

## MEDIUM-SIZED PROJECT BRIEF

### PROJECT SUMMARY

PROJECT IDENTIFIERS	
1. <b>Project name:</b> Lambusango Forest Conservation, Sulawesi	2. <b>GEF Implementing Agency:</b> The World Bank
3. <b>Country or countries in which the project is being implemented:</b> Republic of Indonesia	4. <b>Country eligibility:</b> Convention on Biological Diversity ratified 24 August, 1994
5. <b>GEF focal area(s):</b> Biodiversity	6. <b>Operational program/Short-term measure:</b> Operations Program #3. Forests
<p><b>7. Project linkage to national priorities, action plans, and programs:</b></p> <p>The new <i>Indonesian Biodiversity Strategy and Action Plan (IBSAP) 2003-2020</i> has as its vision: "An Indonesian society which is concerned, empowered, independent, and intelligent in conserving and utilizing biodiversity in an optimum, fair and sustainable manner through responsible management with the ultimate purpose of enhancing its community welfare".</p> <p>Under this it has set the following objectives :</p> <ul style="list-style-type: none"> <li>• to develop the quality of Indonesian individuals and society who are concerned with the conservation and sustainable use of biodiversity,</li> <li>• to strengthen resources for supporting the development of science, technology, and the application of local wisdom for the conservation and sustainable use of biodiversity,</li> <li>• to reduce and stop the rate of biodiversity degradation and extinction at the national, regional and local levels, along with rehabilitation and sustainable use efforts,</li> <li>• to empower institutional, policy and law enforcement arrangements at the national, regional and local as well as customary levels so as to be effective and conducive for the management of biodiversity on a synergic, responsible, accountable, fair, balanced and sustainable manner.</li> <li>• to achieve fair and balance of roles and interests of Indonesian society as well as to reduce conflict potentials among all relevant sectors in a conducive, synergic, responsible, accountable manner in the sustainable use and conservation of biodiversity.</li> </ul> <p>The proposed project meets all these objectives and certainly sits comfortably with the Vision by giving attention to capacity building through the on-going Operation Wallacea program of conservation-orientated research and work at village level that allows communities to understand the importance and benefits of the globally significant natural ecosystems, delivering innovative means by which pressure on forests and species will be reduced, facilitating socially-appropriate enforcement efforts, and working with a broad spectrum of society – especially at district level - to maximize the chances for sustained change in attitudes and behavior.</p> <p>The IBSAP does not set any priorities among its existing or proposed protected areas.</p>	
<p><b>8. GEF national operational focal point and date of country endorsement:</b></p> <p>Drs. Effendy Sumardja. Letter received 7April 2003</p>	
PROJECT OBJECTIVES AND ACTIVITIES	
<p><b>9. Project rationale</b></p> <p>The focus of the project are the forests of central Buton in S.E. Sulawesi, Indonesia (Annex 1), much of which still remain intact and do not face major pressures for forest clearance from oil palm plantations or sawmills that so threaten the forests in the rest of the country. Even so, the District-managed forests face a degree of forest clearance by an expanding local community and resettlers/refugees, while the adjacent nationally-managed protected area forests are threatened by illegal, small-scale selective logging, rattan collection and hunting. This project proposes a new model of forest management by bringing together under a single management system over 60,000 ha of lowland evergreen rainforest which includes the Kakenauwe Nature Reserve forest and the</p>	

Lambusango Hunting Reserve forest (total 25,163 ha) controlled nationally via a provincial-level Conservation Agency, and Protection Forest, Limited Production Forest and standard Production Forest (total 36,365 ha) all controlled at District level. At present there is no management overlap between the nationally-controlled PAs and the District controlled and both have their own management and ranger teams with substantially different management objectives. There is a clear commitment within the District-level government of Buton towards addressing what are seen as pressing environmental concerns particularly in relation to the degradation of their limited forest resources. Both the Bupati (Head of District-level government) and the Head of the Provincial Conservation Agency (KSDA) in the provincial capital of Kendari have been in their respective positions for about a year and already have managed to demonstrate a willingness to address deeply-rooted environmental concerns. In addition the Head of the Provincial Conservation Office (with authority over the nationally-managed protected area) has also been proactive in seeking to apprehend people illegally removing timber.

While not diminishing the problems faced on Buton, they are markedly different from those faced elsewhere in the country where the threats to forest biodiversity are enormous with an average of 1.7 million hectares of forest having been lost to other uses each year between 1985 - 1997. During that period nearly 20% of the forests of SE Sulawesi have been lost. It is likely that the rates of forest loss across Indonesia following the economic crisis in 1998 and the devolution of control of the forests to the approximately 350 District-level governments in 1999, may have increased. Moreover forest loss is just the most obvious aspect of the problem; much of the remaining forest has been selectively logged, and hunting for food, and collection of birds for the pet trade, have been widespread.

One of the principal problems is that although the PA forests within Indonesia are still controlled nationally the forests surrounding these areas (e.g. limited production, production, watershed forest etc) are now controlled at District level. Poor management of the District level forests coupled with a local perception that the nationally controlled forests simply occupy land for which the District receives no income, is leading to substantial deterioration of the conservation value of the PA forests in many cases and even clear felling of PA forests in other areas.

This project brings together nationally-controlled PA forests in central Buton island in SE Sulawesi with District-controlled forests under a single management Forum controlled by national and District level government representation together with local communities and NGO's. The PA forests within the Lambusango Forest Management Area have been shown to have outstanding conservation value with 21 new vertebrate species to science being described from within their borders in the last 3 years. The proposed protected area contains populations of threatened species including one frog which was thought to have been extinct plus numerous other reptile and amphibian species, 12 bird species on the IUCN Vulnerable, Threatened or Near Threatened lists, and 2 bats only recorded on a few previous occasions. There also appear to be viable populations of flagship endemic species such as the Buton macaque, whilst the Lambusango forest is one of the last strongholds of the 'Critically Endangered' anoa. The conservation value of these forests, as elsewhere in Indonesia, is under threat from hunting, illegal selective logging and clearances around the edges by local communities for agricultural use.

The forests of central Buton though provide an excellent opportunity for developing a 'best practice' management programme for integrating the management of currently distinct nationally- and District-level managed forests. The District Head (*Bupati*) responsible for the District-controlled forests and the Head of the Provincial Conservation Department responsible for the nationally-controlled forests in central Buton have both shown commitment to protecting the forests with applications for new roads and quarry extensions blocked, and no further logging permits issued for the forests since both men assumed their positions. In addition an international research tourism organisation, Operation Wallace, has been completing biodiversity and social assessments of the forests in central Buton since 1995 with teams of academics from UK, Irish, US and Australian universities, and investing heavily in the local communities surrounding the forests.

The proposal is to create a 'best practice' model that could rapidly be rolled out to other Districts. Existing legislation in Indonesia allows local communities adjacent to forests to be granted 35 year leases on forest areas adjacent to their villages and the project will implement this legislation in the central Buton area. The leases however, will permit only exploitation of the production forest areas and are contingent on various conditions being met including ensuring the exploited forests are managed sustainably and that none of the villagers are caught hunting or illegally logging in the PA or limited production forests, or the continuance of the lease for the village will be under threat. Since these lease agreements will be a major income source for the local community there will be major pressure from the community itself on any members of the village who are not complying with the hunting and illegal logging restrictions, to cease their activities. This basic 'motor' for the proposal is enhanced by strengthening the ranger team via a mentoring and training programme to greatly increase enforcement activity, improving awareness of the biological importance of the forest fauna and the rules of the forest management amongst local communities by an extensive training programme, and a chain saw amnesty and buy back scheme to immediately reduce the illegal logging activity. The presence of Operation Wallacea allows for quantifiable economic, social and biological performance indicators to be set to assess the success of the management programme and which are monitored annually with much of the funding provided by the research tourism organisation. The involvement of Indonesian graduate students in helping to assess various of the biological performance aspects and a grant system for Indonesian students to work in the biodiversity assessment teams with international specialists will produce a core team of Indonesian personnel who could reproduce the performance monitoring programme in other Districts.

The various District and National government departments have considerably increased their proposed spend on the Lambusango forest areas in anticipation of the GEF-supported scheme being implemented. Operation Wallacea is investing over \$1 million over the 4 years of the project and is willing along with the government departments to take over the funding of all aspects of the management and monitoring aspects of the scheme from year 5 onwards.

The main objective of the proposal is to demonstrate that District forests and PA's can be managed jointly to ensure both increased income to surrounding villages and tax revenue to district governments as well as enhanced protection of their biodiversity. The latter part of the GEF scheme concentrates on providing information to the 350 remaining Districts on the financial and conservation benefits of the Lambusango scheme. If as looks likely the financial benefits are substantial both to local communities and the government, the information which will be provided to each of the Districts and which will contain a step-by-step guide on how to implement such schemes without the need for initial funding, should encourage the establishment of similar schemes in other parts of Indonesia.

The project addresses three of the four GEF Strategic Priorities for Biodiversity: It catalyses the sustainability of protected areas throughout the country (and possibly beyond) through a realistic, innovative model of locally-led forest management in a decentralized government context which, where there is proven local support, seems to offer the best hope for conservation (BD-1). It mainstreams biodiversity concerns in the productive landscape by working with communities and traders on sustainable harvesting regimes (BD-2). It also, through the on-going Operation Wallacea program of mentored student research/publication, will allow outcomes to be closely monitored and tested and the results and modifications disseminated to as wide an audience as possible (BD-4).

**10. Project goal:**

To conserve globally-significant biodiversity in Sulawesi through an innovative local management regime and to utilise the lessons learned from this approach to establish similar national/local conservation partnerships in other parts of Indonesia

**Project purpose**

To establish effective District-level management with the involvement of local communities around the Lambusango forest area.

## 11. Project outcomes

A Local communities vested financial interest in the long term survival of the Lambusango forests ensured

## Project outputs

A1. The formation of a forest management Forum bringing together the management of national and District controlled forests, as an effective decision-making management body

A2. Introduction of management agreements for all the villages surrounding the forest management area to sustainably exploit the production forest areas in exchange for full compliance by all community members in a cessation of illegal logging and hunting in the non production forest areas

A3. Development of a rattan licensing system that allows management measures to be implemented to ensure the rattan was collected sustainably, which would be in the long-term financial interests of all the surrounding communities

A4. Preservation of the forest edge where they are when the project is disclosed (as part of the World Bank requirements).

B Effective enforcement and high levels of compliance with agreed management regulations for the Lambusango forests ensured

B1. Development and implementation of a management plan for the whole of the Lambusango forest management area so that the management regulations are known and accepted by all the surrounding communities,

B2. Strengthening of the KSDA/Forestry team in patrolling and enforcing against illegal logging and hunting in the non-production forest areas,

B3. Implementation of a chain saw amnesty and buy back scheme to ensure that the project has an immediate impact on illegal logging activity.

C Public awareness amongst communities on Buton Island of the biological importance of the Lambusango forests and their management regulations increased

C1. Modification of an existing building into a field centre from which training courses can be run

C2. Participation by 1000 people from communities on Buton on training courses to enhance their knowledge of the biological importance of the Lambusango forest and the management regulations.

D Capacity amongst Indonesian managers and scientists improved to ensure similar schemes could be introduced into other districts

D1. Grant aid for 24 Indonesian forestry and related undergraduates to gain field experience in biodiversity and socio-economic assessment of the performance of such management schemes

D2. Training of 6 Indonesian PhD students to complete the main aspects of the biological monitoring programme so that they could develop and implement similar monitoring schemes in other districts

<p>E Abundance of key biodiversity species and groups increases through success of the adaptively-managed program</p> <p>F Other Districts adopt similar management strategies for their locally and nationally controlled forests</p>	<p>E1. Development and implementation of a monitoring strategy with known levels of precision in detecting biodiversity changes in the indicator groups selected.</p> <p>E2. Development and implementation of a monitoring strategy with known levels of precision in detecting population changes of key or threatened species.</p> <p>E3. Development and implementation of a monitoring strategy with known levels of precision to assess socio-economic changes amongst the surrounding communities that are attributable to the project.</p> <p>E4. Development of an adaptive management strategy to ensure the results of the monitoring programmes is presented in a form that will enable the management Forum to assess the performance of their management strategy.</p> <p>F1. Presentation of the results of the Lambusango project to key government Ministers in Jakarta and obtaining their support for introducing similar schemes elsewhere in Indonesia</p> <p>F2. Preparation and distribution to each Indonesian District of a report demonstrating the financial benefits to local communities and government of the Lambusango scheme, the conservation benefits and a step-by-step guide on how similar schemes could be introduced into other Districts without the need for start-up financing.</p>
<p><b>12. Project activities to achieve outcomes (including cost in US\$ or local currency of each activity):</b></p> <p>Start up phase and visa costs (\$13,000)</p> <p>Project management ( \$242,450)</p> <p>Component A. <b>Local Involvement</b> (\$138,200)                      <b>Community</b></p> <p>Component B <b>Forest Management,</b> (\$106,000)</p>	<p><b>Activities and indicators of progress:</b></p> <p><i>Appointment of project manager</i>  <i>Establishment of project office</i>  <i>Establishment of accounting procedures</i>  <i>Appointment of key staff and contract expertise</i>  <i>Formation of Forum Hutan Kemasyarakatan Lambusango (FHKL)</i></p> <p><i>Appointment of Community Facilitators</i>  <i>Provision of assistance in drawing up forest management plans and identifying other financial opportunities</i>  <i>Establishment of rattan permitting system</i></p> <p><i>Development of management plan</i>  <i>Establishment of joint KSDA/PHPA ranger</i></p>

<p>Component C <b>Public Awareness</b> (\$98,850)</p> <p>Component D <b>Capacity Development</b> (\$105,000)</p> <p>Component E <b>Adaptive Management and Monitoring</b> (\$178,900)</p> <p>Component F <b>Promotion of Approach</b> (\$92,000)</p>	<p><i>team</i>  <i>Equipping field offices and family re-location costs</i>  <i>Development of mentoring scheme</i></p> <p><i>Conversion of Wanda Wolio house to field centre</i>  <i>Promotion of educational opportunities and booking of courses</i>  <i>Provision of short courses</i></p> <p><i>Promotion of field study grant opportunities</i>  <i>Provision of field study for Indonesian undergraduates</i>  <i>Appointment and registration of Indonesian PhD students</i>  <i>Establishment of the Labundo Research Centre</i></p> <p><i>Monitoring for socio-economic objectives</i>  <i>Monitoring of forest structure and total cover</i>  <i>Monitoring for biodiversity indicators and population levels of threatened species</i></p> <p><i>Consultation and investigation of opportunities for similar forest management areas</i>  <i>Completion of report on how the Lambusango approach could be applied to other Indonesian provinces</i></p>												
<p><b>13. Estimated budget (in US\$):</b></p> <p>GEF:</p> <table> <tr> <td>PDF-A</td><td>\$25,000</td></tr> <tr> <td>Project</td><td>\$975,000</td></tr> <tr> <td>Operation Wallacea</td><td>\$1,610,400</td></tr> <tr> <td>KSDA</td><td>\$928,008</td></tr> <tr> <td>Forestry</td><td>\$954,516</td></tr> <tr> <td><b>TOTAL for Global Benefits of Biodiversity</b></td><td><b>\$4,492,924</b></td></tr> </table> <p>Plus</p> <p><b>TOTAL for Associated Financing Local Benefits of Biodiversity \$2,543,072</b> (government non-incremental spending in Lambusango area)</p> <p>The opportunity of the GEF-supported project has already resulted in the government considerably increasing their proposed spending on protection of the Lambusango forests and Operation Wallacea, the private sector research tourism company, is also planning to stay in the area until 2013. This combination of government and private sector spend should enable the Lambusango initiative to be entirely self-financing from year 3 onwards.</p>		PDF-A	\$25,000	Project	\$975,000	Operation Wallacea	\$1,610,400	KSDA	\$928,008	Forestry	\$954,516	<b>TOTAL for Global Benefits of Biodiversity</b>	<b>\$4,492,924</b>
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<p><b>INFORMATION ON INSTITUTION SUBMITTING PROJECT BRIEF</b></p>													
<p><b>14. Information on project proposer</b></p> <p>This project is being proposed by Operation Wallacea, a research tourism company. Operation Wallacea has been established and running research projects in Lambusango since 1995. The research program is run by university academics and funded by paying volunteers (primarily undergraduates or Masters students). The organization is the fastest growing expedition organization in the UK and based on current bookings will have over 700 students and 80 academics participating in the research program in Indonesia and Honduras in 2004. The</p>													

organization has built extensive research facilities in Labundo and is committed to remaining in the area under the terms of its Agreement with the Wallacea Development Institute (the Indonesian counterpart NGO based in Jakarta) until at least 2013.

