

IMPLEMENTATION COMPLETION MEMORANDUM (ICM)

Revised Template version May 2007

A. BASIC TRUST FUND INFORMATION

Most basic information should be automatically linked to SAP TF Master Data and IBTF

TF Name: GEF MSP Indonesia: Lambusango Forest Conservation, Sulawesi, Project

TF Number: TF054815

Task Team Leader Name/TF Managing Unit: Tony Whitten/EASER

TF Amount (*as committed by donors*): US\$ 975,000

Recipient of TF funds (*Bank/Recipient, if Recipient state name of recipient government and implementing agency*): Recipient: The Operation Wallacea Trust; Beneficiary: Republic of Indonesia; Implementing Agency: World Bank.

Type of TF (*Free-standing/ programmatic/ new TF for an ongoing program*):
Programmatic

Single/Multi Donor: Multi Donor

Donor(s) Name(s): Global Environment Facility (GEF)

TF Program Source Code: GEFIA

Purpose of TF (*Co-financing/Investment financing/ Debt Service/ Advisory Activities-Bank/Advisory Activities-Recipient, etc*): Technical Assistance (TA)

TF Approval/IBTF Clearance Date: 03/14/1991

TF Activation Date: 04/26/2005

TF Closing Date(s): 12/31/2008

Date of ICM Submission to TFO:

Cost and Financing Table:

| Cofinancier | Original | Actual |
|--------------|-------------|-------------|
| GEF | \$975,000 | \$975,000 |
| IBRD/IDA | - | - |
| Recipient | \$1,610,400 | \$1,191,650 |
| Other – KSDA | \$928,000 | \$78,846 |
| Forestry | \$954,516 | \$1,036,185 |

Rating Summary

| Category | Rating |
|----------|--------|
|----------|--------|

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|-------------------------------------|--------------|
| Overall TF Outcome | Satisfactory |
| Overall Risk to Development Outcome | Moderate |
| Bank Performance | Satisfactory |
| Recipient Performance | Satisfactory |
| | |

B. TRUST FUND DEVELOPMENT OBJECTIVES AND DESIGN

1. Original (and Revised) Trust Fund Development Objectives

Provide original statement of objectives from the approved/cleared IBTF. If original objectives have been changed, explain the timing and nature of the revisions, their justification and approval authority given.

The project's objective was as follows:

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

The objective remained unchanged throughout the lifetime of the project.

2. Original (and Revised) Trust Fund Activities/Components

Provide original activities/components to be financed by the Trust Fund. If original activities/components have been changed, identify them, and explain the nature of the revisions, their justification and approving authority.

The TF financed the below six components, which remained unchanged throughout the project. The outputs were revised at mid-term as outlined under 3 (Outcome Indicators) and some of the activities were changed accordingly. The changes were proposed to help the grantee better achieve the project objectives and were approved by Mr. Joachim von Amsberg, Indonesia Country Director, on September 19, 2007.

Component A: Local Community Involvement

This component included the formation of a forest management forum and activities to involve the community surrounding Lambusango Forest.

Component B: Forest Management

This component included activities to strengthen forest law enforcement.

Component C: Public Awareness

Under this component different activities were conducted to increase public awareness about Lambusango Forest and its conservation value.

Component D: Capacity Building

Activities included training of Indonesian PhD candidates registered at UK universities and grant aid was given to undergraduates to gain biological and socio-economic field experience.

Component E: Adaptive Management and Monitoring (co-financed)

Under this component a monitoring strategy to (1) detect biodiversity changes in indicator groups and population changes of key or threatened species, and (2) assess socio-economic changes in the surrounding community was developed and implemented.

Component F: Promotion of Approach

Activities under this component included the presentation of the project results to key officials and the preparation and distribution of articles demonstrating the benefits of the Lambusango scheme and how it could be set up.

3. Outcome Indicators

Provide original performance benchmarks to be measured in the assessment of outcome. If none were established, explain why not.

The management objectives and associated performance criteria remained unchanged throughout the lifetime of the project and are listed below:

| Objectives: | Benchmark performance criteria: |
|--|---|
| 1. To maximize income to the local communities around the edge of the Lambusango Forest Management Area from sustainable uses of the forest. | 1.1 Total income received from legal forest-based activities (e.g. tourism, rattan collection, exploitation of the production forests) in the Lambusango Forest Management Area is increased by 5% above inflation over the period to 2008 ¹ . |
| | 1.2 Total number of people receiving their annual income from legal forest-based activities (e.g. tourism, rattan collection, exploitation of the production forests) is increased by 5% over the period to 2008. |
| 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. | 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 2008. |
| | 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 2008. |

¹ Given the extension of the project closure from 2007 to 2008, the year until which the different indicators and objectives were assessed was changed from 2007 to 2008.

