FAO/GOVERNMENT COOPERATIVE PROGRAMME

PROJECT DOCUMENT

CONSERVATION AND MANAGEMENT OF SELECTED RAINFORESTS IN SRI LANKA

GCP/SRL/...../NET

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Prepared by

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Brief Description

The project addresses requirements to improve the management of selected rain forest areas in the South West of Sri Lanka. Remaining rain forests[1], although increasingly fragmented in nature, are characterized by high levels of biodiversity[2] and endemism. Area selection for project interventions combines biodiversity criteria and considerations dealing with the potential for sustainable forest management. To increase the project's chances to introduce sustainable management concepts, a sufficient degree of spatial cohesion between management areas is desirable. This serves to create a contiguous management system for adjoining forest areas. Forest areas covered under the project include Dellawa, Diyadawa, Morawakkanda, and Sinharaja forests, basically forming a single large but dissected complex.

Area selection was based on data from the Government of Sri Lanka (GoSL) National Conservation Review, management plans prepared with some IUCN assistance, and intensive field observations during project formulation. A core element in area selection is inclusion of the Sinharaja World Heritage Site, the single largest and most important remaining rain forest in Sri Lanka.

So far, some form of management planning has been carried out for a total of 30 forests in the Southern rain forest zone. The planning concept is based on combining core area conservation by the state with community based buffer zone management interventions. Among designated rain forests, Sinharaja, is the sole principal forest area where Integrated Conservation Development (ICD) concepts have been practically tested. The present project follows up on earlier management planning and experience gained in the Sinharaja forest. A starting point for the project will be to review the impact of present management planning approaches and methodologies. Review work will look into the relevance of assumed functional relationships between buffer zone and core area conservation management. A clear definition of the interaction and dependency levels of local inhabitants with selected conservation forest areas is of primary importance for the successful design and implementation of buffer zone *cum* conservation management. The underlying condition is that sustainable forest management and conservation interventions simultaneously take into account environmental, conservation and socio-economic aspects. To ensure potential for sustainable conservation management, it is important that the project introduces self-financing mechanisms and in general aims to optimize local benefit generation from management interventions. This implies that strong GoSL dependency on external financing and subsidy mechanisms to finance forest conservation and buffer zone interventions need to be reduced. At present there are few and scattered initiatives following such principles.

Current management planning calls for demarcation and protection of core conservation areas and more intensive studies to enhance biodiversity and regeneration capacity of forests. Planning also recognizes that resource extraction to meet basic livelihood needs of local population must be ensured. Development of ecotourism is mentioned as a potential income-earner and this requires considerable investigation and assessment to determine if there really is a realistic potential for ecotourism. Other benefits from biodiversity conservation such as in-situ conservation of gene-plasm and watershed protection characteristics are of obvious importance, but are not easily quantifiable. Apart from more traditional means of physical forest protection and enforcement by the Forest Department, there is a dearth of knowledge, ideas, concepts and modalities for effective

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[1] Multi story mixed broad leaf forest in the high rainfall zone (exceeding 5000 mm annually in places) of South West Sri-Lanka

[2] Biodiversity, applies to the overall manifestations of lower and higher flora and fauna, but are considered specifically important in terms of tree species, mammals and birds indigenous in these rain forests.

implementation of a long-term conservation strategy. Current knowledge regarding forest resource management indicates that the population in most areas surrounding the forest is only marginally dependent on forest products. This results from strong reliance on a predominantly tea based economy. Environmental pressures from this economy are evident mainly though the expansion of tea growing and forest encroachment. The potential for reducing encroachment pressures and in seeking alternative and economically competitive income generation by involving local population in forest management and conservation has not received the attention required. For a start it is necessary to quantify continuing elements of direct economic forest dependency and its variability from place to place. A second question to be answered is whether sustainable forest management alternatives to tea production can be proposed and implemented. A partial answer may emanate from more detailed resource classification and economic development assessment of physical management strategies. During such assessments it is imperative to take into account a potential future scenario of increasing forest dependency, resulting from a declining tea economy. Ecotourism related employment and income generating potential and involvement of local communities in various services and infrastructure management is another area that should be carefully assessed. Success of all conceptual development, resource classification studies, management planning and plan implementation will hinge in large measure on the quality of participatory involvement of local populations and careful allocation of available local, government and external resources. Initially the project will invest funds in needed additional studies and the development of operational approaches. Definition of strong institutional coordination arrangements and policy support to test innovative management strategies is crucial to implementation success.

Institutionally, the project is complex and will be a pioneer attempt to apply truly community-based and participatory approaches for forest conservation and management, rather than relying solely on policing and law enforcement, which has clearly failed over the years. Given its complexity and absence of clear cut applicable implementation approaches and methodologies, the project will be split in two distinct phases: a conceptual development phase of one year and an implementation phase of four years. By following a gradual approach with periodic reviews, the chances for proper conceptual development of the project will be increased. Definition of suitable coordination and organisational mechanisms to manage the whole process will also be served by this approach. Annual tri-partite reviews will look into project progress and institutional response in face of changing management requirements.

Project Design

A. BACKGROUND

1. National Context

Sri Lanka now ranks as one of Asia's most densely populated countries and retains a predominantly agricultural economy. Increases in agricultural production have largely been accomplished by simply expanding cultivation. Since most readily cultivable land is already in use, forests constitute the main source of new land and they have invariably been regarded as land banks. FAO presently estimates deforestation for the country to be at 1.4% per annum. Most of the deforestation has taken place over the last decades. At the turn of the last century, Sri Lanka, had a population of *3.5* million and had a natural forest cover of over 70% of its total land-area. By 1956, with a population of *8.5* million, the forest cover had diminished to 44% of the land area. By 1993, the population had doubled (17 million) while the natural forest cover had nearly halved (24% of the total land area). Underlying causes for this dramatic deforestation are past logging policies, poverty driven land encroachment and poor land tenure systems, large agricultural and settlement schemes such as the Mahaweli Development Project, chena shifting cultivation, illicit felling, and extraction of firewood for domestic and industrial use.

Sri Lanka, though a relatively small island, has a greater diversity of species per unit area than almost any other Asian country, and a very high proportion of the country's native wildlife species are endemic. Of Sri Lanka's fauna and flora, around 30% of the angiosperm flora, 18% of the ferns, and 16% of the terrestrial vertebrates are endemic to the country, and most of this biodiversity is contained in the rain forests area. As a result the Committee on Research Priorities in Tropical Biology, identified Sri Lanka as one of the 11 areas in the tropics that requires special attention because of its high level of biological diversity, endemism, and threats to habitats. Out of 3,650 species of known flowering plants in the country, 840 are endemic and 94% of these are found in rain forests of the South West. Over 50 percent of the tree flora in rain forests are endemic to the country. Although once heavily forested, this area, as a result of deforestation, now contains only eight per cent of its land area under forest. In recent authoritative publications on threatened 'hot spots' of endemism, South-Western Sri Lanka has been named as one of 18 in the world.

As it now stands, rain forests occur in fragmented residual patches scattered over different parts of the wet zone. The present extent of wet zone forests is about 150,000 ha, a decline of more than 100,000 ha since 1956. Many of the forests are reduced to isolated fragments. For instance, in Matara District of the Southern province, the remaining 16,000 ha of rain forest occurs as 30 isolated patches. Forests fulfil a substantial role in protecting hydro catchments and regulation of water supply, as a store of potentially valuable chemical compounds and a value of religious importance. National and international concern about logging in the rapidly diminishing areas of wet zone rain forests sharply influenced Government decisions on future management. Especially as a result of mounting public pressure the Government of Sri Lanka (GoSL) declared a moratorium on all logging operations in rain forests until the completion of an ecological evaluation. In 1990, an Accelerated Conservation Review (ACR) was carried out by the then Ministry of Agriculture and Lands, Irrigation and Mahaweli Development in collaboration with the FD. The review focused on the ecological value of the 48,000 ha of natural rain forests that under the first Forestry Master Plan of 1986 had been identified for selective logging. Later on reviews where completed under a more comprehensive National Conservation Review, which increased the number of rain forests under conservation status from an

original 13 to 30. As a result of the declaration of conservation status all concerned forest may no longer be commercially exploited for timber.

Initiated under a UNDP/FAO executed project, SRL/89/012, draft conservation management plans were drawn up with World Bank, FAO and IUCN involvement. These plans aim for a core area *cum* buffer zone management approach that includes a measure of participatory management involvement by local people. Participation will take place through sustainable utilization of traditional non-wood forest products from traditional use zones contained in designated buffer zones.

The social environment where attempts at biodiversity conservation have taken place contains a range of conflicting elements. On the one hand, there exists a traditional and religiously inspired high standard of environmental awareness and conservation concern. Environmental and moral consciousness is also reflected in organized public activities concerning conservation of environmental values. On the other hand, social inequality and socio-economic disparity between urban and rural dwellers often conflict with long-standing tradition of politically motivated relaxation of land tenure and enforcement. This situation has actively contributed to the degree of present environmental degradation. A clear exponent is the relatively unchecked land expansion for marginal tea production at the cost of reducing rain forest resources.

2. *Policy and Legal Context*

2.1 National Forestry Policy (NFP) 1995.

Conservation of biodiversity and participatory forest management planning are clearly described elements of the NFP. Project objectives therefore greatly contribute to the intention, framework and statement of the NFP. Under the NFP, state forest-land is categorized in four management classes, out of which Classes I and II comprise conservation forests. Class I comprises strict conservation areas with no interventions allowed. In Class II forests, conservation objectives prevail, but limited management plan based interventions with local communities are foreseen. Both categories would remain under state authority while Class III forests (for multiple use) and Class IV forests (plantations and agroforestry systems) would be available for leasing to non-state users such as local people and industries. Although on-the-ground classification has not yet started, it is most likely that the forests covered under the project would fall exclusively under Classes I and II. As far as suggested buffer zones fall within forest boundaries, this precludes the possibility of meaningful authority transfer of buffer zone forests to local groups or individuals. Insufficiently detailed classification and accompanying management delegation would thereby risk to undermine genuine forest management potential by local inhabitants. In terms of classification there does not exist a clear relation between forest zonation applied under existing (IUCN) management plans (*"core zones", "traditional use zones", "village interaction zones"* etc.) and the four NFP classes. This also highlights the need to refine the classification of forest areas, or where appropriate, to make specific arrangements to ensure long-term tenure rights, to ensure participatory conservation.

2.2 Sri Lanka Forestry Sector Master Plan (SLFSMP)

The SLFSMP strongly emphasizes conservation and multiple use and management of natural forests under partnerships with the local people. The project fits very well within the framework of the SLFSMP, since it is centered around participatory management planning for forest conservation purposes. Moreover, the project will be the first of its kind in Sri Lanka to proceed beyond the planning stage to implementation. The project's strategy also fits into the general strategy for

conservation implementation as outlined in the SLFSMP. This specially applies to central aspects of the current project, such as the suggestion to make conservation pay for itself in the long run. The project also emphasizes and enhances other elements of the SLFSMP strategy, namely: a) Increasingly strategic deployment of FD staff protection efforts in strict conservation areas; b) Staff training in all aspects of biodiversity conservation (especially field-level staff); c) Public awareness raising; and d) Strengthening FD links with NGOs and universities for research, education and extension activities. The SLFSMP further mentions a number of national-level issues, requiring serious attention by the project. Important issues listed are: a) Development of an adequate knowledge base and monitoring system, b) Integration and rationalization of a comprehensive protected area (PA) system, c) Better coordination with other institutions, namely the Department of Wildlife Conservation (DWLC), d) Improvement of the legal framework, e) Better protection against illegal activities such as poaching, and f) Conservation of biodiversity outside protected forests. The project will actively promote and enhance these activities.