Surpluses from Operation Wallacea have been donated over the last 3 years to a UK based charity, The Operation Wallacea Trust which is dedicated to providing support to local communities in SE Sulawesi to ensure long term biodiversity protection. The Trust which is entirely independent of Operation Wallacea (no shared Directors or shareholders) is chaired by the Rt. Hon Ken Clarke QC MP (former UK Chancellor of the Exchequer [Minister of Finance] in the UK) and has the Indonesian Ambassador, biodiversity academics and private sector companies interested in tropical conservation as Trustees. It is proposed that the Trust will be the Lead Agency and will appoint a Project Manager to implement the programme. The Trust will also independently audit the finances and progress in achieving the objectives. Operation Wallacea will perform the monitoring part of the programme to assess performance with the management objectives..

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15. <b>Information on proposed executing agency (if different from above)</b> N/A
16. <b>Date of initial submission of project concept:</b> N/A
INFORMATION TO BE COMPLETED BY IMPLEMENTING AGENCY :
17. <b>Project identification number:</b> P083007
18. <b>Implementing Agency contact persons:</b> Tony Whitten, Senior Biodiversity Specialist, East Asia and Pacific Region, The World Bank. 1818 H St. NW, Washington DC 20433, USA; twhitten@worldbank.org, telephone +1-202-458-2253, fax +1-202-522-1666.
19. <b>Project linkage to Implementing Agency Programs:</b> In recognition that Indonesia needs to deal with issues such as legal and illegal over-exploitation and clearing of natural forests, the World Bank's new Indonesia Country Assistance Strategy (CAS) (October 23, 2003) undertakes to support efforts to improve governance in the forestry sector by extending decentralized natural resources governance to include participation of local communities in decision making for forest land resources upon which their livelihoods depend. The CAS significantly increases Bank support for rural development as compared to the past five years since the crisis, and recognizes that new directions are needed. Thus, the proposed project for Lambusango – both its content and approaches - are entirely supported by the CAS, and reflect the positive lessons learned over the last five years concerning working at District (and Sub-District) level and with community and civil society engagement.  The support of advances in governance is a major theme of the CAS and two of the four stated goals will be supported by the Lambusango project: (i) making development planning more responsive to constituents, and (ii) strengthening the accountability of local governments under a more coherent decentralization framework. Corruption poses a special problem in Indonesia, and before projects such as MSPs are approved finally approved by the Country management Unit, an Anti-Corruption Annex must be prepared and endorsed by the country specialists. This would likely be less of a problem in an MSP than in a conventional loan operation, but the attention to transparency and accountability, through the Forum, should be a good demonstration of best practice.  This project would be the fourth in the World Bank's GEF-MSP portfolio working at District level: Sangihe-Talaud in North Sulawesi, Berbak-Sembilang in southern Sumatra, and Elephant forests in northern Sumatra. (Another OP3 MSP, INFORM, is an awareness/media project focusing on Sumatra and Kalimantan). The experience from these is clearly that working at district level is both appropriate and strategic since this is where most of the authority over natural resources now lies. All three of these were rated 'Satisfactory' at their last supervisions, and all have been/are being successful in different ways, although none has attempted the locally-controlled, government-plus-civil society control of a forest area comprising different categories of forest. Engagement at District level in the management of forests is now essential, and doing this with broad civil society involvement is what this project is piloting. The existing MSPs also demonstrate the importance of long-term commitment of the executing agency prior to, during and beyond the project life - all valid for Operation Wallacea.



# LAMBUSANGO FOREST CONSERVATION, SULAWESI, INDONESIA

## PROJECT DESCRIPTION

### 1. RATIONALE AND OBJECTIVES

The proposed project seeks to take advantage of a favourable decentralized political environment, excellent local government support, a relatively hilly island with globally-significant biodiversity and relatively good forest cover, an absence of large-scale legal and illegal timber industries of the sort that cause such devastation in many other parts of Indonesia, and the long-term presence of a unique research tourism company<sup>1</sup>.

Buton Island off the mainland of SE Sulawesi in the centre of Indonesia lies at the heart of the Wallacea Biogeographical Zone. Buton lies within:

- The 'Critical' Endemic Bird Area of Sulawesi (BirdLife International),
- The Global 200 Ecoregion of Sulawesi Moist Forests (WWF), and
- The Wallacea Hotspot (Conservation International).

This region is bounded by deep ocean trenches and has remained isolated from the Asian and Australasian continents even when the sea levels dropped during the last Ice Ages. The long period of isolation has produced many species endemic to the region. For example the bird fauna has the highest number of endemic species of any similarly-sized land area in the World. In addition to the endemic elements of the fauna, Asian and Australian species have also invaded producing a unique mix of species. Sulawesi forms the largest landmass within the Wallacea biogeographical region and has the highest numbers of endemic species.

The focus of the project is 60,000 ha of uninhabited lowland evergreen rainforest in central Buton in S.E. Sulawesi, Indonesia (Annex 1). Much of this is intact and none faces major pressures for forest clearance from oil palm plantations, pulp industry or sawmills that so threaten the forests in the rest of the country. This block of forest is made up of different categories: 25,000 ha of two protected areas of two types which are managed on behalf of the central government by the Conservation Office in the Provincial capital, and 35,000 ha of protection forest and two types of production forests which are managed by the District Forestry Office. It is the District level which, under the new decentralized government structure in Indonesia, has authority over natural resources. Even so, the District-managed forests face a degree of forest clearance by an expanding local community and resettlers/refugees, while the adjacent nationally-managed protected area forests are threatened by illegal, small-scale selective logging, rattan collection and hunting.

The global significance of the Lambusango-Kakenauwe forests targeted by this project is detailed in Appendix 3 but can be summarised as follows:

- The proposed protected area contains populations of threatened species including one frog which was thought to have been extinct plus numerous other reptile and amphibian species, 12 bird species on the IUCN Vulnerable, Threatened or Near Threatened lists, and 2 rare endemic bats only recorded on a few previous occasions in Sulawesi.
- There appears to be a viable population of flagship endemic species such as the Buton macaque, and the Lambusango forest is one of the last strongholds of the 'Critically Endangered' Anoa. Sulawesi ('giant') palm civet may also be present in the forest.

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<sup>1</sup> Since 1995 this forest area has been an increasingly important focus of attention by Operation Wallacea, a wildlife research company funded by university students who pay to join the yearly activities either for the experience of working with expert biologists or to complete dissertation studies. Over 100 dissertation studies and papers have been submitted to peer-reviewed journals from these studies - see [www.opwall.com](http://www.opwall.com) for complete listing of reports and publications

- In recent years 21 new vertebrate species - 4 fish, 11 reptiles and amphibians, 2 small mammals, 3 bats and 1 primate - have been discovered within the Lambusango-Kakenauwe forest boundaries and are currently known only from those locations.
- tree diversity of the proposed reserve appears to approach that of the most diverse limestone forests on mainland Sulawesi where lowland forest is fast disappearing.
- The proposed protected area seems to contain a good cross-section of the lowland forest fauna of mainland Sulawesi for groups such as butterflies, birds, snakes, bats and small mammals.

The project proposes an innovative approach to the conservation of forest biodiversity by bringing together under a **single management system** an area of forest comprising the Kakenauwe Strict Nature Reserve (*Cagar Alam*) forest and the Lambusango Wildlife Reserve (*Suaka Margasatwa*) forest (total 25,163 ha) and blocks of Protection Forest, Limited Production Forest and standard Production Forest (total 36,365 ha) currently controlled by national and District-level agencies respectively. This will be achieved by establishing a management forum comprising all stakeholders, developing village contracts allowing exploitation of the production areas of forest in exchange for preventing their own community members via a system of Forest Guardians from continuing illegal logging and hunting in conservation forests, increasing awareness of the biodiversity value of the forests by a series of training courses for local communities, developing an intensive biological and social assessment program to assess the performance of the management scheme, increasing the capacity of Indonesian conservationists to carry out biodiversity assessments, and improving the effectiveness of a joint Provincial Conservation Agency (*KSDA*)/District Forestry Service enforcement team through a mentoring scheme. The final stage is the production and dissemination of the data from this project to demonstrate the financial benefits to local communities and governments so that similar schemes can be established in other Indonesian Districts without the need for initial investment. At present the communities surrounding the Lambusango forests have no tenure or ownership rights for the adjacent forests, nor are they allowed to exploit the forests. Granting these limited sustainable extraction rights will be a financial benefit to the communities and the payment of taxes on all extracted wood will also enhance District government incomes.

The merit of the approach being proposed is that it is responsive both to the relatively new situation in which the District Heads (*Bupatis*) find themselves in charge of major natural resources, and to the situation revealed in surveys done under the GEF-MSP Indonesia Forests and Media Project which found that people do indeed know about forest loss – but they do not know what to do about it. The concept for developing a better management model for the Lambusango forests came originally from Operation Wallacea staff who on the ground were observing on a daily basis the failure of the existing management system. This concept envisaged the creation of a National Park, but during development of the ideas by widespread consultation with local communities, government and NGOs over a long time period, a better locally-driven solution emerged and the resultant Brief summarizes the various views on how the problem should be tackled without the need for changing the legal status of the forests.. There is very strong local political support from local government, local NGOs and from local communities for the proposed project.

The local government for Buton has already demonstrated that it is concerned to conserve and sustainably use its forests, and Operation Wallacea has a long-term formal commitment to remain in the area and to continue to bring benefits to the people who live around the forest. The proposed project would allow both sides to give appropriate attention to the globally-significant biodiversity through an innovative partnership. Ministerial Decision 31 (2001) provides an existing legal basis for community involvement in forestry management. The Lambusango Forest Management Area - as it is to be known - will be controlled by a Forum, which is based on the requirements of Ministerial Decision 31 (2001) (see below). It is proposed that the funding for this scheme will go via the Operation Wallacea Trust which is a not-for-profit registered charity. The Trust is independent of Operation Wallacea with no shared Directors. The Trust will contract the

Forum and the Project Manager to execute the project and Operation Wallacea to carry out the monitoring work to assess its effectiveness.

The project addresses three of the four GEF Strategic Priorities for Biodiversity: It catalyses the sustainability of protected areas by trialing a realistic, innovative model of locally-led management of a 60,000 ha block of biologically-significant forest in a decentralized government context which, where there is proven local support, seems to offer the best hope for conservation (BD-1). This promises significant dividends in neighboring forest areas, elsewhere in Indonesia, and potentially beyond. It mainstreams biodiversity concerns into the management of 36,365 ha of the production landscape (the areas of Protection Forest, Limited Production Forest and standard Production Forest) by working with communities and traders on sustainable harvesting regimes (BD-2). In addition to the activities and outputs of Component F which seeks to have the expected successes of the project made known to as wide an audience as possible within the country to encourage adoption of the approaches taken, the project will also, through the on-going Operation Wallacea program of mentored student research/publication, allow outcomes to be closely monitored and tested and the results and modifications disseminated to as wide an audience as possible (BD-4).

The overall **goal** of this project is to conserve globally-significant biodiversity in Sulawesi through an innovative local management regime and to utilise the lessons learned from this approach to establish similar national/local conservation partnerships in other parts of Indonesia.

The **purpose** of this project is to establish effective District-level management with the involvement of local communities around the Lambusango forest area.

The project will pursue the following project **objectives**:

1. Maximise local involvement through the establishment of a management 'Forum' for the Lambusango Forest Management Area, and the development of village contracts granting exploitation rights in exchange for conservation gains
2. Increase local capacity through awareness building of biodiversity amongst local communities, and the development of technical skills in biodiversity assessment at undergraduate and postgraduate levels amongst the next generation of Indonesian conservationists
3. Develop and implement an effective biological and social assessment program for performance monitoring
4. Ensure the various strands of the project are financially sustainable from government and private sector input by the end of the project.
5. Provide data to demonstrate the financial and biodiversity benefits of the Lambusango scheme to all other Indonesian Districts to encourage self-financed start-ups of similar schemes in other parts of Indonesia

Given that so many aspects of this project are already in position (see section 9) it is proposed that the Lambusango Forest Management Area could be established as an effectively-managed area with only three years of GEF support, with GEF funding in the fourth year being used to promote the Lambusango concept in Districts elsewhere in Indonesia. There is a huge momentum at the moment for the establishment of a management forum for all the forests of central Buton and there will be much greater public support if rapid progress is made and changes can be seen on the ground soon.

The innovative components of this project are:

- The integration into a single management unit of District- and nationally-controlled forests.

- The use of financial incentives (i.e. village contracts) to ensure compliance with the protection rules of the central forests.
- An intensive monitoring program designed to assess the performance of the management scheme against specific objectives (e.g. financial benefits to local communities, population levels of key species etc).

## 2. CURRENT SITUATION

### 2.1 Indonesia

Indonesia has been identified as the most biodiverse country in the World<sup>2</sup>. Yet large parts of the country have had little biological investigation and additional species and important areas for conservation are still being discovered. Given the relative ease with which new species can be found in remote provinces of the archipelago, it is likely that the current listing of the country's biodiversity is a under-estimate<sup>3</sup>.

There are significant threats to forest biodiversity in Indonesia with an average of 1.7 million hectares of forest having been lost to other uses each year between 1985 - 1997<sup>4</sup>. It was recently revealed that between 1985 and 2001 56% of protected forests on Kalimantan were either logged or converted<sup>5</sup>. During that period nearly 20% of the forests of SE Sulawesi, the province of which Buton island is a part, have been lost. It is likely that the rates of forest loss across Indonesia following the economic crisis in 1998 and the devolution of control of the forests to the approximately 350 District-level governments in 1999, may have increased. Moreover forest loss is just the most obvious aspect of the problem; much of the remaining forest has been selectively logged, and hunting for food, and collection of birds for the pet trade, have been widespread. From a global perspective such a catastrophic loss of forest in the world's most biodiverse country - and often in areas where species are probably being lost before they have even been described - is one of the most serious biodiversity management issues needing attention.

Investments in forest conservation projects in Indonesia by the donor community and international NGOs have had only limited success, and most of these schemes have been unable to address the pressure from, for example, clearance for oil palm plantations, the overcapacity of Indonesia's sawmills and the pulp industry driving illegal logging, the forest clearance by an expanding rural population, the institutional weakness in various government organisations, or the impacts of devolution and the separation of forest management powers between national and District-levels. Under the Decentralization Law No. 22/1999 and its implementing guidelines, the Ministry of Forestry continues to administer and manage all nationally-important Protected Areas (PAs - National Parks, Nature Reserves, Wildlife Reserves, and Hunting Reserves). Decisions on allocation and management of other forest areas including watershed and protection forests, production forests and local protected areas of limited conservation value such as recreational parks have now devolved to the District-level. This creates the added problem of ensuring effective co-ordination of forest management particularly since PAs occupy land that does not

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<sup>2</sup> Whitten T.J. Whitten P.P. van Dijk, J. Supriatna, R., Mittermeier, R. (1997) Indonesia In *Megadiversity: Earth's Biologically Wealthiest Nations* (eds. Mittermeier, R., Gil, P., and Goettsch-Mittermeier, C.) pp 74 – 107. Prado Norte: Cemex

<sup>3</sup> The islands of eastern Indonesia support much higher levels of species endemism than other parts of the country and have also, perhaps surprisingly, generated far less interest amongst biologists and conservationists in general.

<sup>4</sup> MacKinnon, K. and Whitten, T. (2001). Biodiversity protection and management. In: *Indonesia: Environment and Natural Resource Management in a Time of Transition*, pp. 32-50. The World Bank, Washington DC.

<sup>5</sup> Curran *et al.* 2004. Lowland Forest Loss in Protected Areas of Indonesian Borneo. *Science* 303: 1000-1003.

contribute land tax to the District. From a biodiversity viewpoint many of these PAs will survive as effective units only if the surrounding Limited Production Forests and standard Production Forests are managed properly and act as effective buffer zones.

It appears from this experience of funding conservation projects in Indonesia that the most urgent task now is to develop an effective strategy for managing forests at the District-level since this is where most of the authority over natural resources now lies. An effective regime of District forest management could have a huge impact on the management of forests throughout Indonesia and has the advantage over the old centrally-controlled system of having a management structure much closer to the local people living adjacent or inside these PAs. Support for this view comes from two other GEF-financed MSPs – one on Sangihe-Talaud in North Sulawesi, and the other in Berbak-Sembilang in southern Sumatra.

Walton (2001)<sup>6</sup> described developing a system to broaden and guarantee access to forest benefits for forest dwellers and local communities, through ownership or secure, long-term use rights, in return for responsible forest management, as one of the key actions that needed to be taken to ensure protection of Indonesia's forests. At the heart of this proposal is the development of contracts for local villages to exploit the production forest, which lie around the perimeter of the proposed forest management area, in exchange for agreements to control all illegal logging and hunting activities in the limited production and conservation forests. It has been argued<sup>7</sup> that direct payments to individuals to protect habitats would be a much more cost-effective way of investing limited resources than in trying to build capacity in the protection agencies, increase awareness, and develop alternative income streams. The main drawback of such an approach, however, is how it can be sustained without continuous external funding. The proposed scheme for the forests of central Buton effectively gives direct payments to communities for protecting the forests but it is funded not by an external donor, but from income earned by the community through managed exploitation of the adjacent areas of Production Forest.