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| | 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 2008. |
| 3. To ensure that the levels of non-compliance with the Lambusango Forest Management Area regulations decreases over the period to 2008. | 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 2008. |
| 4. To ensure the effectiveness of the proposed management plans for Lambusango and Kakenauwe in maintaining forest structure and coverage. | 4.1 To ensure forest coverage of the LFMA does not decline by 2008. |
| | 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 2008. |
| | 4.3 To ensure that rattan extraction in the limited production and conservation forests is being carried out sustainably. |
| 5. To ensure the effectiveness of the proposed management plans for the Lambusango Forest Management Area in maintaining biodiversity value of the forests. | 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 2008. |
| | 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 2008. |
| | 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 2008. |
| | 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 2008. |
| | 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 2008. |
| | 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. |

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| 6. To ensure that populations of flagship species such as Anoa, Sulawesi Wild Pigs, Tarsiers and Macaques are maintained in the forests. | 6.1 Ensuring the population of the Buton macaque shows no long term trend of decline over the period to 2008. |
| | 6.2 Ensuring the population of the new tarsier species shows no long term trend of decline over the period to 2008. |
| | 6.3 Ensuring the population of anoa shows no long term trend of decline over the period to 2008. |
| | 6.4 Ensuring the population of the Sulawesi wild pig shows no long term trend of decline over the period to 2008. |

Expected project outcomes:

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

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

Component C: Public Awareness amongst communities on Buton Island of the biological importance of the Lambusango forests and their management regulations increased.

Component D: Capacity amongst Indonesian managers and scientists improved to ensure similar schemes could be introduced into their districts.

Component E: Abundance of key biodiversity species and groups increases through success of the adaptively-managed program.

Component F: Other Districts adopt similar management strategies for their locally and nationally controlled forests.

4. Other Significant Changes in Trust Fund Design

Describe and explain the rationale for any changes made in design, scope and scale, implementation arrangements and schedule and funding allocation

Following the mid-term review, the TF closing date was extended from January 31, 2008 to December 31, 2008 due to a number of delays at the start of the project. At mid-term, the project outputs to achieve the expected outcomes were revised as outlined in the below table.

Outputs of Component A:

| Original | Revised (mid-term) |
|--|---|
| A1. The formation of a forest management Forum bringing together the management of | A1. Formation of a Community Forest Management Forum (CFMP) as a mature |

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| <p>national and District controlled forests, as an effective decision-making management body</p> <p>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</p> <p>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</p> <p>A4. Preservation of the forest edge where they are when the project is disclosed (as part of the World Bank requirements).</p> | <p>organization able to conduct independent conservation movements.</p> <p>A2. Development of sustainable livelihoods models on several villages surrounding Lambusango forest through village conservation contract facilitation schemes</p> <p>A3. Provision of enabling conditions for better forest management and sustainable rattan extraction.</p> <p>A4. Preservation of the forest boundaries at the point at which the project proposals were announced.</p> |
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Outputs of Component B:

| Original | Revised (mid-term) |
|--|--|
| <p>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</p> <p>B2. Strengthening of the KSDA/Forestry team in patrolling and enforcing against illegal logging and hunting in the non-production forest areas.</p> <p>B3. Implementation of a chain saw amnesty and buy back scheme to ensure that the project has an immediate impact on illegal logging activity.</p> | <p>B1. Strengthen forest crime law enforcement</p> |

Outputs of Component C:

| Original | Revised (mid-term) |
|---|---|
| <p>C1. Modification of an existing building into a field centre from which training courses can be run</p> <p>C2. Participation by 1000 people from communities on Buton on training courses to</p> | <p>C1. Promote global significance of Lambusango Forest through development of local-specific teaching materials and awareness rising of Lambusango Forest constituents and stakeholders at local and national level.</p> |

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| enhance their knowledge of the biological importance of the Lambusango forest and the management regulations. | |
| Outputs of Component D: | |
| Original | Revised (mid-term) |
| 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 | D1. Grant aid for 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 | D2. Training of Indonesian PhD students in the main aspects of the biological monitoring program to enable them to develop and implement similar monitoring schemes in other districts. |
| | D3. Improve capacity building of forest rangers and PPNS through on the job trainings which are tailored to site-specific circumstances. |
| Outputs of Component E: | |
| Original | Revised (mid-term) |
| E1. Development and implementation of a monitoring strategy with known levels of precision in detecting biodiversity changes in the indicator groups selected. | No change to any. |
| 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. | |
| Outputs of Component F: | |
| Original | Revised (mid-term) |
| F1. Presentation of the results of the | F1. Presentation of the results of the Project to |