2.3 Five year Implementation Plan (FYIP)

The FYIP (1997) is designed as a five-year programme to prepare full-fledged implementation of the SLFSMP and the NFP. The FYIP is based on the same principles as the latter two and reiterates important issues mentioned in the SLFSMP. Elements with an important bearing on the project are: a) The need for people's participation and joint forest management, b) The necessity of organizational change and legal reforms - especially regarding land ownership, and c) The principle that benefits and costs of various forest development activities should accrue to the same person/management unit. Two of the FYIP components are especially relevant for the project.

The Forest Conservation component foresees the establishment and management of a Protected Area Systems (PAS) network, in which the present project would fit in well. In addition, it foresees collaborative efforts with NGOs to build a system for monitoring of biodiversity, soils and water, and improvement of institutional capacity and the legislative framework. Under the Forest Land Allocation and Macro-level Zoning component, it is foreseen to survey, classify and demarcate all forests according to the four classes of the NFP. It is not fully clear how the actual timing of this exercise will work out, since the FD to a great extent depends on the Survey and Land Use Planning Departments for implementation and legalization of surveys. Other FYIP components which relate to the project are: a) Multiple Use Management of Natural Forests (which includes participatory forest management planning), b) Social Forestry/Agroforestry and Extension (with attention for marketing, land tenure, and extension), and c) Institutional Development. The project will offer one of the first testing grounds for the implementation approach of the FYIP. Valuable feedback is expected to be provided as the result of such testing and this will have implications on policy.

2.4 Management Plans, Socio-Economic Studies and Related Documentation

The documents published under the previous UNDP/FAO project SRL/89/012, "Environmental Concerns in Forest Management" reveal a wealth of information on the biodiversity of the country's wet zone forests including forests designated for the present project. (Dellawa and Diyadawa). It appears from these studies that the Diyadawa forest (classified as Class III) is almost as rich as Dellawa forest (Class I). In addition, a draft management plan has been prepared for the Dellawa forest and is one of a series of management plans that were originally submitted for donor support. Management plans which have been developed are the first in Sri Lanka to emphasize local participation in forest protection and management. The plans seek alternative approaches to the repeated regularisation of the encroachment of tea plantations on forest-land through a system of long-term leases and management planning. The Dellawa Forest management plan is useful as an

initial basis for further planning work required. It contains, however, an unjustified optimistic view regarding potential for participatory forest management. The plan relies heavily on social mobilization through village organisations, while in fact the population is quite scattered and does not heavily depend on the forests (see below). The plan is also vastly ambitious concerning buffer zone management where it proposes a wide range of activities (ranging from health centers to crop germ plasm conservation). At the same time the plans lack essential details for implementation, such as (a) a list of functional village organisations, (b) labor availability and opportunity cost studies and (c) production and marketing appraisals for local enterprise. In comparison to accompanying socio-economic surveys, physical and biological data pertaining to core forest areas are more thoroughly elaborated. However beyond species enumeration, relatively little work has gone into eco-system analysis and operational management requirements. Contrary to some of management plans available for other areas, the Dellawa plan does not contain a land use map for the buffer zone. Before full-fledged implementation can be considered, a substantial amount of data will have to be added to the plan and the overall planning methodology must be streamlined. To a large extent, a similar review of the management approaches and methodologies for other forests under the project has to be completed from the very beginning.

3. *Project Area*

The project area consists of the following forests and intermittent or adjacent buffer zones: Dellawa Forest Reserve, Diyadawa Forest Reserve, Morawakkanda Other State Forest (OSF), Thambatukele Forest and Sinharaja Forest Reserve/WHS . The exact outer boundary of the buffer zone cannot be determined yet and it will be identified and demarcated during the initial phase of the project. Definition of buffer zones and their functions in and outside the boundary of classified forest-land requires detailed forest and land capability classification and mapping work, which, in most instances, has yet to be initiated. The extent to which buffer zones extend into non-forest classified land in large measure depends on the establishment of direct and indirect economic dependency of the local inhabitants with the adjacent forest areas.

All forests falling under the scope of the project have, in various degrees of intensity, experienced past logging and all forests are fringed by tea plantations. With few exceptions, the dependency by local populations on the forests is low. Although most people collect a variety of products from the forest – such as Kitul (palm sugar), firewood, cane, honey - this mostly takes place on an occasional basis to supplement agricultural cash incomes. The main agricultural occupation apart from tea cultivation are home gardening, paddy, cinnamon and rubber cultivation. Most tea production in the vicinity of forest areas falls under smallholder management. Shifting cultivation clearings in the forest fringes are historically not abundant in this part of the country. Encroachment on forests at the present time seems to be in a relative state of equilibrium due to a lack of remaining suitable land for tea expansion and labor shortage. Equilibrium is further reinforced by the fact that even villages considered to be "remote" are never really distant from roads and increasing numbers of villagers seek part-time employment in nearby towns. Out migration from the area and employment created through international labor export, results in remittances to remaining family members, which has a discernible impact on the local economy.

At the moment, core forest area management concentrates mainly on boundary demarcation and patrolling by the FD. Both activities lack strength and consistency. Boundary demarcation stops halfway when funds run out, the FD is understaffed, staff are under paid and not motivated. In addition, FD staff is frequently too occupied with long running court cases in order to perform meaningful roles. Problems of enforcement are further compounded by the fact that boundaries are unclear and sometimes haphazardly adjusted (see the case of Sinharaja below) which reinforces

distrust between the FD and local population. Another important factor in the effective delineation and control of forest boundaries has been the history of repeated regularisation of encroachments. This practice has, over time, instilled the message that encroachment and the subsequent levy of fines by the FD is a relatively safe way to get new clearings titled in a matter of time.

The **Sinharaja** National Heritage Wilderness Area (8,864 ha, 150-1171 m.a.s.l. rainfall 3000-6000 mm/y) contains the largest pristine section of rain forest in Sri Lanka. It was declared a World Heritage Site (WHS) in 1988. Its main vegetation cover consists of middle-hill tropical rain forest characterised by *Mesua nagassarium, M. ferrea*, and several *Shorea* species. A total of 211 woody plant species have been identified out of which 64-75% are endemic. Information on smaller life forms and animals is less abundant. Some 262 vertebrate animal species (147 bird species) have been recorded. The western half of the reserve has been logged in the past but such activity was suspended in 1977 after strong public protests. Secondary forests appear at the edges and mahogany has been planted in logged patches. Studies reveal that natural regeneration is faster in logged-over forest than in previous cultivation areas.

The WHS receives wide public and policy attention. The area contains a visitor centre and a research centre receiving approximately 5,000 visitors per year. A Conservation Plan was formulated in 1985 with support from WWF and IUCN. In addition, the UNESCO Man and Biosphere (MAB) programme, USAID, NORAD, the International Foundation of Sciences (Sweden), IDRC (Canada), and other donor agencies have provided various kinds of support for the area, mainly focusing on botanical and ecological research. The Department of Botany of the University of Peradenya is one of the lead institutes to carry out research. The management of the area could do with improvement. A boundary demarcation to confirm the 1906 boundaries was carried out a few years ago, but a new demarcation was planned at the time of project formulation. This new demarcation is to include adjacent parcels of Other State Forests (OSFs - under Government Agent (GA) administration) for transfer to the FD.

The **Dellawa** forest complex in Galle district (categorized as Class I) is still in relative pristine state. This may be largely attributed to the difficult accessibility of the area. Not only has steep topography in the past delayed active logging but for the more accessible areas, active use of such areas remains equally restricted today. The same topography, preventing drastic increases in exploitation pressure, gives rise to a large variety in eco-systems and biodiversity. Forest boundary demarcation was initiated in the mid-90s with NORAD funding. Initial surveys were carried out and delivery of concrete boundary pillars took place after which actual demarcation has been suspended for lack of funds. There are a number of Buddhist hermitages in Dellawa which play a role in promoting forest preservation. Zonation has been carried out under the Dellawa Conservation Forest Management Plan. Most of the area has been assigned as "Core Area" but a substantial part of it has been classified as "Traditional Use Zone". Zonal boundaries still have to be refined with participation of local people.

Dellawa forest has considerable scope for meaningful project interventions. The potential arises in part from the close vicinity of this complex to Sinharaja. As pointed out before, the relationship between buffer zone and core forest area is loosely defined. However, Dellawa's central location between Sinharaja and other forests such as Diyadawa and Marowakkanda offers potential for effective expansion of conservation and buffer zone initiatives, and especially for economically competitive employment through development of ecotourism. Some areas in Dellawa show good potential for regeneration of hardwood species. Although Dellawa is designated as a conservation area, it is worthwhile to look into the possibility of low-intensity planning for sustainable forest management by the local inhabitants. Such management could be developed on the basis of refined

classification work in selected buffer zone sections of this forest. Selective timber harvesting should be allowed by local residents for their benefit. Allowing sustainable forest management initiatives of this kind in buffer zones would increase the wider incentive for local population to get involved in forest management and conservation.

The **Diyadawa** forest reserve contains less biodiversity values in terms of unique woody plant species than Dellawa and was therefore classified as Class III forest. It nevertheless has a higher total number of species including endemic and threatened species than Dellawa. The forest is relatively inaccessible and untouched on its Southern and Eastern slopes. No zonation or management planning has yet been carried out.

The **Morawakkanda** OSF has been incorporated in the Dellawa Conservation Forest Management Plan. It has been zoned partly as "Core Area" and partly as "Traditional Use Zone". Under the plan, extension of the forest towards the North-East is projected.

The **Thambatukele forest** at the South end of Dellawa forest connects Dellawa and Diyadawa forests. Under the Dellawa Conservation Forest Management Plan the area is zoned partly as "Core Area" and partly as "Traditional Use Zone".

B. PROJECT RATIONALE AND JUSTIFICATION

1. Present Situation

The present situation can be summarized as the pressing need to conserve and manage remaining tropical rain forests and associated biodiversity and protection values in Sri Lanka. Institutionalization of a functional conservation management strategy with participatory involvement, in designated forest areas, is the overall aim of the project. The project rationale is, that conservation objectives of the project will, in large part, be reached and directly served by joint institutional and community responsibility for conservation management. This requires the provision of clear economic incentives, which for a substantial part will have to be generated from within conservation areas. Moreover, successful cooperation will require transparent and equitable sharing of benefits among all partners. The GoSL, has in recent years, accepted the adoption of participatory forest management, when it was realized that local population involvement is essential in maintaining integrity of forests. Revised human-forest interactions and preservation of historical and social values lay at the basis of implementing successful conservation. Therefore the introduction of sustainable use agreements in buffer zone areas and community involvement in implementation of core area conservation are central considerations for finalization and implementation of management plans. The project will have to rely on a carefully prepared strategy to achieve this goal. Given resource pressures and potential for public institutional conflict, the strategy will be of a complex nature, requiring careful checks and balances. Matching institutional arrangements and timely policy support will be essential for development and testing of viable management models.

