reference was made above to the inexplicable curtailment of the NSC mandate, which deprived the PD of guidance from an important and representative forum. Another issue concerned the National Steering Committee (NSC) which was set up to provide overall guidance to the Project, including the approval of annual work plans and budgets. However, for reasons that are not clear, the NSC mandate was confined to guidance on policy issues. Consequently, the Project Director was deprived of the benefit of operational guidance from the NSC. It seems the IDA Review Missions stepped in to fill the breach. In fact, the *Aide Memoirs* have on no less than 90 recorded instances attempted to push matters through strong recommendations, or with interventions such as joint agreements with implementers.

The Project Monitoring Cell (PMC) was a device to monitor and evaluate the various project activities, and assess the timeliness and focus of the Project. It comprised representatives of stakeholders, heads of departments participating in the Project, representatives of IUCN, and the

key project staff. This cell was chaired by the Additional Secretary of the MIM. During the initial stages, the PMC met almost on a monthly basis but from late 1999 the PMC appeared to be phasing out with infrequent meetings, despite a strong recommendation by the IDA Review Mission in 1999, which emphasized the need for it to monitor progress and ensure adherence to the agreements reached in the Mission Aide Memoirs.

Since the Project interacted with a diverse group of stakeholders, mechanisms for formal and informal coordination and linkages, at different levels, were set in place.

Mechanisms for linking the communities to the MCPA Project Office and coordinating their activities were designed by the PMU, as per guidelines in the PAD. The communities were committed to be active partners in selected project activities, eg. in baseline surveys and village mapping. Community Agreements were signed to ensure compliance. Terms of Reference issued to Project staff clearly defined their roles in coordination at the community level as well as at higher levels.

Linkages were also established between the communities and the following line state agencies: a) FD and the DWLC, b) Central Government officials operating in the Divisional Secretariat, and c) Provincial Government officials operating from the Provincial Secretariats. It was under this formal linkage (c) that VPMCs and CAMCs were established. The State agencies represented in the VPMC were the *Grama Niladhari, Samurdhi Niyamaka, and Govi Niyamaka*.

Agricultural Extension and Ayurveda are with the Provincial Administration, while Forests and Wildlife are with the Central Government. The ex-officio representation of all four agencies in the CAMC gave credence to the existence of a tw

It is clear from Sections 4.1 and 4.2 above that the NSC and PMC, which were expected to perform the dual function of coordination and monitoring, failed to play an

The finances of the Project have been managed in accordance with established GOSL accounting procedures and World Bank financial procedures. The accounting procedures and systems have been applied in a satisfactory manner. At first, in terms of the Trust Fund Grant Agreement (TFGA), funds were provided only for the 3 categories, Civil works, Goods and

The Project planned to conserve medicinal plants of significance and their wild habitats, while promoting their sustainable use. This was to

The key outputs expected of the third component of the Project, on information and institutional support are i) the preservation of indigenous knowledge and practices in the use of medicinal plants, ii) improvement in the technical capacity to conserve plants, and iii) the enactment of a legal framework on IPR.

The baseline surveys have generated a large volume of information that have been recorded in an IPR serviced database of 2 GB capacity. Published information is available on a number of subjects of direct interest to conservation of medicinal plants. In addition 1200 *Ola* leaf manuscripts have been transcribed and published and a legal framework for IPR has been drafted. Capacity building and human resource development in various aspects in support of medicinal plants conservation at the community level have been provided to nearly 5000 persons. These outputs show the manner in which the expectations and objectives under the third component of the project had been achieved.

There were several shortcomings in the project design, and many hurdles to be cleared at various stages of project implementation. Despite this the Project did make a significant impact on the conservation of medicinal plants and of indigenous knowledge regarding them. Additionally, the Project has generated numerous impressive spin-offs, which are listed below.

#### ***At the community level***

Opportunities for increased choices of livelihood, and better incomes for those involved in home gardening and commercial cultivation.

Creation of a regiment of field staff well trained in aspects of social mobilization, data collection and analysis, documentation of field data etc.

Development of a new generation of self-reliant and motivated community leaders who are able to identify and analyse local problems, and develop action plans for their resolution.

Creating a strong and effective gender awakening and empowerment, rarely seen in remote rural communities.

Creation of an awareness and understanding among the communities of participatory/joint management of natural resources.

Understanding better the concepts of equitable sharing of natural resources and benefits.

Motivation for innovation and development of new processes and medicinal products.

#### ***At the national level***

A country-wide awareness of the importance of conserving medicinal plants.

Increased skills in conservation and researching sustainable extraction of medicinal plant materials.