## **2.2 Buton District**

The District-managed forests of central Buton are judged to be under medium threat (see MacKinnon and Whitten, 2001) because they face problems of forest clearance by an expanding local community and resettlers/refugees, and the nationally-managed PA forests are threatened by illegal, small-scale selective logging, rattan collection and hunting. However, much of the forest still remains intact and there are no oil palm plantations or sawmills in the District that would provide major pressures for forest clearance.

There clearly exists a commitment within the District-level government of Buton towards addressing what are seen as pressing environmental concerns particularly in relation to the degradation of limited forest resources. Both the Bupati (Head of District-level government) and the Head of the Provincial Conservation Agency (KSDA) in the provincial capital of Kendari have been in their respective positions for less than two years and already have managed to demonstrate a willingness to address deeply-rooted environmental concerns (see Appendix 2). Attempts to open roads that would bisect forest areas covered by this proposal have been rejected by the Bupati on the grounds that they would place at risk existing forest areas through increasing access to illegal forest clearing and timber extraction activities. Proposals to open up remaining forest areas for asphalt mining activities have also been rejected to date and no further official forest conversions have been carried out since the current national level moratorium came into effect. In addition the Head of KSDA has also been proactive in seeking to apprehend people illegally removing timber from within State-managed forests.<sup>8</sup>

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<sup>6</sup> Walton, T. (2001) Forest resources. In: *Indonesia: Environment and Natural Resource Management in a Time of Transition*, pp. 6 - 29. The World Bank, Washington DC.

<sup>7</sup> Ferraro, P.J. and Kiss, A. (2002) Direct payments to conserve biodiversity. *Science* **298**, pp 1718 - 1719

<sup>8</sup> This year forestry staff have made a number of arrests that have seen the confiscation of chainsaws and illegally-cut timber.

## 2.3 Current threats

### 2.3.1 Protected area forests

Although in theory the Lambusango and Kakenauwe forests have protection under national legislation and have a small ranger team to control infringements, in practice there are considerable threats to their integrity. Selective logging is occurring throughout the edges of the reserve with four species of first-class timber trees<sup>9</sup> felled a few kilometres into the reserve. Of these Wola is the most sought after and transects in the Kakenauwe forest have shown this species to now be virtually absent. In 2000 two chain saw operators from Kakenauwe village (including the Village Headman) were arrested and prosecuted for illegal logging. Before the start of the 2003 Operation Wallacea season the ranger based at Labundo had confiscated 2 chainsaws being utilised inside the Lambusango reserve. These chainsaws have been handed to the police who are now proceeding with prosecutions. Such successes are relatively few, however, and overall the extent of the illegal activity has been too great for the small ranger team to control. None of the rangers on site has the power of arrest, and catching illegal loggers means either going back into the forest with a police presence after making initial observations or ensuring back up from the police can be summoned by radio. Large areas of the reserve are outside the daily walking range of rangers who are based at the northern end of the reserve in the village of Labundo. The rangers lack confidence in their abilities in the forest and have to be accompanied by local guides whenever they venture in. As a consequence, motivation amongst the team is low with a very small percentage of their time spent patrolling in the forest. Because of these issues, illegal logging is carried out fairly openly and Operation Wallacea teams have recorded numerous incidents of local people carrying cut wood out from the protected areas. A survey of cut trees in Kakenauwe by Operation Wallacea showed that 80% of felled trees were first-class species as against 30% amongst natural tree fall. Forest structure transect surveys completed by Operation Wallacea 2km into the Lambusango reserve have shown that much of the first-class timber is still present although cutting of Wola has begun even here.

There are large teams of rattan collectors operating throughout the reserves and rattan trails are apparent across the whole of the Lambusango reserve. Surveys of remaining rattan stocks have shown that substantial areas in the Lambusango reserve have been harvested. Interview data from villages around the edge of the Lambusango reserve in 2003 have estimated that 1,500 tonnes per year are being taken from within the reserve boundaries with a net value to the rattan collectors of \$130,000 per annum.

Hunting for anoa is widespread in the protected forests. The hunting is usually carried out by young men and the appeal of the hunt is improved by the opportunity to demonstrate bravery by capturing and killing an animal feared by many. In addition money is raised from selling the meat to local communities to provide variety in the diet. The communities involved in the hunting though are not especially poor or protein-deficient. Anoa are now thought to be extinct in the smaller Kakenauwe part of the forests although they occurred there until four years ago. Operation Wallacea teams from the Lambusango forest removed five anoa traps in 2002, whilst in 2003, a total of 9 traps were removed from the Lambusango forest and a recently dead anoa was seen in one of the traps. In 2002 an anoa trapper presented the head of a recently killed anoa to the Operation Wallacea teams in Labundo in the mistaken belief that he would be paid. He claimed to be taking around 4 anoa a month from the Lambusango reserve. No prosecutions ensued.

### 2.3.2 District-controlled forests

The PA forests will survive as useful conservation units only if the surrounding District-controlled forests (Protection Forests, Limited Production Forests, and standard Production Forests) can be managed effectively. However, despite a national moratorium on converting District-managed

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<sup>9</sup> Wola *Vitex cofassus*, Cendana *Pterocarpus indicus*, Suleve *Madhuca betis*, and Bayem *Intsiapalembanica*

forests to other uses (e.g. plantations, clear felling for agriculture), these forests are under considerable threat from land clearances. Forest clearances from the surrounding road into the Production and Limited Production Forests have been extensive. New transmigrant and refugee settlements have cleared significant areas of the forests currently designated as Production or Limited Production Forests and two new transmigrant camps for refugees are scheduled to be established in these forests in 2004<sup>10</sup>

In addition to these forest clearances, there is the problem of widespread illegal logging of first-class timbers in the District forests, and this activity is now spreading into the PA forests. Much of this activity is being driven by wealthy individuals from Bau-Bau (the Buton capital) who have supplied chainsaws to local villagers and pay them a small sum to illegally cut timber. In addition to the damage caused to the forests by this activity, the tax revenues from such activities are being lost to the Forestry Department.

#### **2.4 Other initiatives in the project area**

In addition to those activities outlined by this proposal, there also exist a large number of development initiatives being undertaken within the proposed project area. Whilst government development initiatives identified within the project area were designed outside the context of this current proposal, several of these programs are seen as having direct relevance to this current project and as such are likely to directly contribute to conservation outcomes being sought. Specifically, KSDA and District-level government, the two government agencies with which this proposal seeks to collaborate, have both announced projects that are seen as closely complementing activities described in this proposal. Furthermore, the ongoing commitment by government as well as that of Operation Wallacea is seen as critical to post-project sustainability and the continuation of activities described by this proposal beyond the four years of GEF funding being sought.<sup>11</sup> The provincial government conservation agency, KSDA, has a small annual budget that enables park rangers to undertake limited patrol activities from a field station located in the north of Lambusango Wildlife Reserve. In 2004, however, KSDA will have access to considerably larger source of funds that will serve to further support activities outlined by this current proposal. Such additional funds are contingent upon this current proposal being successful. In 2003, KSDA had a routine budget allocation of approximately \$90,000 for the existing reserve system, however, in 2004 this figure will increase to over \$300,000 in order to facilitate activities planned to be undertaken in conjunction with this current proposal. These funds will be used for a range of different activities including the construction of a second field station in the south of the reserve, provision of additional rangers to the reserve and to provide increased funds with which to undertake patrols. This increased level of funding will also enable other activities such as community outreach and awareness raising programs and the development of a formal management plan necessary for the reserves effective long-term management.

In addition to those activities being undertaken by KSDA within Lambusango and Kakenauwe conservation reserves, the provincial and District government forestry offices also have activities proposed for production forest areas lying adjacent to these conservation areas. Such funding comes from an array of different sources that include national, provincial as well as District government sources.<sup>12</sup> The Provincial Forestry Office, for example, has approved funds in 2004 for the establishment of teak plantations, the improved enforcement of production forest areas and for yet to be determined community development activities for those communities living in association with Production Forest areas. In addition, the Provincial Environmental Assessment Agency (Bapedalda) will undertake a forest and soil conservation project whilst also commencing

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<sup>10</sup> It is too late in the planning process for the decision on these two new transmigrant camps to be reversed so they will be incorporated into the LFMA management plan and treated as for any of the existing villages. Plans for any further transmigrant camps impinging on the LFMA will be strongly opposed.

<sup>11</sup> GEF funding is requested for a period of four years after which time project activities will be sustained through Government funding sources and those of Operation Wallacea.

<sup>12</sup> These are highlighted within the Incremental Cost Table under Funding Source.

a study aimed at understanding how communities can become more closely aligned in resource management decision-making and practice. The Provincial Planning Agency (Bapeda) will in 2004 commence an inventory of natural resources, including forest resources, for the entire Southeast Sulawesi province. The Forestry Department will continue to support routine enforcement and surveillance activities throughout the duration of this proposed project. There are currently four forestry ranger stations located within the project study area (one for each Sub-District) with a total of nine rangers (not including administrative staff) who operate from these stations. The District Forestry Office therefore has allocated basic funds to ensure the effective operation of each of these field offices including patrol activities for the duration of the project. Finally, commencing in 2004 and in support of this current proposal, a large source of funds will be made available from the national Reforestation Fund primarily to enable the establishment of timber plantations on state-owned land that has already been cleared and settled by local farming communities.<sup>13</sup> Some \$675,000 will be used to ensure an intensive reforestation program is carried out in association with communities included by this project using both teak and local forest species for long term timber production. The allocation of such a significant source of funds is seen to closely complement the underlying objectives of this current proposal through intensifying productivity of land surrounding existing forest areas and in particular increasing production of timber from areas located outside natural forests.<sup>14</sup>

In addition to government funds allocated for activities that are seen to support the conservation goals of this project, there are also numerous government projects planned in relation to more general development programs for those communities found within the project study area. In particular, government funds will be used in the development of recently established Ambonese transmigration settlements, often located adjacent to state forest lands and as such are seen to represent a high level of threat to forests being addressed by this project. The building of surfaced roads, adequate water supply, toilet facilities as well as infrastructure projects including schools, meeting halls and so forth are all proposed for transmigrant settlements in the near future. In addition, there is also an array of different agricultural development projects and poverty alleviation programs that are proposed for communities that also include those found within the immediate study area of this project. Success of the project could result in inward migration to the area. However, once the scheme is established all the production forest would have been allocated to the various villages to manage, which would preclude new communities being established around the edge of the forest. Growth of existing villages though, is a potential side effect of the proposal if the economic benefits of managing the forest became apparent, although whether or not to allow the villages to expand would be a matter for each of the Head Men.

Amongst external agencies there is one project already in existence (UNDP Community Recovery Program) and three new proposed projects (UNDP de-centralized governance, UNDP Conflict Unit and the CIDA Environmental Governance and Sustainable Livelihood Program) with which this project should establish links.

Finally, the international development agency Oxfam has worked in the project study area since 2001 and has established a local network of NGOs as well as facilitating the implementation of several poverty alleviation and environmental projects amongst local communities. The Oxfam project has now finished but they have left a legacy of local NGOs that have successfully completed project activities and will be involved in project implementation including community organisation and awareness-raising activities being proposed by this project.<sup>15</sup>

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<sup>13</sup> The Reforestation Fund is distributed nationally from taxes collected on all timber harvested from state land.

<sup>14</sup> Throughout the Buton District, teak is grown and has tremendous potential as a valuable timber commodity locally.

<sup>15</sup> Yayasan Buana Hijau, one of the representatives on the Committee, is one such NGO that has worked with Oxfam in recent years.



## 2.5 Legislative context

The enabling legal context for this project is described in more detail in Appendix 7. According to ministerial decision (Ministerial Decision 677/Kpts-II/1998) communities can gain the right to manage areas of forest based on community practices and traditional law. The Forestry Ministry under such a law would permit community groups to form co-operatives to obtain 35 year 'community forestry leases' over production and protection forests as well as in specific conservation zones. The decree allows communities to utilize traditional forest management systems as long as they do not conflict with 'forest sustainability'. Moving beyond an earlier community forestry decree, the new initiative also allows for community rights to harvest timber.

In terms of developing the notion of 'Community Forestry' perhaps the most significant of all recent legislative changes is Ministerial Decision 31 (2001), which sets out the basis for community involvement in forestry management. The main elements of this Ministerial Decision are:

- Community Forestry is a forest management system able to be applied to State-owned forests that seeks to optimise benefits to local communities through the exploitation of both timber and non-timber forest products;
- Permission for the establishment of Community Forests is given by the Bupati (District Head of Government)
- Forest areas that can be designated as Community Forests include areas currently designated as Production Forest and Protected Forest;
- Community preparation should be facilitated by the formation of a Forum
- Community forestry areas should be divided according to Exploitation Zones and Protection Zones.

The Bupati, with the consent of the Director General of Conservation, therefore has the authority to create the new Lambusango Forum with management authority over all the forests. The Forum will be a management body with decision making powers and will be responsible for the design, monitoring and evaluation of collaborative forest management strategies that form the basis of this proposal. It will rely heavily on feedback obtained from local communities participating in the project and as such be responsible for finding clear solutions to forest management that seek to benefit both regional level government and the communities that surround them. Given the central role of the Forum in this project it will require a clear mandate for decision making in relation to forest management issues and this will be afforded by both the regional level government of Buton (Bupati) in relation to production forest areas and the Minister of Forestry in relation to protected forest areas.

## 2.6 Social context

The farming communities of central Buton comprise a complex array of different ethnic groups. Such ethnic groups include peoples of Butonese origin, long-term transmigrant communities from Java and Bali and of particular importance in the context of this proposal recently arrived Ambonese refugees. Butonese communities have historically relied upon 'subsistence' level agriculture that includes growing cassava and corn and this is also reflected in a high level of dependency upon forest resources that are seen as a ready source of cash income able to be generated through the harvesting of timber, rattan and other forest products.<sup>16</sup> Recently arrived Ambonese refugees are also highly dependent upon forest land primarily due to the need to gain access to land for agricultural purposes. Government allocation of land to Ambonese refugees has in some cases been seen as insufficient or instead has been located on steep sided slopes that are unlikely to remain viable.<sup>17</sup> There are currently eight Ambonese communities that have recently been established on the edge of or inside the LFMA and there currently exist plans for

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<sup>16</sup> The obvious exception here is the growing of cashews, which the Butonese have long grown as a staple cash crop. It is however characterised by a short and somewhat unreliable fruiting season.

<sup>17</sup> At the Ambonese refugee site of Walawo many families did not receive any agricultural land and this has led to further illegal forest clearing.

this number to be expanded further in 2004.<sup>18</sup> In other cases Ambonese refugees have simply entered forest areas illegally and begun to clear them in order to gain access to land resources.<sup>19</sup> Efforts to work at community level therefore will not only need to focus on established Butonese communities that have long lived in association with local forests but also seek to actively involve marginalized Ambonese settlements.<sup>20</sup> In contrast dependency upon forest resources by those people of Javanese and Balinese origin is seen to be minimal and as such they are not considered to represent a major threat to forests addressed by this project.<sup>21</sup>

The project proposes to work with 24 communities spread across four sub-Districts within Kabupaten Buton, Southeast Sulawesi (Table 1). *Table 1: List of those villages (area in km<sup>2</sup>) by Sub-District that this project will seek to involve directly in the Lambusango Forest Management Area project.*

Kapontori	Lasalimu	Lasalimu South.	Pasar Wajo
<b>Barangka (15.3)</b>	<b>Wasuamba (28.0)</b>	Matanauwe (12.5)*	<b>Wakaokili (20.6)*</b>
Wakalambe (11.0)	Bonelalo (61.1)	Sampuabalo (22.5)	Warinta (124)
Lambusango (21.1)	Lasembang (21.0)	<b>Kumbewaha (81.9)</b>	Lapodi (136.1)
Watumotobe (4.9)	<b>Kamaru (51.2)</b>	Lasalimu (21.5)*	Winning (5.2)
Waondowolio (22.6)*	Suandala (42.1)	<b>SP# 6/7/8 (6.5)</b>	<b>Wolowa (24.0)*</b>
Wakangka (10.0)*	<b>Lawe (91.2)*</b>		Wolowa Baru (15.1)
	Waoleona (15.6)*		

*Those villages marked (\*) were those involved in a detailed community consultation process that sought to determine current levels of forest dependency by local communities and attitudes towards current forest management policies. Those villages marked in **bold** are those wheret Ambonese refugees have been settled*

Criteria used to select those villages proposed for inclusion by this project include:

- Sharing an existing forest boundary with the LFMA;
- Members of the community known to depend upon forest resources found within the LFMA
- There is a significant threat posed by members of the community towards the conservation and sustainable management of resources found within the LFMA.

Preliminary consultation undertaken by Operation Wallacea in association with communities included by the current proposal suggests these communities are overwhelmingly in favour of their direct involvement in forest management decision making and believe that this would assist in addressing current problems associated with illegal and indiscriminate forest use activities and low levels of accountability by state officials currently responsible for regulating forest use. There remains a widespread belief amongst local communities that the benefits of forest exploitation currently belong to those who are already closely aligned to regional level government (politically influential local investors) or who are willing to flaunt current forest regulations and operate illegally within state-owned forests. Whilst both groups depend upon local communities to collect and harvest forest resources, most financial benefits from these activities are not retained locally and tend instead to accumulate within administrative centres distant to these forests . By enabling a vested interest by local communities in surrounding forest areas, this project hopes to support sustainable forest management strategies developed collaboratively and in so doing improve the conservation status of adjoining protected forest areas.