2. Problems to be addressed

A substantial portion of the project area has been affected by human activities. The main activity is the establishment of logging roads for timber harvesting and subsequent encroachment for cash crop (tea) production. In recent years, following the moratorium on logging of wet zone forests, small holder encroachment for expansion of tea cultivation has become the greatest threat. However, although difficult to quantify, well-organized illegal logging, often, by armed individuals continues to

have an impact. Tea expansion as a dominant land use practice has been encouraged by population growth and, until recently, by government subsidies for tea expansion. In addition, the prevailing policy to regularize encroachments and forest clearings has stimulated continuation of such practices. External and well-connected individuals generally prompt illegal logging activity. Local people are involved in providing labor, but derive proportionally minimal benefits from illegal forest exploitation. Other pressures on the forest such as fuel wood collection and non-timber product utilization as in Kitul Palm tapping, all contribute to locally varying resource pressures. In the Northern part of Sinharaja, gem mining poses another threat to the forest. Motorable road access to forest areas in all cases greatly enhances resource exploitation. A newly planned road at the Southern border of Sinharaja WHS may form a case in point. Combined influences have altered the natural ecology and possibly diminished biodiversity.

Preparation of management plans for forest conservation areas has contributed to increased understanding of complex management implications. However, the overall management information basis remains insufficient. Management plans and related socio-economic profiles, where carried out, are often incomplete in their coverage of ecological, environmental as well as socio -economic and cultural data. Parts of the area, especially the Diyadawa and Morawakkanda Forests lack surveys, demarcation and zonation. Detailed maps for the proposed zonation of management areas are only partly available. Thus far, management planners have had no access to modern technology for map preparation such as Geographic Information Systems (GIS) and Global Positioning Systems (GPS). The use of such technology is extremely limited even at the national level and further hindered by scarce availability of up to date aerial photo and remote sensing material. For current management planning local knowledge and landuse information has not been systematically inventoried or deployed.

The diversity in forest status, the current handing-over of OSFs to the FD, and the uncertainty about future forest classification status does not promote confidence by local users that their needs and traditional rights will be accommodated and respected. This reduces community interest to invest time and money in improved land management. The planned classification of forests under Class I status, regardless internal zonation of management plans, forms a disincentive for participatory forest management, which at the same time is one of the main features of GOSL policy. The present paucity of economically attractive landuse and production alternatives for tea production introduces further limitations to meaningful participation of local population living in the forest surroundings.

At present FD presence in conservation areas lacks technical and communication skills required for the establishment of improved forest management. The FD is, moreover, continuously strained in its financial resources to accommodate staff salaries and incentives required for adequate field presence and infrastructure. FD initiatives for mapping, demarcation and research coordination thus are almost systematically dependent on external financing sources. Whatever potential income sources for the management of conservation areas exists goes largely untapped. Presently both national and international visitor fees for Sinharaja WHS are extremely low and when collected revert to the national treasury without adequate compensation for management needs under the annual FD budget allocation. As such, incentives for park staff to invest in the upkeep and development of the area, is negligible and an impediment to the potential establishment of an ecotourism development plan for a wider area.

3. *Expected end of project situation and sustainability of project results*

1) The project is expected to develop replicable strategies and methodologies for participatory conservation management, with strong emphasis on medium and long-term economic aspects

accrued from such management.

2) The project will have produced an easy and locally accessible information and management basis required for technical management and information purposes.

3) The project will have developed approaches and methodologies, which focus on the direct involvement and employment of local people in core area management and in related services for the development of income generating activities such as ecotourism amongst others.

4) FD and line agency staff perception of joint conservation management benefits will have been drastically increased as the result of practical project implementation.

5) The working relationship between local communities and the FD will be permanently improved on the basis of shared concerns and (economic) interest for core area conservation, sustainable forest management and possibly through ecotourism development.

6) Ecotourism and other activities will be promoted, when possible and if feasible, with a view to provide income for the FD and local communities. Proceeds will be used to finance investment and recurrent costs related to conservation management.

7) Product research, market development and increased investment for products originating from the buffer zone will have resulted in increased and sustainable production diversification.

8) Policy and legal development will have benefited and be directly influenced by the documentation of project experiences.

It is justifiably not possible, at this stage of project formulation, to provide quantifiable indicators for the above activities and expected project outputs, but they can be used in the broad sense for evaluation of the project. As such, this section should be reviewed and where possible fine-tuned and quantified during the tripartite reviews.

4. *Relationship of project activities with other programmes*

4.1 National and Local NGOs:

Environmental Foundation Ltd. (EFL) is an advocacy group based in Colombo specialised in legal advice in forestry and environmental issues. This organization is not actively involved in the project areas or for that matter in any field based activities. The legal expertise of the organization may however be useful in relation to a range of policy issues with which the project is likely to be confronted in the course of its implementation.

The **Sinharaja Village Trust (SVT)** is active in encouraging local participation in the protection and management of Sinharaja WHS. The SVT prepared a plan for this purpose, which was assisted by the Biodiversity Support Program an AUSAID funded consortium of the WWF, The Nature Conservancy and World Resources Institute. The SVT advocates a pragmatic approach of involvement of local population in forest conservation and management based on alternative product development and marketing support of which organically grown "green label" tea is an exponent. The SVT also advocates local involvement in ecotourism development on the basis of well conceived studies, relevant local and research information generation and tapping specialized tourism potential

of e.g. ornithologists. The SVT receives important support from the University of Colombo and other sources.

In addition, a number of Village Forest Protection Societies and other organisations are active around Sinharaja. Societies were first engaged in patrolling against illicit timber felling but this proved to be largely ineffective. Other occupation consists of engagement in tree planting and village development. Organizations, almost without exception, rely on presence of continued external funding.

Green Friends (GF): This society constitutes of former (Ratnapura) R-IRDP's Social Motivators. Apart from other rural development activities GF has involved in village nurseries, tree plantations and mobilization of villagers for protection of natural forests. However, contrary to conventional wisdom the GF programme focuses more intensely on villages at relative distance from forests rather than on villages near the forests. An explanation for this may be that most of the leading and better of members originate from villages located far from instead of close to the forest. GF received support from UNDP to set up a training centre near the well-travelled road to Adam's Peak; they are now trying to develop more independent fund-raising mechanisms, and have taken steps to start an agricultural service company. In addition, GF intends to introduce a credit & savings scheme based on the Janashakti scheme. Leading members of the NGO recently received training for this purpose in Hambantota.

4.2 International NGOs and donor agencies

A wide range of other multilateral, bilateral and international NGOs are or until recently were involved in the biodiversity conservation sector and /or natural resource management related rural development initiatives. At the time of project formulation consultations were carried out with; FAO, IUCN, RNE, Helvetas, Inter-cooperation, Word Bank, USAID, ETC, OXFAM, CARE, AUSAID, NORAD, ADB, UNDP-GEF, DFID and the Institute of Policy Studies. Most international supported projects emphasize poverty alleviation and or environmental issues in their programmes. However few projects seem to have worked, let alone been able to achieve self-financing and market integrated development approaches. Many agencies are currently in the process of reviewing the impact of their development programmes and some have withdrawn from the forestry sector. The ADB is the most substantial source of project loan financing. At the time of project formulation, the ADB had a rapidly growing loan portfolio for agriculture, biodiversity conservation, forestry and watershed management consisting of approximately $ 130 million in committed and pipeline funds.

4.3 Relevant on-going or proposed projects

Participatory Forest Management Project (PFMP)

This project was funded by DFID since 1.1.97. The project has developed a promising methodology for the introduction of participatory forest management in Matara District. However, it has only been underway since 1.5 year and the method still needs to be further elaborated and validated. An important condition for the functioning of this project is that it fully operates in prospective Class IV forest areas, which allow long-term leasehold forestry for multiple use management by local partners. However, due to differences in opinion between the FD and DFID the project will be discontinued as of 1.10.98.

Integrated Rural Development Project Ratnapura (R-IRDP)

The R-IRDP is funded by the Government of the Netherlands. Although it is not involved in the project area, it has accumulated vast experience with rural development, agroforestry and farm

forestry. It is currently in its last phase and focuses on the establishment of rural enterprises and self-financing mechanisms. An offshoot of the project is the NGO "Green Friends" mentioned earlier.

Integrated Rural Development Project Hambantota (H-IRDP)

NORAD funds this project. An interesting feature of the project is the "Janashakti" savings & credit schemes, which works on the basis of joint liability groups, consisting of local women. The Janashakti approach seems to adhere to sound rural finance principles. Schemes, which are reported to be successful, could upon further evaluation during the first project year be used as a model for possible replication under the present project.

Shared Control of Natural Resources (SCOR) project

This project, with local headquarters at Diyadana, is implemented by the International Water Management Institute (IWMI, formerly IIMI) and funded by USAID. It has initiated various development activities in the Nilwala sub-watershed and in another sub-watershed in the dry zone. A number of small enterprise, farmer organization and business management approaches piloted by the project are worth studying and evaluating in more detail. At the time of formulation of the present project SCOR is phased out since the donor is scaling down over-all operations in Sri Lanka. The new ADB- loan financed Upper Watershed Management Project (UWMP) has recently started in adjacent areas.

Proposed Global Environmental Facility (GEF) /UNDP Biological Diversity Conservation Project

At the time of project formulation this project was in very premature stage of development. The project focal areas contain a number of wet zone forests in the south West of Sri Lanka. Among those forest proposed for inclusion are Sinharaja, Kanneliya, Dediyagala, and Nakiyadeniya Forests. The objective of this project is of a very similar nature as that of the present one. Projects may be considered as strongly complementary. Proposed inclusion of the Sinharaja forest would make projects of a partly overlapping nature. Close coordination regarding methodology development, sharing of facilities and, in case of the Sinharaja Forest, sharing of resources is mandatory to ensure maximum benefit and impact from the implementation of both projects.

Biodiversity Conservation Project, ADB

This project was in the preparatory phase during formulation of the present project. The project will deal with Biodiversity conservation in protected (park) areas falling under the department of Wildlife Conservation (DWLC). The project aims to tackle management issues in and outside park areas. Mention is made of buffer zone support initiatives for people, amongst others graziers, whom have been re-allocted from park areas into adjacent buffer zones. Other focal points of the project will be to enhance the potential of ecotourism through improved park management. Associated activities will deal with reorganization and policy changes within the DWLC itself. The loan will be in the order of magnitude of US$ 30 million with linked TA of an additional US$ 1 million financed through a Japanese grant. Given the size of the project its focus will be national. Although linked to a different department the project will have an important bearing on the development of conservation management including ecotourism and buffer zone development.