An improved supply of planting material.

Greater efficiency in production of traditional medicine.

Existing sources of traditional knowledge compiled and preserved in-country.

Revival and expansion of *Guru Kula* education that characterized knowledge transfer in the traditional system of medicine –*Deshiya Chikitsa*.

The problems generally encountered in sustaining project achievements were recognised at project preparation. However, it does not appear to have had a proper appreciation of the measures needed to meet this situation. The PAD at one point states:

*“A common drawback of community level projects is that with the exhaustion of project funds, the activities associated with*

social transformation, in which the members would acquire leadership qualities and the capability to plan and undertake community-based development activities by themselves.

The Project initiated a training process in early 2003 to provide the Project Officers, CDOs and community leaders with the skills to carryout situation analysis, action planning and preparation of project proposals. They were also introduced to the fundamentals of financial management, micro credit and the concept of revolving funds. The consultancy also examined the feasibility of converting VPMCs and CAMCs to be commercially viable entities.

By December 2003 several short comings that will affect social sustainability had been noted by the Consultant. These included a) declining trend in community participation in project activities, b) limited capacity of the existing leadership, c) influence of traditional leadership, d) deficiencies in existing constitutions, e) continued dependency on project support, f) limited bargaining power over the other institutions for resources, g) poor understanding of the existing competitive market environment and some confusion among communities on project management.

Although the consultant had made a series of short term and long term recommendations to address these issues, time had already run out, to make any meaningful behavioural changes.

The question of institutional sustainability was examined from a different perspective. VPMCs were originally created for a limited purpose and their constitutions were fashioned accordingly. With time they extended the scope of their activities to include savings and credit, provision of common amenities and other services ou3 Tce ex

Capital items procured by the Project had been handed over to the VPMCs/CAMCs, by the end of 2002. But the fate of assets such as land, buildings and machinery had not been resolved even in mid 2004. In arriving at a decision on this the following observations made by the Consultant should be given careful consideration:

*“The office bearers of VPMCs and CAMCs expect the assets held by the CAMC centres to be handed over to the apex organizations at project end but expressed fear that assets may get distributed to government departments on the basis that management of these assets is beyond the capacity of CAMCs”.*

*“If the CAMC centres with their assets are not transferred to the CAMCs, it will be a serious setback to the sustainability of not only the CAMCs but also the VPMCs”.*

In the context of seeking social and institutional sustainability it would not be inappropriate, for all concerned, to bear in mind these comments of the Consultant:

*“Phasing out of SLCSUMPP is likely to have serious implications on the sustainability of VPMCs because the concept of the project, as well as the institutional arrangements devised for the (also are extd, )T wosco(cto bhe course the )TJ2.2.15TD0T0w.(congreof rerno0 T2.6)ety. WheJr.30TD0 Tc3*



On the basis of the above evaluation a number of useful lessons have been learned:

The principal executing agency should be a stable entity that has a strong cadre with extended tenure to ensure institutional memory. While there were changes in both ministry high officials and DoA Commissioners, the DoA as an institution has been more stable. From the point of view of ownership and sustainability, DoA would have been a better location for the PMU than MIM.

VPMCs and CAMCs prove to be viable institutional structures provided they are very well linked to the state agencies within the desired common objectives. The initiatives taken by the project to sustain these as commercially viable entities should be pursued.

The need for economic incentives to encourage participation of members of rural communities should be recognized at design stage. Project funds should be available to support local communities to pursue alternative livelihood strategies.

In planning natural resource management/rural development projects ensure that project beneficiaries are involved in developing the concept of the project, as well as the institutional arrangements devised for the purpose. Participatory needs assessment and planning exercises would promote ownership and facilitate subsequent mobilization of the community. Equally, ensure a consensus on project objectives among important stakeholders, during project preparation.

Ensure a high level of awareness of project objectives among project personnel and functionaries of partner organizations working with the communities,

Moving from 'protection' to 'conservation and sustainable use' of natural resources entails major attitude/behaviour changes on the part of field level officials of state agencies. These field officers may well be amongst those who feel threatened by the implementation of the project. Ensure that training programmes are provided to prepare these officers,

More time and resources should be spent on capacity building of project personnel working with the communities. Their community mobilizing skills in particular should be fully developed at the very beginning of the project. The time spent on training community mobilizers will be repaid in ample measure during implementation.

Ensure that multi-institutional projects have a strong, dynamic and committed high level committee to guide and steer project and ensure coordination and timely implementation.

Ensure that amidst the achievement of numerous relatively less strategic outputs the project management does not lose sight of the major outputs/indicators.