<sup>18</sup> As cited in the Threats section this number is expected to grow by a further two settlements in 2004 at Barangka (Kapantori) and Wasuamba (Lasalimu). Many of these communities have been located within Production Forest areas.

<sup>19</sup> This has taken place at at least one site in Lasalimu Sub-District

<sup>20</sup> This may well turn out to be one of the most challenging aspects of this proposed program. As will be described later the project has sought to allocate one Facilitator specifically dealing with Ambonese communities as well as allocate one position on the forest management Forum to an Ambonese refugee leader.

<sup>21</sup> These communities were established during the 1980s and early 1990's and are most common within ub-District Lasalimu South and to a lesser extent in Kapantori. Such transmigrants not only have a well-developed agricultural capacity they also received significant areas of arable land on which to farm.

# The code name of a recent transmigration settlement

It is envisaged that by seeking to incorporate each of the above-mentioned villages in a new system of community-based forest management that over 90% of the current Production Forest area within the LFMA will be brought under direct control of local communities. Such a system will not only seek to empower local peoples in the design and implementation of sustainable forest management strategies that brings them direct financial benefits but will also importantly stabilise forest boundaries thereby improving the protection of forests of high conservation value.

Finally, a small group of indigenous peoples known as the Chia-Chia are also found within the parts of Buton island. This economically- and politically-marginalized group of peoples, however, are not known to be directly dependent upon forest resources being addressed by this project and as such these peoples are not discussed in this proposal.

### **3. EXPECTED PROJECT OUTCOMES AND OUTPUTS**

Six major outcomes are expected from the project:

- **Local communities vested financial interest in the long term survival of the Lambusango forests ensured**
- **Effective enforcement and high levels of compliance with agreed management regulations for the Lambusango forests ensured**
- **Public awareness amongst communities on Buton Island of the biological importance of the Lambusango forests and their management regulations increased**
- **Capacity amongst Indonesian managers and scientists improved to ensure similar schemes could be introduced into other districts**
- **Abundance of key biodiversity species and groups increases through success of the adaptively-managed program**
- **The financial advantages for local communities and government of such schemes are demonstrated and that information obtained from the Lambusango project is used to persuade other Districts to adopt similar management strategies for their locally- and nationally- controlled forests**

The delivery of these outcomes is to be achieved via a series of measurable outputs clustered into 6 components. The main approaches adopted to achieve each of the outputs is summarised for each component below whilst a more detailed description of activities is given in Section 4. In addition, a start up component will establish the key structures and staffing for implementation of project activities. Summary budgets for each component and incremental costs are included under sections 7 and 10.

#### **Component A. Local Community Involvement**

This component comprises achievement of 4 complementary outputs:

- A1. The formation of a forest management Forum bringing together the management of national and District controlled forests, as an effective decision-making management body*
- A2. Introduction of management agreements for all the villages surrounding the forest management area to sustainably exploit the production forest areas in exchange for full compliance by all community members in a cessation of illegal logging and hunting in the non production forest areas*
- A3. Development of a rattan licensing system that allows management measures to be implemented to ensure the rattan is collected sustainably, which would be in the long-term financial interests of all the surrounding communities*
- A4. Preservation of the forest boundaries at the point at which the project proposals were announced.*

The main difficulty faced by the conservation forests is from illegal logging and hunting by surrounding communities. One of the key strategies of this proposal is to create financial incentives for these communities such that they ensure that their own community members do not participate in such activities. This will be achieved by granting exploitation rights on 35-year leases to areas of production forest adjacent to the villages within the Lambusango Forest Management Area on a contractual basis. One of the key conditions of the contract will be that the village ensure they eliminate illegal logging or hunting by their community members in the conservation forests.

In order to achieve this strategy, which brings together management of the conservation forests and the surrounding limited production and production forests into a single management area known as the Lambusango Forest Management Area (LFMA), a new management vehicle will be formed. The Bupati, relevant government departments, local academics and NGOs have proposed an organisation known as *Forum Hutan Kemasyarakatan Lambusango* (FHKL) which will comprise 12 government and 12 non-government representatives (Table 2). Each of the representatives will be nominated by the relevant organisation and appointed by the Bupati for an initial 3-year term. The villages in each sub-District will elect one representative to also sit on the Forum for a 3 year term. Operating rules for the Forum will be established by the Forum itself at the first meetings to agree voting procedures, quora, replacement of members not attending the regular monthly meetings, re-appointment of Forum members on a rotational basis to ensure retention of experience and knowledge of the workings of the Forum, appeals procedure for communities objecting to decisions made by the Forum etc.

Table 2: Members of Forum Hutan Kemasyarakatan Lambusango

Government	Non-government
Provincial Conservation Agency (KSDA)	Unidayan
District Forest Service ( <i>Dinas Kehutanan</i> )	Universitas Hasanuddin
District Manpower and Transmigration Service ( <i>Dinas Depnakertrans</i> )	Yayasan Buana Hijau
District Planning Agency ( <i>Bappeda</i> )	Yayasan Bajo Mattila
District Tourism Service ( <i>Dinas Pariwisata</i> )	Tomas Buton
District Police Service ( <i>Polres Reserse</i> )	Tomas Exodus Ambon
District Armed Forces Office (ABRI 725)	Press representative
District Parliament Commission B ( <i>DPRD II Komisis B</i> )	Operation Wallacea
Sub-District (Camat) Kapantori	Village rep from Kapantori subdistrict
Sub-District (Camat) Lasalimu	Village rep from Lasalimu subdistrict
Sub-District (Camat) Lasalimu South	Village rep from Lasalimu south subdistrict
Sub-District (Camat) Pasar Wajo	Village rep from Pasar Wajo subdistrict

The role of this Forum is seen as critical to ensuring there is both a high level of accountability over management of the LFMA and that individuals with a broad range of backgrounds are brought together each able to make significant contributions to project design. The Forum will report to the Bupati, House of Representatives Leader (Ketua DPR), Head of Police and Dandim 1403. The Forum will meet monthly and will be responsible for the development of forest

management policy within the Lambusango Forest Management Area in consultation with relevant government institutions and local communities. This Forum would need to develop into an effective management organisation and a full-time secretary to service the Forum with papers for each item and record all decisions for implementation would be required.

The Forum would have a small executive comprising a Project Manager, Deputy Project Manager and a team of 5 Community Facilitators. Four of the community facilitators would be based one in each of the four Sub-Districts whilst the fifth would be an Ambonese and would be responsible for the Ambonese transmigrant settlements. This team be involved in helping the villages in each Sub-District develop proposed management plans for the production forests adjacent to the villages.

The Forum would have a mandate to establish a draft LFMA plan that will propose village forest boundaries, those activities that may be allowable within forest areas accessible to communities and core forest areas whose principle purpose is biodiversity conservation. This draft plan will require Forum members to undertake a preliminary consultation process with participating communities that will be based upon a series of village level meetings. Agreement of such a plan will provide the framework around which the project will then start to work with local communities in establishing specific forest management plans for designated forest areas. Once the draft LFMA plan has been written there will be a period of further community consultation that will enable final input and debate into the proposed plans that will, in its final form, be written into law (PERDA) by the House of Representatives for Kabupaten Buton. It is estimated that such a process is likely to take a period of up to four months.

Detailed community knowledge accumulated through such processes as semi-structured interviews, PRA and resource use mapping exercises will be carried out during a second stage of community consultation following formal agreement for the LFMA concept. This will be undertaken by local Butonese staff to be employed for the duration of the project and who have received training in such techniques. A vibrant and active NGO community based in the regional capital of Bau-Bau will ensure that appropriate field staff can be selected for this project. Such information along with technical input from a consultant forestry specialist will be used to assist communities in developing management plans for local forests that fall within the guidelines offered by the LFMA. Both formal government leaders as well as traditional and spiritual leaders that still play an important role within present day Butonese society are likely to be instrumental in seeking consensus amongst community members for the adoption of specific forest management practices.

The benefits to villages in participating in the scheme is that they would gain the rights to the sale of timber harvested in a sustainable manner from the forests as well as the non-timber extractive benefits from the production forests (eg rattan, herbs, honey). However, in exchange for being granted these rights the village would have to ensure that the management plan for the production forests adjacent to their village including aspects such as:

- agreement on the boundaries with adjacent villages,
- commitment to mark the boundaries of the village area of production forest either by planting or with paint marking,
- commitment that all further conversion of production forest to agricultural land would be halted within their village,
- agreement that all the village members would halt any illegal logging and hunting in adjacent conservation areas,
- appointment of a Forest Guardian to help monitor implementation of the village forest management plan. Funding for this post would initially come from grant aid but the village would be committed to phasing in funding for the post from the exploitation income,

- ensuring that the rate of exploitation in the village managed forest was designed and implemented in a manner such that quantities taken per year did not exceed total wood production per annum for the managed area,
- agreement that a tree nursery scheme will be developed and a re-forestation program for cleared areas of designated production forest implemented over following years,
- agreement that all timber and non timber income obtained from the village managed forest was declared in full to the government and all taxes paid

Villages that signed up to the scheme could then market the sustainable quantities of timber and other products from their managed areas in conjunction with the Forestry department such that all relevant taxes were paid. At present only a few individuals from each village are involved in the illegal logging and hunting activities so the legitimate exploitation of the surrounding forests would result in a significantly greater benefit to the communities than currently enjoyed. In addition they would also receive technical assistance in improving timber production on private and state owned land holdings through the development of agro-forestry nurseries. This would involve the development of a village-based nursery for all participating villages and the donation of timber or fruit trees for planting to all farmers in the village. This is considered particularly important to facilitate dependency away from timber taken from natural forest areas and also to ensure that every family in villages that have agreed contracts under the conservation management scheme, see a tangible benefit for their participation.

The village contracts would be based on existing legislation (see Appendix 7) and would grant the villages 35 year leases for management of the forest areas within their plan area. The village contracts will be signed off by the District Head of Forestry after approval by the Forum within their agreed procedures (see above) including rights of appeal by the communities if any proposed contracts are refused by the Forum.

Villages breaking from the terms of their contractual agreement may at the discretion of the Forum have their participation benefits suspended for a 12-month period if the scale of the infringements warranted such action. This ultimate sanction would be employed if in the view of the Forum the village were taking insufficient action to control any transgressors from within their community. This would put considerable peer-group pressure on any community members trying to continue with illegal extraction or hunting from the non-village managed forests.

The Limited Production Forest and District-level conservation forests would not be included in the village management scheme. In these forests and the conservation forests of Kakenauwe and Lambusango only rattan extraction would be permitted. The KSDA/Forestry team would issue rattan permits to individual rattan collectors working in the LFMA. Part of the condition of the rattan licence would be that all rattan collected would be reported to the KSDA/Forestry team and taxes paid. Each KSDA/Forestry team would allow an agreed tonnage of rattan to be collected from their sector each season and after that quota was achieved the collection would be closed down. Any rattan collector caught collecting after the quota had been achieved or caught with undeclared rattan would lose their licence to collect from within the LFMA for a 12-month period.

Thus although the principal of rattan collection from within the conservation forests will have been conceded (in practice there is already widespread violation of this ruling), this concession together with the tying of villages to financially-beneficial contracts for the exploitation of the production forest areas, which may be suspended if their community members are involved in hunting or logging in the conservation forests, will result in much better protection. In addition the substantial stands of Limited Production Forest will be brought into effectively the same management strategy as for the conservation forests effectively extending the protected forests. If there were indigenous communities living in these forest areas that had traditionally hunted and gathered wood and the law had been changed such that they had been prevented from carrying out their traditional livelihood legitimately, then the proposed tightening up on illegal activities would require compensation for these communities. However, that is not the case in the LFMA where all the forest edge communities are either farming based or recent trans-migrant

communities. There should therefore be no requirement for any of the communities affected by the tightening up of enforcement to be compensated.

One of the problems when introducing a scheme such as this is that if it is thought that a new line of forest clearance is going to be enforced as part of the village contracts, this might spark a wave of land grabs before the new scheme is introduced. It is therefore proposed to make it a condition of participation in the scheme that the line of clearance of production forest in any participating village must have advanced no further than that identified on the 2002 satellite analysis of forest cover (see Component E).

### **Component B Forest Management**

The second component of the strategy is to strengthen the effectiveness of the management of the non-production forests within the Lambusango Forest Management Area. This will comprise three complementary outputs:

*B1. Development and implementation of a management plan for the whole of the Lambusango forest management area so that the management regulations are known and accepted by all the surrounding communities,*

*B2. Strengthening of the KSDA/Forestry team in patrolling and enforcing against illegal logging and hunting in the non-production forest areas,*

*B3. Implementation of a chain saw amnesty and buy back scheme to ensure that the project has an immediate impact on illegal logging activity.*

A concise management plan for the whole Lambusango Forest Management Area comprising the management strategies for each of the village managed areas of production forest and the management approach to be used for the non-production forest will be produced for agreement after widespread consultation amongst the villages by the Forum and relevant government departments. The agreed management plan will be distributed to all villages participating in the Lambusango Forest Management Project to ensure a high level of awareness about the management regulations.

Much of the control of villagers illegally entering the non-timber production areas of the forest will be carried out at community level from peer group pressure and by the work of the Forest Guardian appointed by the village. This individual has to be someone who has wide respect in the community and who is unafraid to tackle any transgressors of agreed regulations. The Forest Guardians would report both to the Head of the village and to the joint KSDA/Forestry Ranger Team.

Although with selection of the right individuals as Forest Guardians, community compliance should be high, there will also be a need to have an independent, well-organised ranger force to identify outside transgressors and organise prosecutions. The KSDA team is currently responsible for the PA forests whilst the PHPA ranger team is responsible for patrolling the District managed watershed protection and production and limited production forests. It is proposed to produce a single combined KSDA/PHPA ranger team of 12 and to strengthen the capacity of this team to undertake patrolling in all the non-timber production areas of the LFMA. KSDA/PHPA are intending to increase their ranger numbers to 12. Support however, would be required in helping develop existing offices into suitable field bases for the enforcement teams to be based, so that there is a good spread of staff around the LFMA. The support required would involve the equipping of basic field offices and provision of radio communication equipment for the rangers based at these stations.

A second problem that needs addressing is for the appointed rangers to receive training such that they have the power of arrest. At present the rangers need the presence of police on site to make an arrest, which makes enforcement difficult without permanent mixed teams of rangers and police patrolling. This is an element of the program that KSDA has agreed to fund together

with training for the whole ranger team on how to record evidence and prepare papers for prosecution.

The current problem of a lack of motivation by the rangers will be partly addressed by the greater value their work will be perceived as having under the new management regime. However, strong leadership will also be required from the Senior Ranger who will be based at Labundo. Mentoring assistance will be given to this post holder in the early stages of the implementation of the scheme to ensure monitoring regimes are fully established. An initial training course with the KSDA/Forestry team will involve a weeklong jungle survival course that will not only help build their confidence in operating in a forest environment but also help to bond the team together. Similar courses will be run for groups of newly appointed Forest Guardians.

Each pair of rangers would have a segment of the reserve that they were required to patrol 3 times a week and to gather evidence for prosecutions on any observations of illegal activities such as hunting for anoa or logging. Since limited rattan collection would be allowed in all the non-timber production forest, a further role of the patrols would be to check the licences of all rattan collectors. A technical expert on the exploitation of rattan will be contracted to define the annual quotas of rattan that could be extracted from each patrol sector. It is proposed that although initially government funding would be required to assist with the costs of running the KSDA/Forestry ranger team for the first year, from this point onwards part of the tax funds raised from legal extraction of rattan from the non timber extraction parts of the LFMA would be used to fund the enforcement costs and make it self sustaining.

To tackle the immediate problem of illegal chain saws operating in the forests, it is proposed to offer an amnesty where those chain saws handed in would be purchased at second hand prices. An effective amnesty should have an immediate impact on the loss of timber from the LFMA. It is currently illegal to carry a chain saw in any forest PA but existing intelligence from the work of the Operation Wallacea survey teams can identify a number of individuals within the LFMA who are known to be involved in selective logging of first class timbers using chain saws. However, to be run properly the owners and operators of all the chain saws being used illegally in the LFMA need to be identified and listed and this will be the first role for the facilitators after their appointment. Each of the owners will then be approached and informed that there will be a clamp down and confiscation of chain saws from an agreed date, but that if they hand them in during the amnesty then they can receive the second hand value of the chain saw. Those chain saws handed in during the amnesty<sup>22</sup> would be burnt and destroyed at a public ceremony in Bau Bau with national and international media invited to witness the destruction<sup>23</sup>. The amnesty will be followed by regular high profile sweeps of the PA forests for anyone carrying a chain saw.