Integrated Conservation and Development Program (IDCP) Kalugala Forest, CARE

The CARE project under preparation shows several comparable characteristics with the present project. The project is to run over atotal of six years. The forest area under consideration is part of the wet zone rain forest ecosystem located at limited distance from Colombo and Bentota. The total forest area covers about 2900 ha and is surrounded by densely populated agricultural areas. A total of 57 villages are located in the direct proximity of the forest area itself. Substantial past

encroachment on the forest resource has taken place. The project applies an ICDP concept and will be implemented together with the FD. A total of 19 Grama Niladhari Divisions (GND) (village, lowest administrative unit of governance) with a total combined population of 19000 people are designated to fall under the project. The project purposely uses administrative units as the basis of project engagement in order to be allowed tapping into local organizational structures. The project intends to develop a strong community based focus. Apart from the main institutional partner the FD, divisional secretaries and local (village) conservation management groups will be central in planning, implementation, monitoring and evaluation of the project. The FD will have main responsibility for forest management planning of the core conservation area, but it is anticipated that local conservation management groups will bring forward strong planning contributions. CARE will bring in its international and national management experience with ICDPs and rural development projects. Major project implementation will concentrate on improvement of sustainable productive capacity in buffer zone areas through extension support, resolution of existing land tenure conflicts and active community involvement in forest management and conservation. The project will consist of a pilot phase to be conducted in 5 GNDs and will, over the first two years, gradually expand into the remaining villages. M&E will form integral aspects of the project implementation process at community, strategic and overall project levels.

Conservation and Sustainable Use of Medicinal Plants Project, IUCN

This proposed IUCN supported project has yet to become operational at the time of the present project formulation. The project intends to select Medicinal Plants Conservation Areas in various ecological zones of the country. The main objectives are to carry out in situ conservation of medicinal plants, while at the same time the project aims to rationalize the use and collection of raw material. Domestication of selected medicinal plants with good marketing potential is considered. For this purpose both agronomic and marketing studies will be carried out. Project organization at respective field sites concentrates around a system combining village representation, with NGOs and institutional representatives. Involved institutions include the Forest Department and Department of Ayurveda. Integral parts of the project are formed by resource mapping, participatory medicinal plant resource inventories, training at staff and beneficiary level as well as on farm adaptive research related to medicinal plant cultivation. Added activities are specimen collection for herbaria and ex-situ conservation and reproduction of valuable medicinal plant material. Coordination with the project will be useful in terms of replication of technical strategies and the possible introduction of alternative income generating strategies in buffer zones of the present project.

5. Project Strategy

5.1 General

The project will focus on the Sinharaja, Dellawa, Morawakkanda, Thambatukele and Diyadawa forests. For these forest areas, the project will assist the GoSL to develop and implement innovative forest conservation management strategies and developing strategies for improved management of designated buffer zone areas.

Rather than substituting national funding for conservation of biodiversity rich areas, the project aims to build capacity on the basis of environmentally, managerially and financially sustainable concepts. One of the basic assumptions underlying the project design is that for biodiversity protection to be sustainable, such efforts need to be linked to clear and practical identifiable purposes. The implication is that biodiversity conservation in the medium and longer term will have to generate discernible financial and economic benefits. If the project is unable to demonstrate a

sufficient measure of self-financing and rural employment generation capacity, chances for sustainability of may be jeopardized. The appropriation of land hunger and other external market forces will likely overrule weakly substantiated conservation objectives, which state preservation of biodiversity to be for posterity. A further realization is that biodiversity conservation will always require a measure of external funding inputs. Related long-term financial burdens should be accommodated within the financial management capacity of the GoSL.

The project aims to act as a catalyst to achieve the goal of strong local based management with equitable distribution of management benefits to all involved parties. This implies that the project will address such aspects as are considered essential to reach a satisfactory level of replicability of project experiences by national agencies. Important elements of project focus will be:

- Strengthening of information collection and dissemination capacity;
- Development of cost-effective participatory methodologies for improved stakeholder involvement and coordination;
- Consolidated planning for core and buffer zone management;
- Introduction of modern applied management concepts;
- Devolution of management responsibility and accountability to appropriate local and institutional levels;
- Provision of priming funds to start local and institutional mobilization for both productive and profit oriented management activities.

Project supported interventions, such as support to applied research, management methodologies/strategies and income generating activities will benefit from the fact that forest areas are almost adjoining. Interventions in a larger overall forest area will result in economies of scale for project investigative work, design and coordination purposes. Other interventions specifically those related to buffer zone management will initially require a concentrated and human resource intensive approach. Forest dependency relationships in buffer zone areas are variable and of a generally poorly defined nature. Experience and information regarding labor availability and opportunity cost for ecotourism development is lacking. Relationships between forest authorities and local inhabitants continue to be marked by low levels of mutual trust. Therefore entering into well-conceived buffer zone interventions with desired long-term impact on the quality of biodiversity conservation requires a gradual and careful approach.

The project contains components and sub-components that fall into a pilot category. Project interventions whether of an innovative, experimental or pilot nature will require firm FD support and attention to provide the chance of observing impact to extrapolate on wider policy development. To ensure policy attention and impact, steering and review mechanisms will play a crucial role in shaping project interventions.

5.2 Organization of Project Management

The project will be managed on the basis of maximum integration with existing institutional structures and will collaborate fully with other projects operating in the same area or working on the same issues. This integration will predominantly take place at the level of territorial forest divisions. Implementation of core area conservation management and buffer zone management will have to be carried and realized in interaction between local communities, lower levels of government administration at village, division and district level and Divisional Forest Offices. Since no new or innovative developments can take place without continuous policy support from provincial and national government levels, the national project director will be within the ranks of the FD. For

reasons of effective operational management, implementation authority will be firmly delegated to the territorial FD level. National project staff, in great majority will be drawn from, attached to and work under jurisdiction of the territorial DFOs involved with the project. Project Technical Assistance (TA) will coordinate with the principal DFO office (preferably Ratnapura for logistical reasons) and a Project Management Support Unit (PMSU) will be established there. PMSU functions include all immediate support functions for national and international consultants, housing of a project information systems and reference unit and will occasionally serve as the venue for project coordination meetings and training events. At the end of the project the PMSU will become a functional appendix of the office of the DFO.

5.3 Project Phasing

The project will cover a total 5 year implementation period. The project will be implemented in two distinct phases. A first 1 year preparatory phase will be allocated for the preparation of studies, planning and training preparation, improvement of the mapping basis and preparation of contractual agreements between the project and implementing agencies as well as the local beneficiaries. During this preparatory phase one-year phase, a range of policy issues that confront implementation of the project will be identified and addressed at the appropriate level. Small direct investment interventions capped by a well-defined ceiling may be launched during the preparation phase in order to test proposed project modalities. Following one year of operations a review to determine the scope for valid scaled-up project interventions will take place. The review team will consist of representatives of GoSL, the executing agency, and a local donor representative. Review outputs will result in a detailed overall work plan document. This document will require consensus development on all principal strategies and operational modalities for the subsequent 4 years of project implementation. The donor will have full discretion at this review to decide to continue the project, modify it to meet exigencies of the day or to terminate the project.

The second project phase will largely depend largely on the overall commitment on the part of all concerned and this will be assessed by the donor. The degree of project expansion during the second or implementing phase will depend entirely on the feedback and results from on-going project monitoring. Implementation during the second phase, contrary to the initial preparatory work will be stronger based on annual planning targets derived from both participatory and consolidated institutional planning events. Monitoring and evaluation mechanisms will form integral parts of the planning cycle, assessing progress and impact of various levels of implementation as well as adjusting planning targets for subsequent years.

5.4 Strategy for Core Area Management

5.4.1 General Information Base

Substantial parts of designated core conservation and buffer zone areas are covered under (draft) management plans and socio-economic surveys. Mapping information and the analysis of forest inventory information need to be strengthened. Other secondary information such as land tenure records, agricultural, livestock and other household economic data needs to be collected and analyzed and linked to an easily accessible data base. During the early phase of the project attention will be devoted to structured secondary data collection and development of a database framework to manage collected data. This effort will be linked from the start to project monitoring and evaluation. Both international and national consultancy inputs will assist the project and implementing territorial FD divisions in setting up the information management structure. The information system will include establishment of a basic Geographic Information Systems (GIS) Unit. The management information / GIS unit will fall under the principal DFO office. The unit will be full time staffed by a Range Officer,

specially trained on the subject of data management. In-country availability of remote sensing imagery and aerial photos for the project area is limited at present. Location of the project information systems / GIS unit at the operational field level is required to provide easy access an intimate local knowledge of available data. In addition, permanent field level establishment of such services allows regular and accurate updates and captures local area knowledge to the best extent possible. Last but not least information availability should be located as close as possible to actual end users, in this case planning and implementing communities and institutional staff.

The project, though specialized FAO services at HQ and direct contacts with suppliers (e.g. SPOT, Spin-2, IRS) shall review options to complement remote sensing material from suitable international sources. The project information / GIS unit will be equipped with basic data entry, storage and processing tools, such as a digitizing tablet, flat bed scanner and color printer. However bulk digitizing of base maps, scanning of remote sensing and aerial photo information and large format map printing will rely on out sourcing to specialized technical agencies at the central level. Basic training, follow-up technical support and processing services will be supplied to the project on a contractual basis.

5.4.2 Research

Several biodiversity studies have been carried out in the course of management plan preparations and independent university research. The general impression is that these studies require systematic categorization and cross referencing of findings (especially in the field of zoology). As a result, this will produce further precision and fine-tuning in the statement of future research objectives. An overall inventory of research results to date will be carried out under the project. Using mapping facilities created under the project, forest management maps for Sinharaja and Dellawa forests will be updated and maps for Diyadawa forest reserve and Morawakkanda OSF will be prepared. Past research activities will be spatially identified and research abstracts will be linked to the information database. Arrangements will be made to archive information and research outputs locally and to communicate them to the area residents as well as to the wider public.

For the elaboration of research in the project core conservation areas, the National Forest Research Committee (NFRC) action programme lists several relevant research topics.

A basic list modified to suit project area requirements reads as follows:

- Carrying capacity to assess the potential for ecotourism; permanent sample plots to study forest dynamics, especially natural regeneration of secondary and logged-over forests;
- Systematic evaluation of biodiversity for zoning and management; impact of alien species on the natural forest;
- Reproductive biology and regeneration ecology of locally relevant and threatened species;
- Socio-economic research for joint forest management;
- Preparation of a detailed resource assessment for Non Wood Forest Products;
- Harvesting trends and levels of non-wood forest products and their impact;
- Methods and limits of sustainable harvesting of wood and non-wood species;
- Inventory of medicinal plants;
- Propagation studies;
- Growth and harvesting of non-wood species outside the forest;
- Market and economic research for non-wood species and timber; and
- Feasibility of ex-situ germ plasm conservation of threatened wood and non-wood forest species.

Further prioritization and fine-tuning of the above activities will be carried out in the course of

the project. A standard research approach will be to tap into locally available knowledge, through training and contractual involvement of local people under research activities. Research will be contracted out by the project to universities, research institutes such as the Forest Research Centre and local residents as appropriate.