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|---|---|
| Lambusango project to key government Ministers in Jakarta and obtaining their support for introducing similar schemes elsewhere in Indonesia | key officials of the Beneficiary in view of 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. | No change. |

Furthermore, the grant proceeds were reallocated as follows:

| Category | Amount of the Grant Allocated (in US\$) | |
|--------------------------------|---|--------------------|
| | Original Allocation | Revised Allocation |
| Goods | 72,200 | 77,081 |
| Works | 82,200 | 0 |
| Consultants' services | 411,250 | 412,477 |
| Workshops and training | 223,650 | 304,376 |
| Incremental operating expenses | 185,700 | 181,066 |
| TOTAL | 975,000 | 975,000 |

C. OUTCOME

1. Relevance of TF Objectives, Design and Implementation

Discuss how the Trust Fund objectives, design and implementation are proved relevant to current global/regional/country priorities and the Bank's sector strategy

The project's objective to conserve globally significant biodiversity in Sulawesi is highly relevant to the Bank's strategies in the region as well as Indonesia's priorities. Indonesia is a country with exceptionally high biodiversity, one of the highest in the world. The importance of sustainable natural resources management, including biodiversity conservation, is recognized in the current *Environment Strategy for the World Bank in the East Asia and Pacific Region* (2005) as well as in the *Indonesian Biodiversity Strategy and Action Plan (IBSAP) 2003-2020*. The current Bank's *Country Partnership Strategy for Indonesia* (FY09-12) also prioritizes environmental sustainability in Indonesia by incorporating it as one of the five thematic areas, which form the core of the World Bank Group's engagement in Indonesia.

The project focuses on the forests (Lambusango Forest) of central Buton (SE Sulawesi), which is situated at the heart of the Wallacea Biogeographical Zone. The global biodiversity significance of Lambusango Forest can be summarized as follows:

- The project 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.
- Lambusango Forest is home to a population of the Buton macaque, a flagship endemic species, and is one of the last strongholds of the ‘Critically Endangered’ Anoa. Sulawesi (‘giant’) palm civet may also be present in the forest.
- 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 Forest boundaries and are currently known only from those locations.
- Tree diversity approaches that of the most diverse limestone forests on mainland Sulawesi where lowland forest is fast disappearing.

The significance of the project area is further recognized through the inclusion in different prioritization schemes; it is situated 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). Besides its global importance, Lambusango Forest is particularly attractive for a biodiversity conservation project as much of its forest still remains intact. The pressures facing the forest are small-scale logging, rattan collection and hunting, rather than forest clearance from oil palm plantations or sawmills that impose enormous threats to forest biodiversity in the rest of the country. On average 1.7 million hectares of Indonesia’s forest have been lost to other uses each year between 1985 and 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.

The project’s objective and site selection is therefore highly relevant. The project was designed to bring the different forest categories (i.e. Nature Reserve, Protection Forest, Production Forest, and Hunting Reserve) that form Lambusango Forest under a single management regime and to address the various threats faced by the forest through a number of different approaches. Some of the activities were changed at mid-term as they did not prove feasible, including the single forest management regime. The activities implemented during the project remained relevant to EAP’s Environment Strategy and Indonesia’s IBSAP 2003-2020, which has the following 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." In line with this vision the activities implemented ranged from local community involvement, biological monitoring, capacity building, awareness raising to forest management.

2. Achievement of TF Development Objective

Discuss and rate the extent to which the Trust Fund development objectives have been met, with linkage to outcome indicators. This includes an assessment as to whether the actual output/deliverables were successfully completed, compared to the expected output, for each activity/component of the Trust Fund. For activities where the output is a report or a dissemination event such as a workshop, conference, training, or study tour, discuss and rate the Quality, Presentation and Dissemination. Applicable reports and/or documents are to be attached to the ICM.

Component A: Local Community Involvement

Expected Outcome: Local communities vested financial interest in the long term survival of the Lambusango forests ensured.

Rating: Satisfactory

Management Objective:

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

Benchmark performance criteria:

1. Total income received from legal forest-based activities (e.g. tourism, rattan collection, exploitation of the production forests) in the Lambusango Forest Management Area (LFMA) is increased by 5% above inflation over the period to 2008.