### **Component C Public Awareness**

This component comprises two complementary outputs

- C1. Modification of an existing building into a field centre from which training courses can be run*
- C2. Participation by 1000 people from communities on Buton on training courses to enhance their knowledge of the biological importance of the Lambusango forest and the management regulations.*

Operation Wallacea surveys have indicated a fairly low level of awareness amongst surrounding communities about the conservation value of the Lambusango forests or about the many endemic Sulawesi species found in the forests. The quickest way to spread knowledge quickly amongst communities is by inviting primary and secondary school groups and scouts and women's groups from villages around the edge of the Lambusango Forest Management Area to join short courses. In addition religious leaders in each village will be asked to promote participation in the courses.

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<sup>22</sup> It is estimated that 50 - 75 chainsaws could be bought back in this way.

<sup>23</sup> Similar to the well-publicised destruction of ivory by the Kenyan authorities to convince the world that strong action was being taken against the ivory trade.



There is an abandoned Dutch house (Wanda Wolio) set on a hilltop close to the Labundo base, which could be developed into accommodation for small groups (<15) to stay. Local staff have developed jungle training courses and a modified version of this course would be run including natural history trips to see easily observed species such as the macaques, tarsiers and some of the bird species. These short field trip stays could include a trek through the Kakenauwe forest grid down to the Labundo Research Centre for presentations about the endemic species found in the forests. More than 1000 people from villages around the edge of the LFMA could be given this forest experience course under this proposal.

#### **Component D Capacity Development**

This component comprises two complementary outputs:

*D1. Grant aid for 24 Indonesian forestry undergraduates to gain field experience in biodiversity and socio-economic assessment of the performance of such management schemes*

*D2. Training of 6 Indonesian PhD students to complete the main aspects of the biological monitoring program so that they could develop and implement similar monitoring schemes in other districts*

There are very few opportunities for Indonesian biology, forestry, environmental science or geography undergraduates to participate in field research. Without such experience it is difficult for these graduates to have a practical basis for applying their knowledge when appointed to various management posts. The Operation Wallacea multi-disciplinary biological and social science survey teams, which operate in the July to September period each year, provide an ideal opportunity for Indonesian undergraduates to gain practical experience. A competitive grant available to 24 Indonesian university students over the 3 years of the project to cover the costs of their participation in the surveys for a 10 week period would give valuable experience of working with a range of leading biologists and social scientists to a reasonable cohort of undergraduates. Over the years this would help build capacity in biodiversity protection in the various government departments in which the students eventually worked. It would also mean that there would be key individuals around the country who had the basic knowledge and field skills to help design similar District based management schemes and to develop biodiversity and social science monitoring programs.

Indonesian doctoral students will carry out the program for biodiversity and population monitoring in the LFMA (see component E). Completion of the monitoring program will therefore result in six PhD level Indonesian biologists graduating from completion of studies with a very strong field based component at the end of the three-year program and with skills that can be used to develop similar program in other districts.

#### **Component E Biodiversity and Population Level of Key Species Monitoring**

This component consist of a series of performance objectives which are listed in Appendix 4 and which can be summarised as:

*E1. Development and implementation of a monitoring strategy with known levels of precision in detecting biodiversity changes in the indicator groups selected.*

*E2. Development and implementation of a monitoring strategy with known levels of precision in detecting population changes of key or threatened species.*

*E3. Development and implementation of a monitoring strategy with known levels of precision to assess socio-economic changes amongst the surrounding communities that are attributable to the project.*

*E4. Development of an adaptive management strategy to ensure the results of the monitoring programs is presented in a form that will enable the management Forum to assess the performance of their management strategy.*

Appendix 4 gives details of the proposed monitoring program to assess performance against the management objectives. Many of the costs can be incorporated into the existing Operation

Wallacea social science and biological research program even from year 1. However, in order to achieve the geographical spread of some of the monitoring programs, which are checking for changes in biodiversity indicators, or populations of key species across the whole of the LFMA, additional sampling nodes will need to be added. It is proposed that six Indonesian doctoral students are employed to complete some of the aspects of the program (forest structure, birds and butterflies, forest herpetofauna, insectivorous bats, population levels of anoa and Sulawesi wild pig, population levels of tarsiers and macaques) over a field season extending from April to September each year. Nine sampling nodes spread across the Limited Production and conservation forests within the LFMA would be sampled with a week being spent at each node twice over each annual sampling period. The Labundo Research Centre would be operational from April to September each year to support the field survey teams. From year 4 onwards the full costs of this program would be incorporated into the Operation Wallacea research tourism program. The Project Manager would be responsible for ensuring that the data from the monitoring program were presented to the management Forum in a form that would enable the success or failure of their management strategy against the performance objectives listed in Appendix 4, to be assessed.

#### **Component F Promotion of Approach**

The main purpose of the proposal is to use the Lambusango forest management strategy as a 'flagship' project for forest management schemes throughout Indonesia. This component comprises two main outputs:

*F1. Presentation of the results of the Lambusango project to key government Ministers in Jakarta and obtaining their support for introducing similar schemes elsewhere in Indonesia*  
*F2. Preparation and distribution to each Indonesian District of a report demonstrating the financial benefits to local communities and government of the Lambusango scheme, the conservation benefits and a step-by-step guide on how similar schemes could be introduced into other Districts without the need for start-up financing.*

Given the urgency of the problem in Indonesia, it is important that significant progress is made in determining the applicability of the Lambusango approach to other forests. By Year 3 of the GEF program there should be substantial amounts of social and biological data to demonstrate the effectiveness of the Lambusango Forest Management Area approach. These data will be used to prepare a report describing the measured financial benefits to local communities, the increased tax revenue achieved by the local government, the impact on forest resources of the scheme against the overall rates of forest change in other parts of SE Sulawesi and the effectiveness in achieving the conservation objectives. The report will initially be sent to key government ministers in Jakarta and presentations arranged to gain their support for implementing the schemes elsewhere. Once that is achieved the report will be amended to include a step by step guide as to how similar schemes could be set up elsewhere in Indonesia without the need for initial financing. A core part of the approach in Lambusango is to demonstrate the financial incentives of such a scheme to local communities and government so that the market drives the establishment of such schemes without the need for start-up funding. This printed report will be distributed to every KSDA and Forestry office in Indonesia and also to the heads of each of the District

## **4. ACTIVITIES AND FINANCIAL INPUTS**

### **4.1 Start up phase (\$13,000)**

It is proposed that the Lead Agency for the project is the Operation Wallacea Trust, a UK registered charity (no 1078362), which has been working in the SE Sulawesi area since 2000. The Trust is entirely independent (no shared Directors or shareholders) of Operation Wallacea which has run the wildlife survey expeditions in South-east Sulawesi since 1995.. The Trust which was originally inspired by Operation Wallacea has been utilising the field facilities of Operation Wallacea to provide cost-effective support for community development projects that

result in enhanced conservation benefits. The Trust is chaired by the Rt. Hon. Kenneth Clarke QC MP who is a previous Chancellor of Exchequer for the UK. The Trust would receive the funds in its Indonesian accounts and would appoint the Project Manager in September 2004. A shortlist for Project Manager will be prepared from applicants who should already be based in Indonesia to avoid the costs of re-location and be fluent in Indonesian. Interviews for the final three applicants for each post will be held in Bau Bau. To be most effective much of the time of this individual will be spent in the field and an Assistant Project Manager would be required who would be based in the main office and would complete much of the liaison work with the Forum members.

#### **4.2 Project management (\$242,450)**

##### *Establishment of project office*

Bau Bau would be the best place for the main project office since it borders the southern edge of the Lambusango Forest Management Area, has good communications by air and ship with main cities and has telephone (including cell phone coverage within the City limits) and email communication. This is where the Project Manager, and the Deputy Project Manager would be based and it would also act as a communication centre, to maintain radio contact with the field staff and Labundo Research Centre, to arrange the supplies for the field based teams and to act as a 24 hour emergency contact. It is proposed that an office adjacent to the existing Operation Wallacea office is rented from a local landlord. Operation Wallacea have offered to allow use of their office radio communication with Labundo and a fax and can organise the logistics for staff travelling to and from the site as well as organise provision of supplies to field teams and emergency evacuation should this be required. The Operation Wallacea office is also manned 24 hours a day which means that the Project will not have to leave one staff member permanently manning the phones for incoming calls. In addition there is considerable accounting experience in the Op Wall office, which could be used to supervise the financial staff hired by the Trust.

##### *Establishment of financial and progress reporting procedures*

A SAGE accounting package would be used to record all transactions relating to the GEF expenditures. Accountancy expertise from the Operation Wallacea team in Bau Bau would be used to establish the accounting systems and monitor expenditures against agreed budgets and the Forum secretariat trained in these procedures to ensure effective financial monitoring and accountability after the GEF element of the project has finished. Two staff from the Trust would be appointed to audit the financial records and the actual progress in achieving the project objectives twice a year and would produce independent reports to the Trustees and GEF in addition to the reports prepared by the Project Manager.

##### *Appointment of key staff and contract expertise*

- Invitations to apply or tender for the key staff positions and contract expertise would be issued in October by the Project Manager. The applications and tenders will be reviewed by the Operation Wallacea Trust and the Project Manager in I and interviews/appointments made in November 2004.

##### *Formation of Forum Hutan Kemasyarakatan Lambusango (FHKL)*

One of the main task of the Project Manager in the first four months of the project is to ensure the Forum is formed via local regulation, the members appointed and the first meetings held to determine the scope of Forum responsibilities and operating procedures. This time scale is feasible because all parties have accepted the principle of the need to share power and everything is ready for the implementation to be effected once the funding is available. Travel and per diem costs will be paid for all members of the Forum who will be required to work for 3 days each month on Forum business. This will consist of at least one day in the field each month and travel expenses with an additional small attendance fee for the non-government members of the Forum. At first these funds will come from the GEF element of the program but by year 3 of the

project the government is scheduled to begin partially supporting the Forum costs for all members and from year 4 onwards they will be responsible for 100% of these costs. The Forum will be the principal management body for the GEF project and this organisation has to evolve into an effective management unit. Much of this evolution will depend on the servicing of the committee with papers for each item and close liaison with the chairman to ensure decisions are taken that can be acted on by the executive. In addition first hand knowledge of the problems in the field by the committee members is essential and their help will be required on occasions in resolving difficult political issues.

***Component A. Local Community Involvement (GEF \$138,200, Operation Wallacea \$80,520, KSDA \$26,731 and Provincial Forestry Office \$84,013***

***Appointment of Community Facilitators***

Once the Forum is formed the posts of Community Facilitators will be advertised. The Project Manager and a subcommittee of the Forum will appoint the Facilitators in October 2004 with one to be based in each of the four Sub-District covered by the Lambusango Forest Management Areas. One Ambonese facilitator will also be appointed to be responsible for all the Ambonese trans-migrant villages. Costs for the appointment, training of the appointees by the Project Manager in the work to be undertaken and relocation (where necessary) of the Facilitators need to be included. Motorbikes for the transportation of the Facilitators need to be provided. Their role in the first year is to ensure the village contracts are developed and for the second year to ensure smooth implementation. After this period they will be moved to help with assessing the feasibility of establishing similar systems in other Districts in SE Sulawesi.

***Provision of assistance in drawing up forest management plans and identifying other financial opportunities***

The Facilitators will spend the first couple of months socialising the concept of the contracts to the villages. The first round of villages to be accepted into the scheme will commence in February 2005 with visits by the contracted agro-forestry expert to all villages wishing to participate in the scheme. The Facilitators will have arranged for meetings and workshops for this period to maximise utilisation of the expertise on site. A participatory development and conflict resolution expert will also be contracted for this period to help villages sort out any issues relating to boundaries. Over the next few months all the villages participating in the scheme should complete their proposed plans and the Project Manager should have organised signing ceremonies with the Forum for all of those who have completed the process. A deadline of May 2005 will be established for villages to submit their first draft management plan so that all applications should have been completed by the end of July 2005. As soon as villages have signed a contract work on developing the village agro-forestry nursery will begin with a villager being appointed to manage the seedlings.

***Establishment of rattan permitting system***

One of the first tasks of the Facilitators is to contact all the existing rattan collectors utilising the forests within the Lambusango Forest Management Area who are operating in their Sub-District to inform them of the need for them to register. A deadline of the end of March 2005 will be given for all collectors to complete registration which will involve completion of a questionnaire and being issued with a laminated card containing their photograph and registration number. A digital camera and laminator would be required and the Project Manager will concentrate on this registration process during the first few months of the project with the KSDA/Forestry teams. A rattan expert will be asked to produce an estimate of the sustainable quantities of rattan that can be collected from each of the forest sectors patrolled by the various KSDA/Forestry teams. Once these estimates are obtained and the rattan permitting system and the system for recording quantities extracted have been established and are functioning properly, then the annual quota system for rattan from each sector can be implemented. Rattan collection up to this quota limit

will be allowed and after that point all further rattan collection will be prohibited until the start of the following season.

***Component B Forest Management (GEF \$ 106,600, Operation Wallacea \$80,520, KSDA \$311,901, and Provincial Forestry Office \$870,503)***

***Development of management plan***

After completion and initial implementation of the village-managed areas of the production forest the Project Manager will present a summary management plan for the whole forest to the Forum. The objective is to finalise the plan and ensure all the policies contained within it are approved and adopted by the Forum by October 2005. This document will then be implemented as the basis for all management decisions by the Forum and will be updated annually.

***Establishment of joint KSDA/PHPA ranger team***

The joint ranger team will be formed in consultation between the Forestry and KSDA departments and additional staff provided by Forestry and KSDA to ensure a full team are budgeted (see section 7). The joint team will report to KSDA, Forestry and the Forum. However, the Forest Guardians appointed as part of the contract conditions for the exploitation of the production forest areas by each of the villages will represent a significant increase in the patrolling effort. It is important that the persons appointed as Forest Guardians are widely respected in the communities and are not afraid to tackle community members not complying with the management conditions. The Facilitators will recommend a shortlist of candidates from each of the 24 villages and interviews held with the Project Manager and Headman of the village to select the most appropriate candidate. The selected Forest Guardians will be issued with a uniform and will complete a 2-week long training course on the procedures to be followed and a week jungle-training course to help bond the team and strengthen their forest skills. A radio connected to the KSDA system will be issued and before each patrolling activity the Forest Guardian must make contact with the KSDA/Forestry team. Payment for the Forest Guardians will come from GEF for the first year, By Year 3 the entire wage costs for the Forest Guardians will come from the income generated by the villages from the contracts.

***Equipping field offices and family re-location costs***

There are existing offices around the edge of the LFMA belonging to KSDA and PHPA that can be used to base the joint ranger team. Each office though needs substantial refurbishment to work as functioning offices and this is proposed to be done jointly from KSDA and GEF funding. Expenditure against this budget and will be targeted at provision of power, computers and re-location grants for the families of the posted rangers,

***Development of mentoring scheme***

The ranger team and the associated Forest Guardians will need to be formed into an effective patrolling force. The Education and Enforcement Officer who will be based in Labundo will provide mentoring input to the Senior Ranger to ensure the patrolling schedules are carried out and all patrol reports produced. The mentor will also be involved in training and supervising the Forest Guardian team and ensuring that monthly reports are produced by each of them. The objective is to form a team that engenders pride from being the most effective patrolling unit within SE Sulawesi and in driving down offences against agreed regulations for the LFMA. This will require both an energetic approach to the work by the field staff and recognition of their efforts within the local communities and more widely through presentations given by the mentor and the Senior Ranger. Without an effective patrolling force the confidence that all communities are being made to conform to the rules will break down. The first line of forest defence is to use peer pressure from amongst villages concerned about losing their exploitation contract if rogue community members continuing transgressing the agreed rules. In these cases the transgressors will be reported to the relevant Village Head for disciplining. However, if this does not work, or if the transgressors are outsiders then the next line of forest defence is to co-ordinate an arrest and prosecution of the individual.

The mentor post will be combined with that of the education work which will take up the other 4 days a week after the initial 10 month period when input will be full time. The use of jungle survival training as a bonding program and skills training for both the KSDA/Forestry and the Forest Guardian teams will be carried out in October and November 2004.

***Component C Public Awareness (GEF \$98,850, Operation Wallacea \$80,520 and KSDA \$150,855)***

*Conversion of Wanda Wolio house to field centre*

The Bupati and local officials have identified an abandoned Dutch built house on the ridge of mountains running through the centre of Buton Island as a potential field study site for schools. The house is set amongst good secondary forest designated as production forest and is within walking distance of the research centre developed at Labundo by Operation Wallacea for KSDA. The Bupati has promised to repair the bridge over the river at the entrance to the site and to prepare a car park. Access to the Centre would be on foot to maintain the feel of living in the forest. The objective is for groups of 15 school children, village women groups, and scouts etc from villages around the LFMA to complete 3-day courses at the centre to gain an understanding of the forest fauna. The courses would include usage of the Kakenauwe study grid established by the Operation Wallacea research scientists to see macaques, tarsiers and endemic bird species as well as overnight stays in the forest camp and training in forest skills such as navigation and survival. In addition there would be a trek to the Labundo Research Centre for PowerPoint presentations about the unique fauna of the forests. The courses should be fun as well as informative and are aimed at rapidly increasing awareness of the value of the forests amongst village communities around the LFMA. The house will need some conversion to make habitable for overnight stays. It is proposed that this work is done in the October to December 2004 period with the Centre opening for courses in March 2005. A site manager and cook from the nearby village will be appointed and water and supplies will be provided by horse and cart. Using this approach will provide an income for local people and avoid the need for expensive water pumping and power facilities to be provided to this remote location.