5.4.3 Management planning and implementation

In order to refine and update mapping, participatory resource inventories will be carried out with local residents, who will be trained on the job, by FD staff. Under contractual obligation to the project the FD inventory and management planning staff will prepare required training material and adapted tally sheets. Inventory results will be analyzed and used to detail management prescriptions for conservation areas. Outputs will be added to the locally managed information data-base. Management plan implementation will include investments for visitor centre improvement and upgrading and maintenance of existing infrastructure (trails and signboards). These activities will be implemented through contractual arrangements with local residents. Demarcation will be completed for those areas where preliminary surveys have already been completed (Dellawa, Sinharaja). Where new demarcation is required and where adjacent OSFs have been allocated to the FD - as is the case in Sinharaja - boundaries will be established in consultation with local residents. Demarcation work will be carried out on contract basis between the FD/project and local residents. Contracts will be piece-based an involve digging/ filling and on site casting of permanent colored concrete markers.

5.4.4 Extension, education and training

Much can be improved in the field of conservation education, awareness raising, and interaction between core area managers and buffer zone population. This requires sufficient and adequately trained staff, especially at field level. Training and capacity building of locally hired forest guards and other local staff will therefore form a prominent part of the project. Whenever possible, locally knowledgeable people will contribute to such training. An important precondition for good staff performance is long-term employment of guards and adequate payment of their field duties. Conservation extension will not necessarily start with village organisations but equally address individuals, households, groups, schools etc. Conservation extension will be functionally linked to various practical buffer zone interventions launched in the course of the project. Interventions may include planning, training and implementation of NTFP and TFP income generating activities, local extension and information material production and aspects of forest conservation and management in the development of school curricula. Training and employment of local guides, licensed by the FD, to provide services for ecotourism, will help ensure that conservation extension will not be considered as an unidirectional affair, meant alone for local residents. Through properly organized guiding facilities local people will be able to share their forest area knowledge with visitors. Educational displays in visitor centers, camp sites and buffer zone locations of interest will be prepared, placed and maintained during the project. Improved availability of visitor center documentation and preparation and sale of pre-recorded audio-visual material will also be undertaken under the project. Part of conservation extension and education will further include proper means of litter management in forest conservation areas.

5.4.5 Eco tourism Development

Ecotourism may become one of the more financially rewarding and long-term benefits derived from core area conservation, provided that sound management and professional business planning is applied. A precondition is that proceeds of entry fees and other income from the conservation areas accrue directly to area management. This alone can provide a continuing incentive to develop and deliver. A business-oriented management plan for ecotourism will be prepared. Increasing entry fees to realistic levels, as already applied in National Parks can generate important increases in income.

Entry fees for institutional groups, such as school children, could be supported through corporate advertisement on entry tickets and signboards and information pamphlets. Service delivery for ecotourism has to be rapidly improved in order to give visitors value for money, not only in terms of accommodation and facilities but also for services and information provided. The development of ecotourism is therefore intimately related to other core area activities. Improvement of trail infrastructure, setting out routes and information supply as well as opening of guided overnight accommodation sites within the forest areas will be carried out to enhance area attraction to visitors. Furthermore, special educational events and seminars in conservation areas may be considered to attract public. As part of business management studies and plan preparation the project will assist the GoSL to identify and contact potentially interested segments of the international ecotourism industry. This approach may eventually lead to targeted advertisement regarding the unique environmental aspects of Sri Lanka's rain forest areas. Continued and gradually more specialized investments such as development of crown trails may be considered once conservation areas start to demonstrate potential for sustained attraction of public interest. Outputs of applied forest research will have immediate relevance for visiting tourists. The FD obviously has an important role to play in the organization and coordination of information supply to the visiting public. However, local people should be at the center of information dissemination. This implies that the FD should engage in training and licensing of local guides. Other involvement of local people in actual core area management may materialize through contract-based village management arrangements for sections of forest trails. In all dealings with local people it is of great importance that interventions provide for sufficient and realistic long-term financial compensation. Only through fair contractual arrangements paid out of raised entry fees and licensing income, will villagers remain committed to a long-term management partnership.

5.4.6 Institutional Development Support

Interaction of national project management with other similar initiatives in and outside the country is important. The project will therefore at appropriate junctures during its development and implementation stimulate project exchange visits and participation in national and regional forums on Integrated Conservation Development (ICD) approaches. Field-level staff with gained project implementation experience as well as policy-oriented staff from the national level will be equally provided with chances to participate in such forums.

5.4.7 Policy Modifications, Legal Aspects and Accountability

Engagement to involve local population to a much larger extent in actual physical management of conservation areas and ecotourism development entails the review of certain parts of the policy environment. The decentralization of financial management and fee collection in relation to conservation management equally demands such modifications. These issues need to be sorted out at the policy level during the preparation phase of the project if actual field based interventions are to go ahead. The project may request the FD to provide specialized legal support in the formulation and negotiation of proposals.

Decentralization of financial management, contributions from the existing conservation trust fund and proceeds derived from collection of increased entry and licensing fees from ecotourism needs to be governed by transparent accounting and regular external audits. Once basic financial management concepts have been agreed upon, the project will assist in preparation of operational guidelines and regulations and support external audits.

5.5 Strategy for Buffer Zone Management

5.5.1 General

Given the weak information basis on interaction mechanisms between buffer zone and core conservation areas a careful design and implementation approach for the buffer zone component is required. The project is not meant to fulfil a wide rural development role. Interventions should have a direct bearing on improved forest management and focus on conservation. An inherent risk for buffer zone management is that interventions will attract beneficiaries, who have little or no relationship with the forest resource. As a result, distribution of direct project benefits will help inflate the conservation-development unit cost. In order to minimize chances for undirected investment the geographical delineation of buffer zones and the topical character of support interventions have to be carefully selected and negotiated. At the same time it is important that the choice of buffer zones is made on the basis of clear administrative boundaries. The preference will be to follow GND boundaries, since these conform to the lowest level of administrative planning and management. Taking into consideration the logistical limitations of the project, there will be a benefit from varied and multiple site experience during development of buffer zone activities. This will require development of selection criteria and choice of a limited number of representative villages during the early stages of the project. Village selection should incorporate locations with different levels of remoteness and integration in the prevailing tea based economy. Past (IUCN) socio-economic studies and planning work carried out by the Sinharaja Village Trust will be consulted for initial selection of pilot sites. The implementation of Rapid Rural Appraisal (RRA) exercises for a number of potentially relevant GND will complete final prioritarization among villages and provide for tentative phasing of subsequent expansion of project interventions. The information gathered by RRAs also serves to provide a foundation for detailed participatory methodology development. Apart from improving overall planning and implementation conditions, the project will spearhead activities in the field of production intensification and diversification, community involvement in sustainable forest management and ecotourism development. It is envisaged that buffer zone interventions will start small, initially in only three or four GND in close vicinity to the forest fringe and will gradually expand on the basis of lessons learnt and availability of funding resources.

5.5.2 Planning, Monitoring and Evaluation Methodology

To ensure long-term cooperative management arrangements between local stakeholders and responsible government institutions - in this case primarily the FD - it is crucial to develop, introduce and gradually refine appropriate participatory methodologies. Participation between local inhabitants and institutions implies that both parties jointly define, negotiate, agree on and mutually enforce management arrangements, related inputs and responsibilities. This process is strongly dependent on personal attitude, capacity for coordination and communication. Participation can only work if involved parties operate and negotiate on equal terms without one party being overly dependent on the other, either financially or in terms of decision making. Participation is more than consultation and institutional information-supply to potential project beneficiaries or preparation of community "wish lists". Well-conceived participatory methodologies become a feature of recurrent and permanent local planning and management. Participatory planning techniques using Participatory Rural Appraisals (PRA) tools will be part of such methodologies. Sectoral responsible Government staff must fulfill a facilitating role in introducing planning methodologies at community level. Government involvement is also required during consolidation of planning outputs, institutional analysis and preparation of a negotiation response. The presence of responsible Government staff during field planning exercises actually offers a first negotiation opportunity. Important results of sound participatory methodologies are a reinforced capability for village-level planning, implementation, monitoring and evaluation and a resulting rise in local responsibility. Under favorable circumstances increased village capacity leads to

strong village management and an increased community self-help capability, which ultimately carries attractive cost aspects for the government. During the first year planning phase, the project will assess the current status of participatory methodology development in the country and proceed with the preparation of a framework for its own participatory methodology. Development of (sub) sector relevant participatory methodologies and tools will start on the basis of existing experiences, and will aim to maximize the integration of M&E and the interaction with (project) management information systems. A sectoral planning focus and the inclusion of economic and financial analyses is of utmost importance. Planning modules and planning tools will be developed on a topical basis, concentrating on specific issues at stake rather than trying to establish general patterns. It is crucial for continuity of planning facilitation that FD and selected technical line agency staff has a long-term commitment. This commitment should cover the full sequence of planning, implementation, monitoring and evaluation cycles. External assistance for methodological development and training will be scheduled over the first years of the project to guarantee continuity and quality control of institutional staff development. For the purpose of consolidation and feasibility analysis, planning, monitoring and evaluation events will include the involvement of GND, Divisional Secretary, GA and FD levels. Exercises will result in comprehensively negotiated, budgeted and agreed annual village plans. Among advocates of participatory development, institutionalization and increase in cost effectiveness of participatory methodologies currently receives a lot of attention. The current project could benefit from active linkage and contributions to this debate. Completion of the first operational planning in selected villages will coincide with the end of the one-year preparatory phase of the project.

5.5.3 Local Organization and Enterprise Support

When entering the operational planning stage issues of local organization, training and technical support will come clearly to the forefront. The project recognizes the importance of strong functional community organizations and local enterprise. The role of these organizations is required to deal effectively with management, production and service requirements superseding individual household capability. The project however does not advocate strong external support in the creation of such local organizations. Ample evidence in and outside Sri anka demonstrates that, all to often, so called Community Based Organizations (CBO) are actually invented by and dependent on outsiders. Such organizations become either project-bound or continue to rely and thrive only as long as an NGO or government supplies external funding. According to sound management principles, organizations and enterprise creation should start with existing and proven local individual or institutional initiative. Admittedly such an approach to local organization support is of a more time consuming nature. However, the approach results in independent, financially and managerially sustainable organizations. The role of government facilitating institutions and of the project will be to: 1) help identify organizational and enterprise development needs; and 2) offer assistance in the form of: a) training; b) preparation of management regulations and by-laws; and c) continued technical support. Only when sufficient local initiative and management strength is evident through broad based community participation and individual household contributions, should the project consider direct investment based support. Examples of organizations and enterprise development in buffer zones, that might be considered for project assistance may include: a) rural finance services, b) irrigation management and renovation, c) agricultural and forest product processing and marketing and d) ecotourism support services. For forest and infrastructure management of conservation core areas, the Project will play an intermediary role between communities and FD. This role will mainly focus on development of appropriate contractual modalities. It will be important to clearly advertise the project strategy in regard of local organization and enterprise support during the initial planning stages.