Rural development/natural resource management projects should have a realistic time frame. The Project worked with generally impoverished rural communities with little or no entrepreneurial or business skills. A 5-year period seems wholly inadequate to raise their awareness on conservation issues, mobilize them, build capacities to plan and develop sustainable projects/enterprises and marketing strategies and manage them profitably to generate livelihoods options and support the communities.

In countries with little or no previous experience in participatory projects on conservation and sustainable use of natural resources, a pilot project limited to one MPCA would be sensible.

Performance in regard to financial and accounting matters were acceptable to World Bank and GOSL auditors. Nevertheless, the communities were not at all satisfied and always complained of delays. The problem here may go beyond lethargy in execution. There may be a case for revisiting the financial regulations and procedures in force with a view to making them community development projects friendly.

1.	Establishment of MPCAs: Kanneliya, Naula, Rajawaka and Bibile	04
2.	Establishment of community organizations for conservation of medicinal plants	39 VPMCs 04 Companies
3.	Establishment of an information centre and office complex in each MPCA	04 Information centres 04 Office complexes
4.	Establishment of processing centres with necessary equipment for drug production, Ayurvedic clinics, and sales centres at each MPCA.	04 Processing centres 04 Ayurvedic clinics 04 Sales centres
5.	Establishment of two national level nurseries at Meegoda and Pinnaduwa with more than 500 important medicinal plants species at each location	02 New national level nurseries cum gene banks
6.	Establishment of germplasm collections of important medicinal plants species at each MPCA with more than 350 species at each location	04 Medicinal plants gene banks
7.	Improvements to the existing 3 nurseries of the Department of Ayurveda; Girandurukotte, Pattipola and Haldummulla for enhanced germplasm stocking and planting material production	03 Improved national level nurseries
8.	Development of propagation techniques for 22 selected important medicinal plants species through research conducted under contract research programme	22 Species
9.	Medicinal Plants Resource Inventories	04 Resource inventories
10.	Publication of two volumes of Techno-guides to disseminate findings of the agronomic and propagation research	02 Volumes of Techno-guides
11.	Sustainability studies on selected medicinal plants species	04 Species studied
12.	Increased diversity and population of important medicinal plants in home gardens in each of the four MPCAs	3650 Home gardens
13.	Establishment of a comprehensive database on	01 Database

	medicinal plants at BMARI, Navinna	
14.	Training of community members in natural resources and medicinal plants conservation, product development, accounting, computer literacy, book keeping etc	4700 persons
15.	Short term overseas training of community members on Joint Forest Management, Drug	

		50 Leaflets 4 Posters 1 Booklet
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35. Publications on IPR



**ANNEX II**

**Ministerial and Management Responsibilities By Semester**

1997 (2)	Provincial Councils and Cooperatives and Indigenous Medicine	Mr. Amarasiri Dodamgoda	Mr. Austin Fernando	Mr. W. Ellawala	Dr. Upali Pilapitiya	Mr. Cyril Pallegedara	Mr. Gunaratna de Silva	
1998 (1)								
1998 (2)								
1999 (1)	Health and Indigenous Medicine	Mr. Nimal Siripala de Silva	Mr. A. Abeygunasekara	Mr. Gamini Kariyawasam	Dr. Lakshmi Senaratne (Acting)	Mr. N. W. Dissanayake	Mr. Cyril Pallegedara	Mr. S. Kalansooriya
1999 (2)			Mr. Thilak Ranaviraja					Mr. M. K. Cooray
2000 (1)			Mr. Ariyawansha Ranaweera					Dr. Malliyawadu
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BMARI	Bandaranaike Memorial Ayurvedic Research Institute
CAMC	Conservation Area Management Committee
CBO	Community-Based Organization
CDO	Community Development Officer
DoA	Department of Ayurveda
DWLC	Department of Wildlife Conservation
EBS	Ethno Botanical Survey
FD	Forest Department
GEF	Global Environmental Facility
GOSL	Government of Sri Lanka
IDA	International Development Agency
IPR	Intellectual Property Rights
IPR	Intellectual Property Rights
IUCN-SL	World Conservation Union Sri Lanka
MIM	Ministry responsible for the subject of Indigenous Medicine
MPCA	Medicinal Plant Conservation Areas
NGO	Non-Governmental Organization
NIE	National Institute of Education
NIPO	National Intellectual Property Office
NITM	National Institute of Traditional Medicine
PAD	Project Appraisal Document
PMU	Project Monitoring Unit
SLCSUMPP	Sri Lanka Conservation and Sustainable Use of Medicinal Plants Project
VPMC	Village Project Management Committees
WB	World Bank