*Promotion of educational opportunities and booking of courses*

If there is going to be investment in a developing a new training centre it essential that the facilities are fully utilised. In January and February 2005, the Education and Enforcement Officer will visit each of the villages surrounding the LFMA and explain the free 3-day training course opportunities to each school, and women, scout groups and any other groupings where no per diems were required in order for the participants to attend the courses. Bookings for the courses will be taken during these visits.

*Provision of short courses*

It is proposed to run the Centre over a two-year period from March - May inclusive and from September to November, with a total of 36 courses being run each year. This would allow over 1000 people to be trained from villages around the LFMA, which should significantly increase the level of awareness about the conservation value of the forests. The participants will be picked up from their village on the start day of the course and the course will be free for LFMA participant villages. From 2007 the Training Centre would be available for use by the Education department as a Field Centre for schools in the Buton District.

***Component D Capacity Development (GEF \$105,000, Operation Wallacea \$322,080 and KSDA \$346,124)***

*Promotion of field study grant opportunities*

The Project Manager will circulate the forestry and biology departments of local and national universities with the opportunities to receive a grant to work alongside international scientists helping to gather biodiversity data. Applications would be assessed by a small committee comprising the Project Manager and academics from the local university. The first round of applications would be invited in January 2005.. Vetting of applications would be undertaken by

email to avoid expensive travel costs for applicants in distant parts of Indonesia. The grant awarded would cover the travel costs of the students.

*Provision of field study for Indonesian undergraduates*

The groups of Indonesian students chosen would join the biodiversity survey in the June to August survey periods. They would be divided into smaller groups with each group spending two weeks on each of the following: macaque and anoa density estimation, herpetofauna surveys, stream surveys and butterfly monitoring and forest structure surveying. In addition they would spend one week completing the forest acclimatisation course and one week working with the logistics support team helping to prepare the study grids.

*Appointment and registration of Indonesian PhD students*

It is intended that most of the survey work for the biodiversity monitoring is completed by six Indonesian students registered for PhD level studies. Obtaining the right students to take up this opportunity is important and expenses have been included for visits to various leading Indonesian universities by the Project Manager to identify suitable candidates with an initial knowledge of field skills and statistical analysis. Interviews will be held in Java. From 2005 onwards each of the nine sampling nodes will be sampled twice over the April to September period.

**Component E Biodiversity and Population Level of Key Species Monitoring (GEF \$178,900, Operation Wallacea \$966,240 and KSDA \$64,114)**

*Establishment of the Labundo Research Centre*

In order to run the biological and social science monitoring program the Labundo Research Centre will need to be opened each year for the period April to October. However, given the use of the facilities to run the awareness training courses in component C the Centre will need to be opened from March to December inclusive. There will need to be a small support staff and transport for supplying the centre and transporting the survey teams. Each of the PhD survey teams will need a couple of local guides to support their field work and additional support staff to service the field camps. Whilst the Labundo Centre has been mostly equipped by Operation Wallacea who are willing to allow their equipment to be used by the PhD students, some additional items need to be purchased. Each student and their assistant will need a radio linked to the KSDA system, a GPS and a pair of binoculars for all the teams except the herpetofauna, bat and forest structure teams. Dedicated computers for data input would also be required and an SSB for the mobile base camp. An equipment budget for purchase of additional survey equipment (e.g. harp traps, buckets for pit line etc) would also be required.

*Monitoring for objectives 1, 2, and 3*

Operation Wallacea dissertation students will monitor these social science objectives. However, a specialist social scientist is also required to ensure that there are no data gaps, ensure the methodology used to gather data in all the studies is consistent between years and to complete the annual reports on progress against objectives 1 - 3.

*Monitoring for objective 4*

The first task is the classification of the current forest types in the Lambusango Forest Management Area. Completion of this task will also allow identification of the location for the 9 sampling nodes. Satellite imagery will be used to classify forest types using a standard classification technique with ERDAS IMAGINE software and included in a GIS. In October 2004 a botanical team will then ground truth the various forest types in the classified image and identify zones within the forest reserves relating to human disturbance and management. In addition notes will be made on altitude, soils and geology of each of the forest types. This work will require satellite imagery and appointment of a small team to complete the ground truthing of the forest. Updated satellite imagery will need to be purchased each year and whilst the analysis of changes from these images, the forest structure and the rattan exploitation data can be gathered as part of the Operation Wallacea program, a short contract will need to be let for ensuring the data are

gathered in a consistent manner, any information gaps are filled and an annual report on performance against objective 4 is completed.

#### *Monitoring for objectives 5 and 6*

An experienced population ecologist is needed to ensure that the monitoring program for objectives 5 & 6 are properly designed and the PhD students completing many of the aspects of the survey work gather data in a consistent manner. In addition the Population Ecologist will draw together the data from all the various specialists and PhD students and will draft the annual report on performance against objectives 5 & 6. In addition this person would also provide email support for 2 days a week over the October to February period to the PhD students on how to analyse their data. At the start of the survey work it will be necessary to have specialist input to train the PhD students in species identification skills and methodologies for the various study groups.

#### **Component F Promotion of Approach (GEF \$92,000, Operation Wallacea \$80,520 and KSDA \$28,283)**

For the last year of the project the Project Manager will concentrate most of his/her efforts on spreading the message about the financial benefits to local communities and governments of the approach being used in Lambusango as well as the conservation benefits. A report will be printed and distributed to each of the Indonesian Districts and which outlines a step by step approach on how similar schemes can be implemented with no initial funding.

## **5. SUSTAINABILITY AND RISK ASSESSMENT**

The ecological sustainability of the project will be assessed from the performance criteria for management objectives 4 - 6 (see Appendix 4) established for the detailed monitoring program. Given the large financial incentives for contracted villages to control rogue elements in their communities, the increased awareness of the value of the forests and the greatly enhanced patrolling effort, it is considered very likely that the forest management performance indicators at the end of the project will be positive.

Ecological stability however, eventually depends upon financial stability. The main engine of this proposal is the financial benefit villages obtain from co-operating on conservation of the non-production forests. This financial benefit requires no external funding and once established should continue. Operation Wallacea will fund the forest management performance monitoring in full after Year 3 although a substantial element of the program will be funded from year 1. The District government will be due to take over only the Forum management and the education costs. The enhanced revenues to the government from taxing all timber and rattan products leaving the LFMA will more than cover these additional costs. At present most of the timber is being illegally removed and the government is gaining no tax revenues at all from this illegal harvest. In addition if the project is a success and is seen by the rest of Indonesia as a front runner in forest management, then the recognition that Buton District will receive from continuing the project is substantial making it even more likely that the tax funds raised will be re-invested in the continuance of the project.

The key issue is that the financial return both to the local communities and the government of this scheme should be so great that it will continue in the absence of any external support. The reason so much expenditure needs to be concentrated on the Lambusango site in the first place though is so that the methodology for establishing such schemes can be developed and in particular so that the financial and conservation benefits can be quantified in order to encourage other Districts to adopt similar schemes. No funding should be required for other Districts to adopt similar schemes.

Operation Wallacea has the funds to run annual monitoring biodiversity and socio-economic programs in Buton Island from the paying volunteers. However, it does not have the funds



available from these paying volunteers to develop and implement a new management strategy or complete an intensive training program. At the moment the data produced by the survey teams is showing clearly how the current management of the Lambusango forests is failing (eg evidence of increased selective logging, increase in anoa trapping). If the GEF funding is not forthcoming then the annual monitoring program will continue and could provide an interesting academic study of how the current management of Indonesia's forests is failing to protect their conservation value. However a better use of these resources would be to focus this effort on assessing the performance of a new management initiative. Initial funding from GEF is required to implement the new management program but once established the financial incentives from the village contracts will make it self sustaining and the annual monitoring program funded by Operation Wallacea will continue to produce data on the performance of the program.

The main risks to the project are:

*Hunting of the Critically Endangered anoa continues unabated and the species becomes extinct in the Lambusango Forest Management Area.*

This is the likely outcome if a new management structure is not introduced and the main danger is in ensuring an effective system is introduced quickly enough before the hunting reduces the population size too far. Once the village contracts are in position there will be a large financial penalty to communities if they allow their own community members to continue this practice and they lose the forest exploitation contract. The Forest Guardians will be selected on the basis that they are unafraid to tackle even the most hard line transgressors from within their own communities and already have the prior respect of the community. The massively increased patrolling regime from the KSDA/Forestry ranger team should also assist with ensuring that any traps set for the anoa are removed.

*Conversion of forest to agricultural land continues unabated around the edge of the Lambusango Forest Management Area*

The pressure for converting forest to agricultural land is driven by population increase, transmigration and the need for refugee camps. There would be a major financial penalty to villages participating in the scheme in allowing their community members to claim further forest land because the whole village would then lose the valuable forest exploitation contract. Moreover the possibility of last minute land grabs by villages between the time the scheme is announced and implemented has been tackled by the requirement that only those villages that retain the forest line as it was at the end of 2002 will qualify for the financial benefits of the scheme. Government departments involved in transmigration or refugee settlements however, would not be subjected to such financial restraints. However, since all the production forest areas would have been allocated to various villages the addition of a new settlement in any area bordering the LFMA would significantly affect the financial arrangements for the neighbouring villages and would meet with strong objections from them. Promotion of the unique management scheme being trialed in Buton to other areas of Indonesia by Operation Wallacea as part of its' international marketing strategy to recruit fee paying volunteers would enhance the District profile as leaders in environmental management nationally. This would give the Buton government a vested interest in ensuring the success of the project and make it less likely that such settlements would be targeted at the LFMA.

*The Forest Guardian and joint KSDA/Forestry patrolling system is ineffective*

The current patrolling system is particularly ineffective and provides a low baseline against which any changes should be judged. There are some major institutional issues within both Forestry and KSDA at national and District-level that cannot realistically be tackled by a project such as this. The key to making the KSDA/Forestry patrolling system for the LFMA work well is to concentrate effort exclusively on the rangers assigned to this task and from the mentoring approach proposed. Here a highly motivated individual would initially bond the team with an intensive forest survival course and then drive them to meet patrolling and reporting targets. Confidence within the team would be built both by their greater confidence to operate in the forest after completion of the forest survival course and from the promotion of their team as being the

most effective in the District. The Forest Guardians would be selected on the basis of their ability to tackle any member of their own community, removing a common problem encountered at the moment in Indonesia where rangers are worried about reprimanding certain individuals and as a result lose the respect of the majority.

*The staff appointed to the key posts will not have the drive and ambition to ensure the tasks are completed fully.*

This is probably the greatest risk faced by any project since much depends on motivated and skilled individuals in many of the posts implementing the plan in full despite operating difficulties, which will undoubtedly arise. The advantage that Operation Wallacea Trust as the Lead Agency has is that it has been working in the site for a number of years and has considerable experience in selecting appropriate and dynamic individuals for various posts. However, all appointees will be placed on trial contracts and will be judged on performance after 3 months and 6 months before the full contract is awarded.

*The villages will not take up the opportunity of the exploitation contracts*

The financial benefits are so great to villages that it is very unlikely that any village will not be interested in developing a contract. There is no downside to the villages agreeing the contracts apart from the loss of illegal income from logging and hunting in the PA forests. Under the enhanced enforcement strategy these activities would be stamped down on hard and would be a declining resource available to the villages anyway. On the other hand the contracts would offer a substantial legal income available to the villages. However, it is possible that some villages will have difficulties in meeting some of the contract conditions in order to initially establish the contract. Some villages for example may have problems in getting written agreements from neighbouring villages on the boundaries. In these cases it will be the role of the Facilitators to mediate between the villages and ensure a solution is achieved.

*The legal rights of traditional (adat) communities will conflict with the proposed forest management scheme*

Butonese farming communities have traditionally relied upon forested land in the past for agricultural land clearing as well as local timber, but the current intensive rates of exploitation have occurred only in the last few decades. The exploitation of other forest products, in particular rattan, is a relatively recent event that has followed its increasing commercialization across Indonesia in recent decades. Where traditional linkages to forests do exist these are mostly in relation to historical settlements in forested areas that were abandoned after the construction of the Trans-Buton Highway which facilitated local communities to resettle along its margins during the 1970's. None of these communities regard state forest areas as traditional lands or seek to lay traditional claims to such areas.

*The Forum will become a place for discussion rather than an effective management body*

The Forum must act as an active management body rather than as a discussion forum. This will be aided by the scheduling of regular monthly meetings with action minutes being produced. The Project Manager will be the executive arm of the Forum and will produce papers assisted by a full time Forum secretary before each meeting and ensure the Forum's decisions are implemented on the ground.

*The Indonesian government counterpart funding will not materialise causing the project to collapse*

The accuracy of future budget figures given by any Indonesian government department are always open to dispute. The problem arises from the way in which the finances for all government departments are fixed. For example KSDA in Kendari do not have their final agreed budgets in most years until after the financial year has started! Getting KSDA or any other government department to predict forthcoming budgets accurately is therefore impossible. The best that can be done for proposals such as this one is for the government department to submit the requests for funds that it is making for year 1 on the assumption that the GEF funding is forthcoming and then to apply inflation criteria to those submitted sums for future years. KSDA for example are aware that GEF funding has to lever additional funds for the target area and the

Head of Conservation for KSDA in Kendari was convinced that the sums he requested would be forthcoming. Even if he turns out to be wrong though this will not materially affect the success of the project since the government aspects of the funding are targeted at complementary actions (eg upgrading ranger post facilities, training rangers so that they can make arrests etc), rather than the core activities funded by GEF and Operation Wallacea.

*Local electoral changes will de-stabilise the Forum and management of the project*

Although the Forum will be responsive to local electoral changes through changes in the DPRD II representative and the village representatives, the stability will be provided by the regionally appointed personnel (eg Bupati who is appointed by the Governor for a fixed term), nationally appointed personnel (eg Regional Head of Conservation), non-elected representatives (eg NGO's, Heads of Police and Army) and civil servants (eg Head of Tourism).

*The various initiatives will not be taken up by government departments or other organisations and will collapse at the end of the funding period.*

The reason that the handover of funding to other organisations is scheduled fairly early in the process is so that there is time to work under the new funding systems whilst the GEF funded staff are still on site to ensure the transfer is smooth. Part of the momentum for this project will be provided by the pride the Buton government have in trialing such an innovative forest management scheme, which has applicability in other parts of the country. Such schemes will only be successful elsewhere if it can be demonstrated that the various component parts can be fully integrated into government systems. It is therefore in the interests of the Buton government to ensure their commitment to take over developed parts of the project (e.g. Training Centre, KSDA/Forestry mentoring) is fully implemented. The village funding of the Forest Guardians is a contractual obligation for them. However, in the final analysis the main aspect that will keep this system running will be the financial advantages to the government from increased tax revenue and to the villages from the increased income obtained from being allowed to sustainably manage areas of forest.

Operation Wallacea is in a similar position to the Buton government in that much of its reputation is staked on ensuring the forest management system works and that research tourism revenue can be used to provide all the biological and social science data needed to assess performance of such a management system. Operation Wallacea however, is subject to market forces and it is possible that the necessary growth will not be achieved to enable it to take over all the monitoring costs by 2007. Against this argument though is that there has been constant 20% annual growth in numbers of volunteers over the 8 years of Operation Wallacea except for the 2003 season when there was a 20% drop. This was due to the travel advice given by the UK government following the Bali and Jakarta bombs and the SARS scares. The effect on tourism in Indonesia of such warnings has been catastrophic and recent figures from Bali suggest arrivals are 80% down on normal levels. The research tourism of Operation Wallacea has therefore proved to be much more stable than the normal tourism market and has shown that even in years regarded as catastrophic for tourism that investment levels in monitoring forest biodiversity can be maintained. Bookings for the 2004 season are 100% higher than for 2003, suggesting that the annual growth in popularity of the project has resumed.

Since establishing in the SE Sulawesi area in 1995, Operation Wallacea has achieved the following:

- Provided data and lobbied for the creation of the Wakatobi Marine National Park. The National Park was designated in 1996, only 18 months after the start of the project.
- Funded teams of international and local scientists to complete biodiversity and socio-economic surveys in the Lambusango forest and Wakatobi Marine National Park since 1995. This has resulted in a large number of publications (currently running at approximately 15 per year) as well as data provision to local government and

universities. In addition the teams in Lambusango have discovered 21 new species of vertebrates to science.

- Raised the profile of the forests of Buton Island to the international academic community as a desirable location for long-term research projects.
- Established research tourism as the largest revenue stream from tourism in SE Sulawesi. Each year more than 400 local people obtain their annual income from the Operation Wallacea funded surveys.