5.5.4 Training and Technical Support Services

Training and technical support services are equally part of core area conservation and buffer zone interventions. The participatory management approach advocated under the project in fact leads

to closely related requirements for institutional and beneficiary training and technical support. Anticipated training needs for staff and local beneficiaries cover a range of complementary managerial, technical and (extension) communications aspects. Replicability and sustainability of project approach dictates that maximum use is made of locally available training potential and skills. This will require a well-conceived training of trainer (TOT) approach directed to the FD, technical line agency staff and knowledgeable local people. Specialized technical information support will be realised through contractual arrangements with specialized research and extension institutions. For the efficient delivery of technical training contents, improving training and communication skills is a cross-sectoral requirement and will be addressed early on in the project. Basic concepts of economic and financial appraisal will also be introduced on a cross-sectoral basis. On the basis of introduced economic appraisal techniques, institutional staff and beneficiaries alike will be better equipped to review feasibility of proposed interventions. Building local training capacity includes all aspects from training needs assessment to training module preparation, training delivery as well as improvement of technical follow-up. Such tasks will be implemented with and by existing local technical institutions. The project will use the contractual modalities at the disposal of FAO (service contracts, letters of agreement (with institutions) to arrange required services. Early RRA activities carried out by the project will allow anticipation of major technical training requirements and identification of appropriate support sources. Preparation work in turn will allow a rapid training response once detailed operational planning is completed. Project training participation will be voluntary without inclusion of special fees for training attendance. Training will as much as possible be carried out on-site to introduce a maximum local relevance and a high level of practical orientation. In case of mobility requirements or overnight accommodation the project will reimburse on the basis of actual cost. Extended involvement of local resource persons and key informants during training events will be considered liable to financial compensations at going agricultural wage rates. Apart from managerial, economic/financial and communications training various other fields such as agriculture, animal husbandry, forest management, and other types of production may be addressed. During the year one preparation phase the project will prepare a draft Human Resource Development Strategy, which will be subject to regular annual revisions as dictated by needs.

5.5.5 Production Extension Support

An important aim of buffer zone planning will be the identification and promotion of production diversification and local income earning opportunity reducing high dependency on tea incomes. However, with tea prices at their current high level, it is recognized that development of alternatives may be limited or even should focus on improved tea production technology itself. Increasing unit area production or aiming for niche markets, such as green label teas may form alternatives to production area expansion. To identify alternative non-tea production potential the project will collect, review and elaborate on existing commodity studies and commission new research. In order to keep the project focused and within manageable limits of complexity, technical support will concentrate exclusively on farm and forest production related income generation activities. On the basis of promising production and market analysis, the project will assist development and delivery of extension support of alternative agriculture and non-timber forest product enterprise. Support will consist of training inputs, organizational support, technical follow-up but will exclude individual investment support or other forms of input distribution.

5.5.6 Rural Finance

During the first year preparation phase of the project the project may identify support requirements for rural financial services. Preferably existing rural financial institutions and not the project itself should provide such services. Within the project environment there is ample variety of rural banking institutions, of commercial, state managed and cooperative origin. In addition there is widespread reliance on social well fare in the form of Samurdhi scheme participation, also containing

a savings and credit component. An estimated 55 to 60% of all rural households in the project area are part of this scheme. Even though the present situation puts in doubt the need for additional credit funds, this assumption requires thorough verification. As it happens frequently with rural banks, financial services are actually insufficiently accessible for rural households. This especially applies to small-scale production loans with percentage-wise high transaction costs. In other cases easy and nearby access to savings institutions may actually be in greater demand than credit as a financial service. Locally managed savings and credit groups and credit management boards at village level with full fund ownership, may form an appropriate answer to meet the aforementioned short-term production credit and savings needs. Ultimately, however, the aim should be integration of local households in the sphere of regular banking services. This may take place through bank on-lending by strong locally managed savings and credit infrastructure. Rural finance interventions by the project will be based on the conclusions of an independent rural finance study. The study will include a credit availability and needs assessment and be carried out in conjunction with sectoral participatory planning in selected GND. For the purpose of this study, the project will approach an independent and qualified research institute (e.g. the institute for policy studies). If rural finance sector interventions are considered to be in line with achieving project goals, the same institute may be requested to assist in the subsequent design, training, follow-up and implementation reviews. Applied rural finance design will be based on global best practice for group formation, group organization and managerial/ financial regulations. Such practice conforms to market rate interest settings, phased interest and principal repayment, well defined management fees etc. The project will specifically research performance and relevance of the Janashakti rural finance programme. Project budgetary allocations for seed capital formation on a ratio basis of local generated savings will be accommodated under the revised budget and overall work plan resulting from the preparation phase.

5.5.7 Sustainable Forest Management

Variable levels for community involvement in sustainable forest management will have to be negotiated. Negotiations will depend on the outcome of resource mapping, the final definition of buffer zone boundaries and dependency studies on the forest resource. The opportunity for improved productivity, management, processing and marketing of NTFPs will specifically be explored. Possibility to allocate limited forest areas to local residents for sustainable timber harvesting within the buffer zone will be investigated. The possibility to legally practise activities on a well managed basis (contrary to the prevailing situation), will raise interest of local residents. Experiences of the incipient PFMP in Matara are relevant in this respect. At the basis of all sustainable forest management approaches needs to lie adequate legal classification of forest contained in buffer zones. A variable (forest) land classification status within buffer zones is required to provide the underlying management and tenurial security for locally involved communities and individuals. This is somewhat counter to the present, more rigid, policy founded classification approach currently advocated for wet zone conservation forests. Principal forest areas under conservation and legal control of the FD should be given Class 1 and 2 status. This should however not apply for forest-land contained in buffer zones, since this would imply that such areas will remain under indefinite FD management and may ultimately be included in core conservation areas. Thereby the permanency of the buffer zone function would disappear. Small parcels at the forest fringe should preferably and where appropriate be classified as Class 3. This would allow leasehold based sustainable forest management. Obviously implementation of such ideas requires strong supervisory inputs by FD staff. Sustainable leasehold forest management and utilization would take place on the basis of participatory forest management planning. Stump marking and royalty collection by the FD would be a condition for selection felling on leased lands. Marketing of registered and certified timber should be explored in order to generate attractive returns and motivate beneficiaries for continued sustainable forest management. All of the FD created pine plantations and parts of previously logged over natural forest areas will require thinning and assisted natural regeneration interventions. Such areas may be considered for re-

classifiaction as participatory forest management areas on the basis of land capability and habitation proximity criteria.

5.5.8 Ecotourism

It will be very difficult to provide quality services for ecotourism in conservation areas using only FD staff. Provided that internal financial mechanisms for management of core forest areas are drastically revised, there is potential to create economically attractive employment for buffer zone inhabitants. Such employment may come from direct and indirect income generation benefits. While the FD should concentrate on licensing ecotourism accommodation, it should not itself manage such accommodation. Specifically cheaper accommodation classes can be handled by villagers or through local entrepreneurs establishing small guest-houses. Other opportunities as mentioned would lie in contract based local employment generation by the FD for infrastructure development, maintenance, and for guides and guarding employees. Initial conservation area development studies in for ecotourism promotion and marketing will look in detail at the economic and financial feasibility of suggested local employment involvement

6. Reasons for assistance from FAO Government Cooperative Programme

FAO has given high priority to the conservation and management of tropical rain forests especially with participation of local communities. A number of initiatives have been taken in recent years through the implementation of global and regional programmes such as the Forests, Peoples and Trees Programme as well as the 1990 Forest Resources Assessments which have highlighted the danger of tropical deforestation, in particular the tropical rain forest eco-types. Moreover, as Task Manager for Chapter 11 of Agenda 21, FAO is responsible for coordinating global efforts in conservation and management of all types of forests, including tropical rain forests with other international and national partners.

FAO has also taken a lead role in facilitating global and regional meetings on he sustainable utilisation of NTFP, especially in the Asia-Pacific region. In Sri Lanka, most recently FAO assisted the GoSL in implementation of environmental management of forests under project SRL/89/012. The current project is a logical follow-up to this pioneer effort, with its focus on conservation and management of the remaining tropical rain forest. Efforts also fit under priority issues for donor support by the Government of Netherlands concerning Tropical Rain forest Conservation. The FAO Government Cooperative Programme, which supports technical assistance through externally funded projects, provides a flexible approach for the development and implementation of the type of project under consideration.

7. Special Considerations

The project takes into account the following special considerations:

(i) Core area conservation management will rely on the coordinating role of the FD through its geographical and functional divisions, and will include the local population as well as specialized institutional involvement through contractual and licence arrangements;

(ii) Financing of core conservation area management will rely on maximized local and national resource generation. Project funding for direct investment purposes will have a priming function and will be phased out on a gradually declining basis during project implementation;

(iii) Production-oriented socio-economic development measures with impact on income and employment generation will be central to participatory buffer zone development on the basis of consequent local contributions and limited project funding support;

(iv) The environmental guidelines developed during implementation of project SRL/89/012 and other projects in Sri Lanka will be applied to minimise negative impacts of project interventions;

(v) The global development of criteria and indicators for sustainable forest management will be tested with a view to evolving locally applicable indices which will include, among others, the regenerative capacity of tropical rain forests for a possible wider application elsewhere;

(vi) Awareness about gender issues in conservation and buffer zone management programmes is fundamental to their sustainability and will be incorporated at all stages of project implementation; and

(vii) Involvement of the private sector and community organisations as partners is paramount to successful implementation. Suitable coordination mechanisms will be developed in the project context.

8. Coordination Arrangements

The project is strongly field-based and depends to a maximum extent on operational integration with forest divisional, district and technical line agency institutions. Given the strong forestry-oriented character of the project the NPD post will be vested with the FD at central level. Although the forest areas that fall under the project are spatially concentrated, administrative boundaries still require complex coordination requirements. The project area falls in two provinces, three districts (Matare, Galle and Ratnapura) and under two Forest Divisions. Whereas internal coordination between field and functional FD divisions may be relatively easy, in the case of buffer zone interventions, which demand technical line agency and local authority involvement, this is not the case.

To keep project coordination at a manageable level, the central FD will delegate a large amount of autonomy at the Territorial Forest Division level. At the operational level, a senior DFO will chair a Project Management Board (PMB), which coordinates project interventions between the two divisions, especially those in regard to core area conservation management. The PMB will relate, through appropriate channels, with other involved technical line agencies. It will guarantee regular implementation-oriented coordination and consistency of approach between different parts of the project area. It will also identify issues demanding policy attention and bring these forward to the Project Steering Committee (PSC). The board will do so through the organization of regular meetings.

Meetings will be held on a bimonthly basis, or more frequently as the situation demands. Technical agencies will prepare progress reports following a fixed reporting format provided by the project. Institutional representatives of district technical line agencies and possibly local NGO's will be invited on the basis of their direct or indirect contractual implementation arrangements with the project. As a matter of principle, members of the Project Management Board will ensure the presence of implementing staff during board meetings. This staff will be available as resource persons and may during meetings be requested to clarify on matters of practical coordination between line agency institutions and villages. Village representatives and relevant local authorities will also be invited. A designated ranger of the lead Divisional Forest Office will act as the secretary of the PMB. He/she will collect and consolidate technical reporting and keep detailed minutes of meetings. Minutes will serve as a chronological record of project implementation.

Policy decisions will be reviewed during the regular six-monthly Project Steering Committee meetings. PSC meetings will be chaired by the Secretary of the Ministry of Forestry and Environment and attended by representatives of the FD and the districts in which the project has active implementation involvement. Other resource persons (specifically national-level agencies and universities involved in project services) may be invited to attend meetings when this is considered opportune for specific issues under discussion. In principle the first PSC meeting is held in the middle of each planning year. This meeting will serve to discuss all outstanding issues in relation to project planning and implementation. The second meeting will take place following the completion of the annual project planning cycle and the preparation of a consolidated project annual work plan. The second PSC meeting will also allow a forward look on forthcoming project implementation issues. As part of a review of project planning the PSC will confirm its support for a set of achievements foreseen for the year ahead. The PSC will analyze project progress in the light of its own documented project achievement benchmarks.

C. DEVELOPMENT OBJECTIVE

The development objective is the provision of a viable and field-tested model for sustainable conservation of remaining tropical rain forests in South West Sri Lanka for the benefit of the people who rely on forests for their welfare and their livelihoods. The objective relates to conservation of forest biodiversity and catchment protection values achieved through management involvement and sustained improvement of socio-economic status of rural households resident in buffer zone areas.

D. IMMEDIATE OBJECTIVES, OUTPUTS AND ACTIVITIES

OBJECTIVE 1

Development of effective forest conservation management planning for core forest conservation areas on the basis of participatory management planning involving local communities;

Output 1.1

A completed operational and contractual framework providing the secondary information basis for participatory project planning.

Activities

1.1.1 Review all existing planning documentation, identify shortcomings and information gaps and present findings for discussion in the project inception report, including a proposed schedule to address issues.

1.1.2 Conduct broad institutional consultations to establish potential for detailed project preparation studies.

1.1.3 Carry out rapid forest resource appraisals for all complexes falling under the project, to identify and agree on priority locations for project implementation and phasing of spatial project expansion.

1.1.4 Define complementary study requirements and develop detailed terms of reference for biodiversity, forest dependency, ecotourism potential and marketing surveys.

1.1.5 Develop criteria for detailed forest classification and landuse zoning as per the classification proposals of the SLFSMP.

1.1.6 On the basis of contracts with suitable identified agencies, institutes and universities, launch detailed studies on biodiversity, eco-system sensitivity, economic appraisal, marketing and management of ecotourism.

1.1.7 Identify and procure relevant satellite imagery and aerial photo material and engage contract support to establish and technically assist a local-level GIS-based facility for basic forest resource classification maps.

Output 1.2

Completed revised forest classification and zonation for Dellawa, Sinharaja and Diyadawa and other enclosed forests areas including detailed management prescriptions, using participatory inventory work.

Activities:

1.2.1 Develop participatory inventory guidelines with the FD and train local inhabitants in inventory to complete data collection for forest and buffer zone delineation.

1.2.2 Review the zonation of buffer zone and core conservation areas to establish a clear distinction between non-forest land, classified forest land in buffer zones and core forest conservation areas.

1.2.3 Demarcate boundaries between conservation forest areas and (possibly redefined) buffer zones using set bench-mark criteria through contract arrangements.

1.2.4 On the basis of ecosystem sensitivity analysis and accessibility criteria, identify appropriate sites, trails and infrastructure improvements needed for the promotion of ecotourism and carry over information on map overlays.

Output 1.3

Contracts and licence arrangements established for the involvement of the private sector in forest conservation and in ecotourism,(if deemed feasible) to promote alternatives to employment generation.

Activities:

1.3.1 In the participatory planning process with buffer zone communities, establish interest, quantify labor potential and opportunity costs for licence and contract based forest conservation and ecotourism service delivery.

1.3.2 Prepare an investment proposal and a plan for the management of ecotourism services giving priority to the involvement of the private sector.

1.3.3 Establish, with the agreement of the FD and the National Treasury, an upgraded structure of entry and service fees to reflect realistic commercial levels and propose fund reinvestment in conservation area management and ecotourism development.

1.3.4 Train division staff in basic business management concepts for increasing financially independent and partnership-based approaches of ecotourism development.

1.3.5 Define and delineate areas for temporary or permanent closure to the public to protect sensitive areas or fragile ecosystems from damage using natural boundary demarcations.

1.3.6 Design and prepare costing forecasts for the development of larger areas of conservation forest which will include amongst others, trail improvement, information displays, documentation improvement and private sector accommodation development.

1.3.7 Propose a competitive bidding system within the FD to accommodate requirements to promote ecotourism services, such as infrastructure maintenance, accommodation and guiding services.

1.3.8 Develop forest conservation management and ecotourism infrastructure initially relying on project financing with a progressively increasing share of funding from income generation from entry fees and ecotourism licences.

Output 1.4

Forest research outputs effectively categorized and analyzed with relevance to forest conservation management and new applied research.

Activities:

1.4.1 Review and classify the body of available and on-going research and assist the National Forest Research Committee (NFRC) in tracking on-going and future research initiatives conducted in relevant rain-forest areas.

1.4.2 Using the forum of the NFRC, create a priority research agenda for applied and fundamental research applicable to the rain forest complexes falling within the project.

1.4.3 Match existing research results for applicability to forest conservation and regeneration management and commission additional applied research to meet identified information gaps, amongst others secondary forest management.

1.4.4 Establish permanent monitoring plots applicable for the study of fauna and flora in collaboration with national and international research institutions.

1.4.5 Establish a research, documentation and coordination unit in Sinharaja to document all past and on-going research in the concerned forest areas.

Output 1.5

An independent financial and accounting system established for conservation management and ecotourism development.

Activities:

1.5.1 Develop account management and accounting regulations that will govern forest conservation and ecotourism development.

1.5.2 Train divisional staff in financial management and accounting concepts required for transparent and effective use of funds.

1.5.3 Establish regular external audits for the management of the forest conservation and ecotourism development funds.

Output 1.6

Core area conservation management and ecotourism development monitored, evaluated and documented.

Activities:

1.6.1 Carry out participatory monitoring and on-going evaluation (PMOE) to track development of the forest conservation and ecotourism management.

1.6.2 Produce detailed process documentation that may serve wider application of tested management concepts in other conservation management and ecotourism environments.

OBJECTIVE 2

Development and effective implementation of participatory forest development plans on the basis of sustainable concepts in forestry and buffer zone management;

Output 2.1

Dependency relationships and (historical) interaction dynamics of buffer zone communities with forest conservation areas defined and analyzed.

Activities:

2.1.1 Using RRA methods carry out an identification of communities considered representative for varying degrees on forest dependency and market accessibility in the immediate vicinity of selected forest conservation complexes.

2.1.2 Carry out secondary data collection at the local level, involving line agency representatives, government and NGO sources, which may shed light on historical forest dependency relationships of individual communities.

2.1.3 Design and test participatory (PRA based) methodologies focused on planning, implementation, monitoring and evaluation of buffer zone and forest conservation management as well as ecotourism development, the case applicable and feasible.

2.1.4 Clearly define and negotiate institutional acceptance for variable buffer zone vocations and management based on degree of forest (land) dependency, land capability classification and plan-based management agreements.

Output 2.2

A participatory village action plan and framework established for monitoring and evaluation.

Activities:

2.2.1 On the basis of data and studies collected, broadly outline sectoral opportunities for economic development in buffer zones.

2.2.2 Design sectoral participatory planning exercises and information consolidation methods for village planning of buffer zone, forest conservation and ecotourism related interventions.

2.2.3 Carry out buffer zone planning and implementation ensuring the involvement of local stakeholders, starting in selected representative pilot villages.

2.2.4 Train staff and persons from selected pilot communities on participatory methodologies.

2.2.5 Facilitate participatory planning, monitoring and evaluation in buffer zone communities, while adjusting the methodology on the basis of experience gained.

2.2.6 With appropriate divisional, district, provincial and national level authorities, consolidate, document and seek policy support for implementation of annual participatory village action plans for buffer zone management

Output 2.3

Completed design of buffer zone management interventions covering community organization support and contractual arrangements for external support services. Clear linkages and coordination forged between buffer zone management and core area conservation.

Activities:

2.3.1 Redefine and map buffer zone boundaries to encompass non-regularized agricultural encroachments, traditional use zones and fringe forest areas for sustainable utilization.

2.3.2 Develop, negotiate and implement lease arrangements stipulating long-term management status and land management criteria for various land types contained in buffer zones between users and the FD.

2.3.3 Investigate processing and marketing opportunities for products originating from buffer zone management areas through collection of existing, and commissioning of independent new commodity (marketing) studies.

2.3.4 Respond to specific community demands for technical and organizational support through identification and recruitment of technical resource personnel and training of locally responsible line agency staff.

2.3.5 Assist communities in the organization, design and training for local service and management structures including those for contract forest management and ecotourism support in core areas.

Output 2.4

Community resources mobilized as well as institutional/project support mechanisms effected and village action plans implemented.

Activities:

2.4.1 Provide extension training services and technical follow-up support, while replicating experience in an increasing number of villages over time.

2.4.2 Complement community initiatives through provision of capital matching funds to rural service organizations and group-based enterprises e.g. savings and credit organizations, infrastructure management and local processing cooperatives/enterprises.

2.4.3 Document and analyze the impact of buffer zone management initiatives on individual villages through regular monitoring and evaluation inputs.

OBJECTIVE 3

Development and establishment of appropriate institutional arrangements with the concerned stakeholders at the local, divisional, district and higher level in support of the previous two immediate objectives.

Output 3.1

Training needs among communities and institutional actors assessed, in-country training resources identified and overall project training requirements formulated in the form of a (project) Human Resource Development (HRD) strategy.

Activities:

3.1.1 Following detailed investigations into demand for technical, organizational and management training develop a comprehensive but flexible (HRD) strategy to be revised and adjusted on an annual basis

3.1.2 On a recurring basis organize cross-sectoral training workshops to improve institutional and individual training capacity and skills, with a special focus on adult learning methodology.

3.1.3 Introduce the concept of peer trainer involvement by selecting and contracting experienced villagers to work on training events outside their own village.

3.1.4 Monitor trainees and use feedback for updating training course materials and approaches in a process of continuing improvement of training quality and cost effectiveness.

Output 3.2

HRD strategy implemented, resulting in increased resource management skills, better community consultation and participatory management involvement.

Activities:

3.2.1 Through two-way extension communication develop demand-driven extension approaches for forestry and other technical extension.

3.2.2 Provide project grants for environmental information campaigns and (school) competition events using selected local organizations and representatives with mobilization skills.

3.2.3 Solicit the assistance of the FD Extension Division and private sector make available information materials for use in mass media information and ecotourism advertisement campaigns.

Output 3.3

Established project information management system, data collected and project experience analysed and documented.

Activities:

3.3.1 Establish an automated information system at the Divisional Forest Office level including purchase of relevant database software and provide training on database management.

3.3.2. Provide inputs and training to link a GIS and Global Positioning Systems (GPS) supported unit to the information system

3.3.3. Provide audió-visuals and presentation aids and assistance for the production of audio-visual material.

Output 3.4

Policy review and dialogue established on institutional and legal issues and related options and constraints for the optimum management of the remaining wet zone forests based on the project's findings and experience.

Activities:

3.4.1 Ensure that pilot management and demonstration areas and the activities implemented offer sufficient flexibility for replication and implementation of new, innovative forest and buffer zone management methodologies and that these originate from participatory approaches.