*The baseline data for assessing progress against the various management objectives is not available and monitoring after GEF funding has finished will cease*

Operation Wallacea which is funded by paying volunteers has been completing surveys on various aspects of forest structure, biodiversity, population levels of key species and socio-economic structure in the Lambusango area since 1998. Much data therefore already exists to provide this baseline and in June to September 2004, the Operation Wallacea survey program has been modified to complete such surveys on the 9 sampling nodes that will form part of the GEF monitoring program. At each node camp 4 trails each 3km in length have been marked and are being utilised to gather the following data: levels of forest disturbance (assessed using indicators such as levels of rattan extraction, numbers of cut trees etc), diversity and abundance of butterflies (using traps and sweep netting), stream fauna (using electro-fishing and kick sampling for invertebrates), herpetofauna diversity (using a range of techniques), birds (from point count surveys along each transect) and populations surveys of macaques, tarsiers and anoa. The Operation Wallacea funded surveys in 2004 will provide not only baseline data across the whole of the Lambusango forest but will also refine the survey methodologies to be utilised by the Indonesian PhD students to complete the follow-on monitoring. Operation Wallacea is committed long-term to the forests of Lambusango and after the more intensive GEF monitoring program finishes, Operation Wallacea will continue with annual monitoring across the 9 sampling nodes. This is one of the main strengths of this application in that the funding for long term monitoring is already in position.

*The sense of pride engendered by the successful implementation of the Lambusango project will not act as a sufficient incentive to the local government to continue supporting the project after the GEF funding finishes*

The biggest incentive for the project to continue beyond the GEF funding period is the financial benefits obtained by both the local communities and the District government from continuance of the scheme. The sense of pride is a secondary driver and the success of this as an incentive depends to a large extent on how widely publicised the good practice example is. If it is known only to funding agencies and NGO's within the country, it is unlikely to be a major incentive. However, if the good practice is recognised internationally with foreign experts and politicians visiting the area to meet with the individuals concerned then the incentive is much greater and can be sold to the local population as a symbol of pride. The advantage of this project over most others is that Operation Wallacea has an active interest in promoting the success internationally. Operation Wallacea has already won two major international awards (ASEAN Best Ecotourism Project and British Airways Tourism for Tomorrow Best Project in a Protected Area). These have involved flying key local government officials to Manila and London to pick up the awards and receive the recognition. Success in ensuring conservation objectives for a forest area in Indonesia would be a major benefit in applying for such awards. The Chair of the Operation Wallacea Trust, the Rt Hon Ken Clarke QC, MP (a senior UK politician and ex-Chancellor of the Exchequer) is visiting the Indonesia sites this summer to meet some of the key personnel. Politicians as well connected in international circles as this can promote the work of individuals well beyond their normal national boundaries. Within the country the Wallacea Development Institute (WDI - the Indonesia partner organisation of Operation Wallacea) has extensive political connections in Jakarta and in the past meetings with key Ministers (eg Forestry, Environment, Fisheries) both in Jakarta and on site in SE Sulawesi have been arranged with relative ease. Indeed presentations about the work of Operation Wallacea in SE Sulawesi have been made at Presidential as well as Minister level. These connections would be exploited to ensure key

individuals that were ensuring the success of the project were brought to the attention of the relevant senior politicians.

*The capacity building will not be effective in ensuring the skills and motivation are present for the project to continue after the GEF funding finishes*

The main aspects that prevent local government organisations from effectively carrying out management are:

- A lack of in field experience by the managers. Working in the forest or with local communities is seen as low status by many government officials and as a result they become dangerously out of touch with what is actually happening on the ground. A good example of how this will be addressed is the mentoring of the joint ranger team in the field. The academic teams will also be field based and will be able at the end of the project to design and implement similar monitoring programs elsewhere.
- A lack of drive to implement changes. Simply training government officials to undertake particular tasks seems to have little effect in practice when there is so much inertia in government departments. The Forum is designed to act as an Executive agency and as such will have to take management decisions on a monthly basis about the management of the forests rather than the normal policy level discussions that occur in government departments. The results of the monitoring scheme will be fed back to the Forum so that they can assess whether their decisions are having the desired effects. The Forum consists of representatives of various government agencies as well as NGO's. The Forum under active guidance from the Project Manager will develop into an effective management unit, which will give invaluable experience to the various government department members.
- Corruption. A percentage of all funding going through government organisations in Indonesia does not reach its intended target. The tight financial management system that will be operated by the Op Wall Trust will train local staff in how to ensure that all expenditure is accounted for and no 'under money' is paid. The local staff recruited to carry out this task for the Trust will be associated with local NGO's so that they develop the experience necessary to handle large budgets with transparency.

In the final analysis, making sure that institutions work effectively after a project has finished is dependent on finding and training staff who have the requisite characteristics (drive to complete tasks, honesty, intelligence to develop effective solutions to problems as they arise etc). The project is designed specifically to identify and train these individuals.

*The concept will prove to be non transferable to other parts of Indonesia*

This is unlikely since each District has the same mix of District and nationally controlled forests. The whole thrust of political reformation in Indonesia is to devolve power down to the District-level and the Lambusango proposal is in line with this trend and if it proves to work could be applied to many other Districts. However, in Districts with large sawmill and oil palm plantation interests the applicability of the scheme will undergo a greater test since the government will have to reign in these pressures to allow the communities to be granted control of their adjacent forests.

## **6. STAKEHOLDER INVOLVEMENT AND SOCIAL ASSESSMENT**

This project document has been developed with the full participation of each of the major stakeholder groups identified as being relevant. Key stakeholder groups include the Provincial Conservation Agency (KSDA ), District-level government offices (e.g. Forestry, Tourism and Education), Sub-District-level governments, local and international research-based institutions (Universitas Haluoleo, Unidayan, Arthur Rylah Institute), NGOs actively involved in the field of forest conservation within Buton District (Yayasan Buana Hijau, Operation Wallacea), as well as

those communities who live in association with forest areas to be addressed by this project.<sup>24</sup> Project consultation has included a range of different activities with each of the major stakeholder groups that to date has included:

- Formal meetings and informal discussions held with relevant government agencies at both District and Sub-District-level;
- Consultation with research institutions and non-government organisations seen as being relevant to the proposed project;
- Semi-structured interviews and planning exercises with members of local communities including village leaders, rural households living adjacent to forest areas, and most importantly those individuals known to be dependent upon local forest resources as a source of livelihood;<sup>25</sup>
- A formal presentation to District-level leaders outlining the need for effective management of the forests of central Buton and key elements of the proposed LFMA described by this document.

#### *Consultation with Government agencies*

Consultation work undertaken directly with those government agencies seen as being relevant to the current proposal raised a range of different issues relevant to issues of biodiversity conservation and forest management in general. Of key concern was the lack of inter-sectoral coordination in the development of forest management decision-making and policy. The allocation of forestland to transmigrants and refugee settlements that has to date been responsible for the destruction of large areas of forest over the past decade was seen as the most relevant example of this. The allocation of rattan export licenses and timber licenses (IPK) was also seen as undermining the forest resource base and was not based upon sound forest management practices. The first steps towards achieving a coordinated approach to forest management have already been undertaken through a series of meetings that have to date been undertaken involving each of the major government stakeholder interests relevant to forest management in central Buton.<sup>26</sup> Both KSDA and the District-level Forestry Service identified the need to improve the capacity of forest rangers in surveillance and enforcement procedures and that greater coordination between staff of the two government agencies was necessary to ensure more effective compliance with forest regulations. Both agencies also emphasized the limited number of personnel and resources available for forest enforcement activities and that this would need to be addressed in the near future if forest management were to become effective.<sup>27</sup> Another constraint highlighted over the course of consultation was that on site facilities were poorly developed and that accommodation and other basic logistical needs necessary for rangers and their immediate families to reside at field stations located around the edge of the LFMA were poorly developed and in a state of disrepair and as such acted as a disincentive for rangers to remain based in the field.<sup>28</sup> Finally, KSDA also identified the need for the development of clearly defined Management Plans for the Lambusango and Kakenauwe conservation reserves that would provide long term management strategies seen as being appropriate to each of these areas.

#### *Consultation with research institutions and NGO's*

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<sup>24</sup> A total of 27 administrative villages are known to share boundaries with the Lambusango Forest Management Area.

<sup>25</sup> A total of 66 people from 11 villages were interviewed over the course of this consultation process. Forest resource use activities for which people were interviewed included timber extraction, rattan collection and honey collection.

<sup>26</sup> Operation Wallacea facilitated these meetings with funds provided by GEF for the development of this proposal document. There remains a strong commitment amongst all those involved in such meetings to continue to work together to address pressing concerns in relation to forest management on Buton.

<sup>27</sup> This document recommends the need for local communities to play a more active role in forest regulation compliance rather than relying upon significant increases in those resources being made available to government.

<sup>28</sup> As a result rangers and their families tend to spend a greater proportion of their time in the District capital of Bau-Bau rather than at their field ranger posts.

The following organisations also played a significant role in the development of the concept and detailed discussions were held with them over each aspect of the proposal:

The social and biological scientists who have been working with Operation Wallacea in the LFMA since 2000 were closely involved with the design of the proposed scheme for monitoring the performance criteria to assess the success of the proposed management scheme. In addition the Arthur Rylah Institute in Melbourne which has been collaborating with Operation Wallacea for the past three years in biodiversity related research undertaken within the forests of Lambusango had a significant input into the design of the adaptive management strategies that will enable informed feedback to be obtained on the success or otherwise of the forest management scheme on biodiversity. Two local university institutions also assisted. Unidayan University in Bau Bau provided expertise in the field of community consultation and needs assessment and how to monitor the social change elements. Universitas Hasanuddin in Makassar has a large established forestry department and contributed expertise in the design and management of the agro-forestry elements to be established with local communities.

The local non-government organisation *Yayasan Buana Hijau* has many years experience in working with rural communities in central Buton on a range of development related issues. Their in depth knowledge of those communities with which this program seeks to work was used to develop the detailed proposals for the village contract scheme.

#### *Consultation with local communities*

Semi-structured interviews were completed with 66 people who were known to live in the immediate vicinity of and in many cases depend directly upon forests to be addressed by this project. The sample was selected from villages all around the LFMA and included those who collected timber, rattan and honey from local forests as well as some farmers not dependent on forest resources.

In the group dependent on forest resources only a small number of those interviewed had been undertaking such activities for an extensive period of time (more than 10 years). Importantly a vast majority had only recently come to depend upon forest resources (less than five years) highlighting the increasing pressure that was still being brought to bear upon these forests. Also of significance was the fact that most of the people interviewed in this category depended upon forest resources as their principal source of income, spent at least half their time within forests, undertook forest based activities in groups rather than as individuals and that they tended to travel significant distances from the forest boundary to seek access to sought after forest resources.<sup>29</sup> Demographically forest users tended to be young unemployed men (less than thirty years of age) who did not own land or participate in farming based activities. Their income derived from forest-based activities was seen to be low but importantly unlike farming based activities provided an immediate source of income upon which they could depend.<sup>30</sup> One of the problems associated with the short term nature of the involvement of the majority of the interviewees was that they did not have a long-term concern for forest resources and their sustainability, and resource exploitation was seen as a means to meeting short-term ends only.

A common theme amongst almost all interviewees was their opposition to current government efforts to control and where possible restrict local efforts to exploit forest resources. Instead local people saw government interests as resting with outside commercial interests that they saw as the principal cause of forest degradation and were removing benefits associated with local forests that they saw as belonging first and foremost to themselves. Such resentment towards government allocation of and control over forest resource rights has led to local communities themselves undertaking forest exploitative practices in disregard for forest regulations and as such has only compounded issues of forest mismanagement and over exploitation. Members of local communities interviewed over the course of this study voiced a common concern towards

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<sup>29</sup> Rattan collectors, honey collectors and timber cutters would travel up to three kilometres to access forest resources.

<sup>30</sup> Forest users tended to make less than Rp.500,000 per month from their activities.

government efforts to restrict their access to forest resources. Interviewees commonly cited how non-local interests were often able to freely operate in the exploitation of forest resources but that local residents were often prevented from collecting forest resources for their own needs. This apparent double standard amongst those responsible for forest enforcement has led to a high level of disregard and disillusionment with how forest resources were being managed and as such encouraged non-compliance with forest regulations. The proposed project would reverse this position with the local communities being in charge of their own resources and since all the production forest would be allocated for management by one of the surrounding villages, non-local exploitation would be excluded. There remained overall low levels of awareness amongst forest users over differences between different forest land use types and the activities that are allowed within each.

Rattan collectors also complained of the low prices they received for their efforts and believed that private sector interests frequently colluded to suppress rattan prices. Local rattan collectors were also concerned by the influx of rattan collectors from other Districts and how this was impacting on their efforts to search for rattan increasingly difficult. Under the proposed project, all current rattan collectors would be issued with permits whether they came from a surrounding village or further away. Once there was full compliance with the licensing scheme and annual quotas had been established, the Forum could for example allow local rattan collectors to have preferential access to the quota (say a 1 month start on the external rattan collectors).

All the forest users were willing to support efforts to protect and rehabilitate forest areas so long as they were not seen to impinge upon their current level of activity. This position was in stark contrast to many farmers interviewed over the course of this study who viewed forest areas as disruptive to their farming efforts and who wished that forest areas be opened in order to provide access to new farming areas.<sup>31</sup>

All those included by the consultation process expressed their desire to be included in discussions of rules and regulations in relation to forest resources. There was seen to be a very real need to incorporate forest users and those that lived in close proximity to existing forest areas in all aspects of decision making in relation to forest use. Forest users were for the most part opposed to the idea of establishing forest conservation areas from which all activities were banned. It was seen as inevitable that in order for forests to be protected and retain their general forest structure that some level of human exploitation was unavoidable.

#### *Formal presentation*

Following the consultation process, a formal presentation was also given to the Bupati and the Chairman for the House of Representatives for Buton<sup>32</sup>. The presentation highlighted the significance of the Lambusango forests both as an important site for the protection of biodiversity and as a livelihood resource for local communities and gained in principle support (Appendix 5) for the GEF proposal from the two most influential government officials within Buton District, whose support is deemed critical to achieving project success in the future.

As a result of the extensive consultation process that has been undertaken to date and the formal presentation there now exists widespread support for the proposed GEF Lambusango Forestry Management proposal across all the major stakeholder interest groups. The following agencies are keen to collaborate in the implementation of the proposal:

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<sup>31</sup> Forests were found to be seen in a negative light by those who rarely venture inside them. Farmers in particular saw them as a source of wild pigs and monkeys that frequently raid and destroy their crops. This was in stark contrast to forest users who had a mostly positive view of forests, readily ventured inside them and saw the need for some level of forest protection.

<sup>32</sup> This was held on August 15 2003 at the Bupati's residence. In addition to these two senior District leaders the heads of departmental agencies deemed relevant to the project were also in attendance at this presentation including Forestry, KSDA, the Regional Planning Agency, the Environmental Assessment Agency and Police. Appendix 5 contains Minutes of the meeting.



**Table 3 Collaborating Agencies for the Lambusango Community Forestry Project**

<b>Lead Agency</b>	<b>Partner Agencies</b>	<b>Executing Agency</b>
Operation Wallacea	Buton District Government and KSDA	Forest Management Forum

<b>Collaborating Agencies*</b>	<b>Proposed Areas of Collaboration</b>
District Planning Agency	Regional planning
KSDA	Surveillance & enforcement of forest regulations Management plan development for conservation forests
District Forestry Service	Surveillance & enforcement of forest regulations Management plan development for production forests
District Tourism Service	Tourism marketing and planning
District Police Service	Processing of criminal forest activity
Sub-Districts	Coordination of Sub-District-level government Land use planning
Operation Wallacea	Delivery of environmental awareness courses Biodiversity & social monitoring Training of Indonesian research scientists
Arthur Rylah Institute	Adaptive management design & analysis
Hasanuddin University	Agro-forestry research
Unidayan University	Social needs & assessment Socio-economic change
Yayasan Buana Hijau	Community participation in resource use planning & management Public awareness raising

## 7. INCREMENTAL COST ASSESSMENT

Whilst Indonesia supports an expansive network of established conservation areas, current levels of government expenditure remain far below those necessary to ensure the proper protection and management of these protected areas. Although international conservation organizations continue to retain a high profile within Indonesia, much of their effort to date has tended to focus on the larger islands of Java, Sumatra and Kalimantan.<sup>33</sup> As a result the smaller islands of eastern Indonesia, in spite of known high levels of endemism and some of the most intact stands of primary forest found anywhere in the country, remain poorly resourced in their attempts to manage existing protected areas and are increasingly being undermined both in terms of their ecological integrity and long-term conservation value.<sup>34</sup>

Table 4 lists the budgets from various government departments that have been requested from central government by the Buton District for year 1 of the project. The government budgets for years 2 and 3 of the proposed program are not available so these have been estimated as the same as for year 1 but with a 5% increase for inflation. The non-highlighted section of the table depicts those government expenditures aimed at achieving national development goals (baseline), whilst the grey sections depict expenditures aimed at achieving sustainable development benefits (alternatives). The alternatives section though has been split between those elements which have global environmental benefits and which are intimately linked to the conservation of biological diversity (dark grey) and those expenditures which relate to local sustainable development and local biodiversity protection benefits (light grey). In some cases it has been impossible to determine the exact expenditure that will relate to the Lambusango Forest Management Area since budgets for some government departments are not split in this way. In

<sup>33</sup> This is because such islands support greater numbers of high profile flagship species, contain large 'wilderness'-sized protected areas and face a high level of impending threat due to increasing human population densities.