3.4.2 Support inter-project and programme coordination and promote regular dialogue with the FD and the Ministry of Forestry and Environment.

3.4.3 Support FD staff and ministerial authorities to contribute to relevant regional consultative fora regarding biodiversity conservation and buffer zone management concepts.

3.4.4 Organize a national policy seminar using as a basis, the project's experience, findings and conclusions regarding, forest management, biodiversity conservation and buffer zone management in order to prepare for future donor assistance in the sector.

E. INPUTS

1. Government Inputs

1.1 Personnel

The Ministry of Forests and Environment will provide the following staff:

i. The National Project Director (NPD) who is a Deputy Conservator of Forest, and who will be based in the Forest Department, Colombo. The NPD will act on a part-time basis, but he/she will function on project matters for no less than 15% of his/her time. The NPD will coordinate overall project implementation between territorial and functional FD divisions and address all policy issues relevant to the project at appropriate administrative and political levels. The NPD will delegate day-to-day project implementation and management responsibility in the field to the two territorial Divisional Forest Officers (DFO) in whose areas the project resides.

ii. Two territorial DFOs who will act as national project site managers on a part-time basis. Each DFO will spend no less than 50% of his/her overall work time (including field meetings and inspections) on project work. One of the two officers will be designated as overall field coordinator. The role of the field coordinator will be to ensure arrangements for extra-territorial meetings and contacts with non-forestry technical line agencies. The coordinator, for logistical reasons, should preferably be the Ratnapura DFO. The project management support unit (PMSU) will be attached to the office of the coordinating DFO. The project CTA will be based in the PMSU. Divisional Forest Officers will be supported by full-time technical forestry staff.

iii. At least three Range Officers (ROs) who will be specifically assigned to the project. At least two ROs will oversee field activities, one or more in each division. In addition, one senior RO will be trained and put in charge of the field-based project information system. RO staff will be actively involved in all institutional development activities involving field planning and buffer zone locations. They will also coordinate and supervise project field interventions.

iv. Additional FD field staff, i.e. Beat Officers and Forest Guards will be employed on an actual need basis. Required staff numbers will depend on the rate of expansion of both core area conservation and buffer zone management aspects of the project. The FD will contract out a part of the conservation area management and protection tasks to local communities. Actual field staffing levels will depend on the rate of success of this implementation approach.

v. Coordinating and technical government staff at district and divisional level belonging to line agencies of relevance to the project. They will be available to work with the project in the course of their regular duties and they will actively participate in multi-disciplinairy coordination.

1.2 General Operating Expenses, Equipment and Premises

The government will provide available equipment needed in the course of studies and surveys, which may either be carried out on a contractual basis between the project and the government or independently by the government.

The Government will provide suitable office premises for the establishment of the PMSU free

2.7 Equipment

Provision is made for supplementary office furniture of the PMSU and territorial division offices. A sufficient budget will be allocated for office computing and communications equipment (multimedia and office PCs, including LAN, faxes, slide projector and screen as well as other minor extension communication equipment) including required hardware and software for GIS applications and GPS. Placement of equipment will be decided upon by the DFOs and the CTA on a functional needs basis. Two 4WD vehicles one of which is a double cabin pick-up will be acquired by the project. The budget line also foresees in a reservation for the purchase of light all-terrain motorcycles (maximum 6), which will be allocated to out-posted FD staff for mobility improvement (4) and used for general office DFO/PMSU communication purposes (2). Equipment will formally remain property of FAO until the date of project termination, after which transfer to the Government will take place.

2.8 Training

After gaining a reasonable level of implementation experience the project will organize a study tour to one of the countries in the region. The study tour will only be organized once project implementation is well underway and relevance of information and experience exchange is most meaningful. Study tour participants will be selected from a cross section of institutional staff and community representatives directly involved in project implementation. As for all project interventions, a proper gender division in the selection will be guaranteed.

Additional budget will be reserved for national project staff participation in a limited number of regional forums. Participation will specifically be targeted to managerial project staff at national and field level.

In-country training will form a strong component of the project for national staff and local people through on-the-job training, participation in workshops, seminars, and in-country exchange visits. Specifically towards its end, the project will arrange a national policy seminar to share results and findings with other programmes/projects. Actual training design and delivery will in most instances will be covered under contractual arrangements. However, additional material costs, transportation, accommodation and occasional training compensation fees will be covered under this budget line.

F. RISKS

Risk	Likelihood
1. Lack of required policy support to allow innovative management approaches in participatory forest management, ecotourism development and buffer zone interventions.	**medium to high**

The government has recognized participatory management and decentralization of administration as a policy matter. However, formal mechanisms remain to be put in place.

2. Poor gender balance in relation to project implementation	**low to medium**

Women's associations are in existence in various parts of the country, national/local associations are often gender neutral with significant women's involvement. However there still exists an imbalance of female staff representation, with possible consequences for gender balanced selection in training and technical support events.

Risk	Likelihood
3. Absence of long-term sustainability of planning and implementation of conservation/management plans and buffer zone interventions	**medium**

From its start onwards, this is one of the major issues to be tackled by the project. Among the rural population, there exists a history of government dependence through subsidy and social welfare schemes. The project will meet with complications to obtain beneficiaries' commitment to dependency-reducing interventions that are based on co-sharing of inputs and local organization Provided that the project can early on demonstrate its intention and ability for delivery of equitable project support, such obstacles may be removed.

4. Lack of counterpart funds to support project implementation and possibilities to create project and management related incentive chemes for involved staff to ensure effective project implementation	**low to medium**

Government (FD) financial resources are limited as are those for line agencies services in buffer zone areas. Fund availability may however be compensated by strong beneficiary contributions for buffer zone interventions. Other Government fund raising potential such as tapping the Conservation Trust Fund and revised entry fee management for conservation areas depends on timely and adequate policy decisions.

5. Inadequate staffing and staff lacking necessary skills and absorptive capácity	**medium**

One of the prerequisites is the assignment of core staff to implement the project strategy. The selection and absorptive capacity as well as a clear definition of responsibilities is crucial. However, the project is not solely relying on permanent government staffing. Government staff duties will focus on core business, lying at the center of their competence. Management inadequacies will be compensated through in-country training, supportive external contractual and strong private sector involvement.

6. Lack of coordination between other relevant project initiatives in the sector low through and with the FD leading to isolated project implementation and less than effective policy integration and support	**low**

Although the project is field-centered it is well anchored at various higher government institutional levels. The project combines pilot elements with broader scale implementation and if successful it holds a promise for wider replication. This aspect is shared by other up-coming initiatives such as those of GEF in the Sinharaja Heritage area. If actively pursued as a matter of project strategy coordination and sharing of experiences should not form obstacles to the project.

G. PRIOR OBLIGATIONS AND PREREQUISITES

Assurance will be given by the Government to appoint national staff and resources as described under inputs.

The Government of Sri Lanka agrees to facilitate the project strategy and participatory approach adopted in this project and will approve/support implementation of a detailed work plan for

management of the conservation areas and surrounding buffer zones, resulting from appropriate local and institutional consultations.

The Government will put in place all agreed contributions including adequately furnished and serviced office facilities, conservation/development sites, etc.

The Government will assure timely selection and clearance of nominees for training courses and study tours and will for the overall project duration ensure continuity of staffing inputs.

The Government will make available staff to carry out the project and to act as counterparts and consultants and will supply all necessary existing data and information including reports and (base) maps to enable completion of agreed activities.

The Government will take the necessary steps to appoint a project management board and steering committee, as well as institutional responsibility and authority for the appointment of suitable counterparts to work with expert staff and consultants.

H. PROJECT REVIEW, REPORTING AND EVALUATION

1. Reports

Reports as listed below will be prepared in English and translated to Sinhala by the FD:

An "inception report" will be prepared by the CTA within the first three months of project start-up in collaboration with project staff, using standard FAO format, for transmission to FAO regional office and HQ, GoSL and donor. This report will highlight the strategy for first year project development.

Six-monthly progress reports will be prepared by the CTA in collaboration with project staff, using standard FAO format, for transmission to FAO regional office and HQ, GoSL and donor.

Technical mission reports from each consultant including contributions by the CTA will be submitted to FAO for technical review and onward distribution to the GoSL and the Donor. Such reports will also include technical subject matter documents, guidelines, manuals and training material. The latter will be produced in both English and Sinhala, depending on relevance, application and audience.

Not later than six months before the end of the project, a draft Terminal Report will be prepared by the NPD assisted by the C.T.A. and submitted to FAO and GoSL for their review and clearance. The Terminal Report will include recommendations and investment proposals for any future follow-up action arising out of the project and this report will be formally sent to the donor by FAO.

2. Tripartite Reviews and Backstopping

The project will be subject to an early tripartite review to review the concepts and methodologies proposed in the light of the enabling policy environment. The project's direction during the following four years will be reviewed during this first review. Following, annual Tripartite reviews will be held involving the Government , FAO and the Donor. The NPD and the CTA will be responsible for preparing relevant documentation for the tripartite reviews. The organisation of the Terms of Reference, timing and duration will be decided between FAO, Government and the Donor. A Project Performance Evaluation Report may be requested and this will be prepared by the NPD and the CTA.

FAO in consultation with Government will provide periodic and regular technical and operational backstopping to the project and its sites. Recommendations of the backstopping missions will be used during annual tripartite reviews. A technical review may be called at anytime by all parties concerned.

3. Evaluations

The project will be evaluated twice. The first evaluation will be held at the halfway point of the project and the second evaluation will be held six months prior to the end of the project. The timing, duration and mission composition will be discussed and agreed by the Government, FAO and the Donor.

I. BUDGET

See Annex 1 for the donor budget.

ANNEX 2

CHIEF TECHNICAL ADVISER

TERMS OF REFERENCE

Under the guidance of the Chief, RAPR and designated Operations and Technical Officers, the Chief Technical Adviser will, in close collaboration with District Forest Officers and the CCF in the Forestry Department, be responsible for the following:

1. Prepare an inception report six-weeks following arrival at the duty station and a preliminary work plan for discussion to be followed two months later by a detailed annual workplan ;

2. Review all related documentation and the draft management plans already prepared and propose a framework to collect additional information and data to permit participatory project planning;

3. Prepare the Terms of Reference for all project consultants (national and international) and prepare in draft the elements needed for subcontracting;

4. Assist in preparing a revised classification and zonation of selected forests for management purposes;

5. Provide a mechanism for contract and licence arrangements for the involvement of the private sector in forest conservation and in ecotourism;

6. Define research required to assist the project in effective participatory management;

7. Establish participatory village action plans and frameworks for monitoring and evaluation;

8. Hold periodic workshops to promote participatory forest management;

9. Prepare required inception, progress, TPR and other reports as may be required;

10. Prepare a detailed training programme, update the training programme to meet project needs and assist in the implementation of training in country;

11. Assure the management of all FAO inputs, including the supervision of consultants and contracts, purchase of equipment and ensure that the objectives of the project are being achieved in a timely manner;

12. Prepare relevant technical reports and the project's terminal report.

EOD: June 2000
Duration: 36 months (24 months consecutive)
Duty Station: Colombo
Language: English