<sup>34</sup> This project is seen as one step towards addressing the existing inequality in conservation effort that has so far given more emphasis to western Indonesia.

these cases the budgets for the whole Buton District have been included and the departments have been identified with an asterisk in the table.

In addition to the government expenditure, the only other main financial input to the area is that from the research tourism operation run by Operation Wallacea. The total financial input by this organisation into the Lambusango forest management area in year 1 will be \$300,000, rising by 20% annually. These funds are used to support the research teams in the field, provide research equipment, field transport, academic and logistics staff, communication and safety systems, food and accommodation for the staff and volunteers etc. The costings (see Appendix 6) for implementation and monitoring of the Lambusango Forest Management program assume considerable usage of equipment, logistics and support staff and provision of social and biological data from Operation Wallacea with the level of help required increasing each year over the lifetime of the GEF program. In practice approximately 50% of the Operation Wallacea funds are used to support the volunteers in the field with the remainder being used to provide the equipment and scientific staff to provide the survey data. These sums though are inextricably linked since it is the presence of Operation Wallacea that attracts the top international scientists to work in the area for expenses only. Without Operation Wallacea the costs of running the survey program would be much higher because consultant rates would have to be paid. Because of this inextricable linkage of the two components of the Operation Wallacea funding the whole annual sum has been attributed to the global aspects of this program.

The total cost of the baseline and the alternative, including the GEF contribution, are depicted below in Table 4.

Baseline costs to be funded by the Government of Indonesia is estimated at US\$12,323,374, over the 4-year period. Project Alternative costs are estimated at US\$ 7,011,646. Included within the Alternative costs though is an Incremental cost of US\$4,467,924, of which 22% (US\$975,000) is being requested from the GEF and the remainder (US\$3,492,274) will be contributed by Operation Wallacea, KSDA and Forestry departments. Government and Operation Wallacea will be increasingly responsible for the ongoing costs of this program and by year 4 will be wholly responsible for the continuance of the program.

Table 4 Estimated annual budgets for initiatives in the project area. The non-highlighted section at the bottom of the table depicts those government expenditures aimed at achieving national development goals (baseline), whilst the grey sections depict expenditures aimed at achieving sustainable development benefits (alternatives). The alternatives section though has been split between those elements which have global environmental benefits and which are intimately linked to the conservation of biological diversity (dark grey) and those expenditures which relate to local sustainable development and local biodiversity protection benefits (light grey).

Institution	Program	Year 1 US\$	Year 2 US\$	Year 3 US\$	Year 4 \$US	Total US\$
Global Environment Facility	Lambusango Biodiversity Conservation Program	446,800	291,700	241,000	18,000	975,000
Operation Wallacea	Component A	15,000	18,000	21,600	25,920	80,520
	Component B	15,000	18,000	21,600	25,920	80,520
	Component C	15,000	18,000	21,600	25,920	80,520
	Component D	60,000	72,000	86,400	103,680	322,080

	Component E	180,000	216,000	259,200	311,040	966,240
	Component F	15,000	18,000	21,600	25,920	80,520
KSDA	Component A	6,202	6,512	6,837	7,180	26,731
	Component B	72,365	75,983	79,782	83,771	311,901
	Component C	35,000	36,750	38,588	40,517	150,855
	Component D	80,305	84,320	88,536	92,963	346,124
	Component E	14,875	15,619	16,400	17,220	64,114
	Component F	6,562	6,890	7,235	7,596	28,283
Provincial Forestry Office	Component A	19,492	20,467	21,490	22,564	84,013
	Component B	201,967	212,065	222,669	233,802	870,503
<b>INCREMENTAL COST ASSESSMENT</b>		<b>1,183,568</b>	<b>1,110,406</b>	<b>1,155,087</b>	<b>1,042,013</b>	<b>4,468,574</b>
Provincial Forestry Office*	Baseline costs	94,911	99,656	104,639	109,871	409,077
Provincial Environmental Agency*	Forest & Soil Conservation Project	47,059	49,412	54,118	56,824	207,413
	Raising the Role of Community in Resource Management	52,941	55,588	60,882	63,926	233,337
Provincial Planning Agency*	Information Development in Relation to Natural Resources	111,772	0	0	0	111,772
Regional Forestry Office	Forest Enforcement & Surveillance	28,235	29,647	31,059	32,612	121,553
	Operational Expenses	182,353	191,471	200,588	210,617	785,029
	Rehabilitation Funds	674,891			0	674,891
<b>TOTAL LOCAL BIODIVERSITY SPENDING</b>		<b>1,192,162</b>	<b>425,774</b>	<b>451,286</b>	<b>473,850</b>	<b>2,543,072</b>
Provincial Agricultural Office*	Agricultural Production Facilities	13,647	14,329	15,046	15,798	58,820

	Rice Field Establishment	29,412	30,883	32,427	34,048	126,770
	Irrigation rehabilitation	12,353	12,971	13,619	14,300	53,243
	Agrobusiness development program	255,382	268,151	281,559	295,637	1,100,729
District Agricultural Office	Rice & Corn Production	128,824	135,265	142,028	149,129	555,246
Provincial Plantation Office*	Industrial Plantation Development	174,553	183,281	192,445	202,067	752,346
	Coconut Intensification Program	15,902	16,697	17,532	18,409	68,540
District Plantation Office	Cocoa & Cashew Development	6,059	6,362	6,680	7,014	68,540
Provincial Planning Agency*	Coordinating Program for Basic Commodities Provision	47,059	49,412	51,883	54,477	202,831
Provincial Fisheries Department*	Fishing Capture Facilities	13,529	14,205	14,916	15,662	58,312
	Industrial Fisheries Development	16,824	17,665	18,548	19,475	72,512
	Mini Ice Factory	19,853	20,846	21,888	22,982	85,569
	Fisheries Production Development	85,782	90,071	94,575	99,304	369,732
Trade Office*	Appropriate Technology Development	51,941	54,538	57,265	60,128	223,872
	Raising the Role of Community in Industry & Trade	35,294	37,059	38,912	40,858	152,123
Cooperative & Small Business Office*	Cooperative Development Program	302,353	317,471	333,344	350,011	1,303,179
Provincial Tourism Office*	Tourism Development	112,941	118,588	124,517	130,743	486,789
Provincial Transmigration Office*	Raising Work Capacity Skills	67,694	71,079	74,633	78,365	291,771
	Development of Transmigrant Settlers	102,353	107,471	112,844	118,486	441,154
District Transmigration Office	Settlement Development	462,706	485,841	510,133	535,640	1,994,320
Community Empowerment Body*	Various Poverty and Economic Development Programs	167,059	175,412	184,183	193,392	720,046
Provincial Education Office*	School Education Improvement Program	200,000	210,000	220,500	231,525	862,025

Social Office*	Project for Raising Social Prosperity	21,176	22,235	23,347	24,514	91,272
Health Office*	Community Clean Environment Program	49,412	51,883	54,477	57,201	212,973
Public Works	Road Development Projects	467,059	490,412	514,933	540,680	2,013,084
<b>TOTAL BASELINE SPENDING</b>		<b>2,859,167</b>	<b>3,002,125</b>	<b>3,152,232</b>	<b>3,309,846</b>	<b>12,323,374</b>
<b>TOTAL BASELINE AND ALTERNATIVE SPENDING</b>		<b>5,234,897</b>	<b>4,538,305</b>	<b>4,758,605</b>	<b>4,825,709</b>	<b>19,335,020</b>

## 8. BUDGETS

A detailed breakdown of proposed expenditure is included in Appendix 6 and estimated costs by budgetary component are listed in table 5 below. GEF funds will be supplemented by contributions from Operation Wallacea, which will provide much of the monitoring data required to assess the performance of the project and loan equipment and facilities that otherwise would have to be purchased as part of the GEF program. Provincial Forestry Office will be responsible for taking over the costs of running the village tree nurseries (included as equipment) and the education costs from year 2 onwards, whilst KSDA will be responsible for meeting the costs of the Forest Guardians from the income received from the forest exploitation contracts.

*Table 5 Project Budget Summary*

Component	GEF	Operation Wallacea	KSDA	Provincial Forestry Office	TOTALS
PDF	25,000	28,000			53,000
Personnel	255,000	700,000	300,000	500,000	1,755,000
Subcontract	197,600	500,000			697,600
Training	174,400		500,000	100,000	774,400
Equipment	83,450	200,000	75,000	300,000	658,450
Travel and stipends	188,150		25,000	50,000	263,150
Evaluation missions	15,000				15,000
Miscellaneous	61,400	210,400	28,008	4,516	304,324
<b>Project totals (excluding PDF)</b>	<b>975,000</b>	<b>1,610,400</b>	<b>928,008</b>	<b>954,516</b>	<b>4,467,925</b>

## 9. IMPLEMENTATION PLAN

One of the main advantages of this project is that the momentum for implementation is already present. The Lambusango Forum for example is ready to start work within a few weeks of the go ahead. The Operation Wallacea Trust, the Lead Agency have been on site for a number of years and most of the proposed field bases and logistics are already in position. Given these advantages, the strong local desire for a more effective management system and the urgent threat to endangered species such as the anoa, it is proposed to go with this momentum and implement the project as quickly as possible consistent with ensuring proper management controls. The start up phase, which will be run by the Lead Agency and will involve the appointment of the key staff and contracts, for example can be achieved in only three months.

After this the Project Manager and the Forum will take control of the project with the Lead Agency having a small auditing and summary report writing role each year.

A main emphasis throughout the project is for the GEF funding to be used to initiate developments, demonstrate how they can be run cost effectively and how the benefits can accrue to the local communities. Once this has been established government and other agencies are scheduled to take over the responsibility for these elements. For example the use of the Wanda Wolio training centre is scheduled to be funded by the GEF proposal for years 2 - 3 with a target of putting over 1000 local people through 3 day forest appreciation courses. After this point the government would be expected to fund the centre long term as a Forest Field Centre suitable for schools and other groups throughout the Buton District. Assistance is given in funding the wages for the Forest Guardians in year 1, with the wages from this point on supported by village generated income from the forest development contracts. Help is also given in forming an effective patrolling force combining the rangers of Forestry and KSDA with the Forest Guardians but again this is gradually phased out such that by Year 3 all the Forestry and KSDA elements are met from their own resources. A similar approach is used with the biodiversity monitoring program where the costs of establishing the long term monitoring program will form part of the GEF program but an increasing percentage of the program gradually becomes incorporated into the Operation Wallacea program, which is funded by research tourism income.

The main purpose of demonstrating with strong biological and social science data, that District and nationally managed forests can be jointly controlled very effectively using the motor of strong community financial incentives, is so that the approach can be used elsewhere in Indonesia. There is an urgent need to find forest management models that work effectively in Indonesia given the current rates of forest loss and the huge biodiversity importance of this country. By Year 3 the Lambusango approach should begin to be brought to the attention of government and NGO's elsewhere in Indonesia and the last year of the project should concentrate on applying the lessons to other Districts and on presenting the data and the concept to national government and NGO's to help catalyse change elsewhere in Indonesia.

## **10. PROJECT MONITORING AND EVALUATION**

The proposed management objectives with the performance criteria are listed below. Appendix 4 explains in detail how the monitoring will be carried out for each of these performance criteria.

### **Management Objective 1**

To maximize income to the local communities around the edge of the Lambusango Forest Management Area from sustainable uses of the forest.

#### ***Performance criteria for management objective 1***

1.1 Total income received from legal forest-based activities (eg. tourism, rattan collection, exploitation of the production forests) in the Lambusango Forest Management Area is increased by 5% above inflation over the period to 2007.

1.2 Total number of people receiving their annual income from legal forest-based activities (eg. tourism, rattan collection, exploitation of the production forests) is increased by 5% over the period to 2007.

The reason for the second performance criteria is that simply increasing the total income from the forest says little about the overall value of this income to the local communities unless data are also presented on the numbers of people gaining their annual income from forest-based activities.

### **Management Objective 2**

To ensure that communities on Buton Island are aware of the importance and uniqueness of the Lambusango Forest Management Area and that facilities are developed and used so that the forests can be used as an educational resource for schools and universities in SE Sulawesi.

***Benchmark performance criteria for monitoring management objective 2***

2.1 Knowledge in communities around the edge of the Lambusango Forest Management Area about the rules and regulations applied and the unique flora and fauna of the forests shows an increase to 90% awareness over the period to 2007.

2.2 Level of knowledge amongst the general population of Buton Island about the existence of the Lambusango Forest Management Area and the main faunal species it is protecting shows an increase to 60% over the period to 2007.

2.3 The Labundo Forest Centre and the Wanda Wolio field centre are used as a resource by most schools in Buton and university students from Kendari and Bau Bau at some point over the period to 2007.

**Management Objective 3**

To ensure that the levels of non-compliance with the Lambusango Forest Management Area regulations decreases over the period to 2007.

***Benchmark performance criteria for management objective 3***

3.1 The level of infringements of rules and regulations observed per unit of patrolling effort by Forest Guardian teams decreases by 10% per year from 2004 over the period to 2007.

**Management Objective 4**

To ensure the effectiveness of the proposed management plans for Lambusango and Kakenauwe in maintaining forest structure and coverage.

***Benchmark performance criteria for management objective 4***

4.1 To ensure forest coverage of the LFMA does not decline by 2007.

4.2 To ensure that the structure of the forest in the conservation and limited production forests shows no significant anthropogenic impacts over the period to 2007.

4.3 To ensure that rattan extraction in the limited production and conservation forests is being carried out sustainably.

**Management Objective 5**

To ensure the effectiveness of the proposed management plans for the Lambusango Forest Management Area in maintaining biodiversity value of the forests.

***Performance criteria for management objective 5***

It is not possible to measure or monitor all aspects of biodiversity, nor is there one single measure or indicator that could be used as an index of biodiversity value or change. Consequently a range of key organism groups need to be monitored that represent a cross section of forest ecosystems and community processes, such as habitat, trophic level, phylogeny and life history. Such groups must meet the following criteria:

1. Relatively high species richness so that guild or community level responses as well as individual species responses may be examined.

2. Presence of species sensitive to local environmental change and anthropogenic effects, so that communities/species most likely to be affected by management are not overlooked.
3. Conducive to systematic repeatable sampling with achievable sampling effort necessary to detect biologically important changes, such as relative abundance or species composition, within 5 years.
4. Conducive to student/volunteer participation/assistance with sampling/data collection over the summer holiday periods, thereby enabling the research to be funded.
5. Conducive for masters or PhD level studies by Indonesian students.

The following groups potentially meet all of the above criteria: birds, reptiles, bats, stream frogs, freshwater fish and macroinvertebrates, and butterflies. Standard methods for sampling each of these groups are well established and data has previously been gathered for most groups within the Lambusango and Kakenauwe forests. The performance criteria for assessing biodiversity change have therefore been set in terms of changes in these indicator groups. 5.1 To ensure the diversity of bird species indicative of undisturbed forest does not decline in the conservation and limited production forests over the period to 2007.

5.2 To ensure the diversity of reptile species indicative of undisturbed forest does not decline in the conservation and limited production forests over the period to 2007.

5.3 To ensure the diversity of insectivorous bat species indicative of undisturbed forest does not decline in the conservation and limited production forests over the period to 2007.

5.4 To ensure the diversity of butterfly species indicative of undisturbed forest does not decline in the conservation and limited production forests over the period to 2007.

5.5 To ensure the freshwater fish and macro-invertebrates in rivers flowing through the limited production and conservation forests do not show evidence of deforestation or intermittent pollution incidents over the period to 2007.

5.6 To determine the impacts on these indicator groups in areas of exploited production forests to assess the sensitivity of the chosen indicators in detecting the impacts of anthropogenic change.

## **Management Objective 6**

To ensure that populations of flagship species such as Anoa, Sulawesi Wild Pigs, Tarsiers and Macaques are maintained in the forests.

### ***Benchmark performance criteria for management objective 6***

6.1 Ensuring the population of the Buton macaque shows no long term trend of decline over the period to 2007.

6.2 Ensuring the population of the new tarsier species shows no long term trend of decline over the period to 2007.

6.3 Ensuring the population of anoa shows no long term trend of decline over the period to 2007.

6.4 Ensuring the population of the Sulawesi wild pig shows no long term trend of decline over the period to 2007.



## **Appendices**

- Appendix 1     Map of proposed Lambusango Forest Management Area
- Appendix 2     Support letter from the District head of government
- Appendix 3     The biological significance of the Lambusango and Kakenauwe forests
- Appendix 4     The proposed performance monitoring program
- Appendix 5     Bupati's summary speech at meeting on 15 August 2003 in Bau Bau
- Appendix 6     Costings required from GEF for the LFMA program
- Appendix 7     Enabling legal environment