Although no quantitative data are available to assess how forest-based or forest-related income has changed in LFMA, the project team conducted household income surveys in villages (pooling villages with and without project activities) surrounding Lambusango Forest. As some of the target villages of the project shifted during the lifetime of the project, different villages were interviewed before than after 2007. Between 2007 (n=250) and 2008 (n=254), mean household income increased by 7 to 156% above inflation rates in the villages interviewed; hence all of them surpassed the 5% target. The initial project idea to develop community forest exploitation rights was abandoned. It was replaced by the development of village businesses. In return for project support with business development 17 villages signed conservation contracts, renouncing unsustainable forest exploitation. In the 17 villages, the business developments provided on average an added income of US\$2004 per annum. This income generated through the businesses in villages with conservation contracts can be seen as forest-related income. The income generated through these activities is likely to have contributed largely to the observed increase in total household income between 2007 and 2008.

2. Total number of people receiving their annual income from legal forest-based activities (e.g. tourism, rattan collection, exploitation of the production forests) is increased by 5% over the period to 2008.

No data were collected to measure how the number of individuals receiving income from forest-based activities has changed. However, given that few people were reliant on forest-based or forest-related activities prior to the start of the project, but 17 villages are now receiving income linked to forest conservation through conservation contracts, the criterion is likely to have been met if extended to forest-related activities.

Outputs:

1. Formation of a Community Forest Management Forum (CFMF) as a mature organization able to conduct independent conservation movements.

CFMF was formed and very successfully conducted independent conservation initiatives. Among a number of other things, CFMF successfully opposed (i) the development of oil palm plantations around Lambusango Forest and (ii) the exploitation of nickel in the project area that would have large detrimental environmental and social effects. CFMF also facilitated the formulation of village conservation regulations and developed Muslim preaching material regarding the conservation of the Lambusango Forest. The importance of CFMF was recognized by the local government by (i) inviting the coordinators to attend their regular meetings and (ii) providing financial support for their activities.

2. Development of sustainable livelihoods models on several villages surrounding Lambusango Forest through village conservation contract facilitation schemes.

The project team developed various sustainable livelihood models by first determining which type of business were most feasible in a specific village and by then providing financial and/or technical assistance to implement the village businesses. Seventeen different types of village businesses emerged ranging from seaweed, oyster and orange farming to coconut oil production and coffee export to the UK. The businesses were very successful in providing alternative income to forest resources extraction as they were generally more profitable and demanded less physical labor. In 17 villages, with a total of 7590 households, these businesses were linked to conservation contracts through which all community members committed to stop illegal and unsustainable extraction of forest resources in return for support provided by the project in developing alternative livelihoods. In the 17 villages, the business developments provided on average an added income of US\$2004 per annum.

3. Provision of enabling conditions for better forest management and sustainable rattan extraction.

At the start of the project, the capacity for spatial data collection and analysis was found to be insufficient in Buton District for effective forest management. The project therefore facilitated training in the use of GIS, GPS and remote sensing to government officials, BKSDA and forest rangers. The project further established and equipped a GIS Forum in Buton, which subsequently produced maps relevant to forest management, including forest encroachment as well as forest and village boundaries.

To promote sustainable rattan extraction, the project supported surveys to assess the sustainability of rattan extraction. As outlined under the third benchmark performance criterion of Component E, for reasons beyond the control of Operation Wallacea Ltd. the surveys were not successful in collecting sufficient data. In order to turn rattan collectors into rattan farmers, the project facilitated the development of a rattan nursery and supported a rattan farmer association in one pilot village. This facilitated improved management of rattan resources.

4. Preservation of the forest boundaries at the point at which the project proposals were announced.

Forest boundaries were not explicitly monitored; however, overall forest cover was monitored as part of the first benchmark performance criteria of Component E. The fact that there was no statistically significant change in forest cover provides some evidence that the forest boundary probably remained unchanged.

Component B: Forest Management

Expected Outcome: Effective enforcement and high levels of compliance with agreed management regulations for the Lambusango forests ensured.

Rating: Satisfactory

Management Objective:

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

Benchmark performance criteria:

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 2008.*

Because of difficulties in measuring patrolling efforts, the levels of infringements of rules and regulations was not assessed through Forest Guardian teams (i.e. forest rangers), but through interviews conducted by the CFMF Coordinator asking at least 10 authoritative villagers from every village bordering Lambusango Forest on a monthly basis from 2006 to 2008. The infringements recorded in the interviews were then ground-truthed by the project team through visits to the crime sites, where data on the forest crimes was collected and used for legal prosecution, if applicable. Overall, the total number of detected infringements decreased by 12% (from 138 to 121) between 2006 and 2007, and by 31% (from 121 to 83) between 2007 and 2008.

Outputs:

1. *Strengthen forest crime law enforcement.*

Various project activities contributed towards strengthening forest crime law enforcement in and around Lambusango Forest. This included (i) training in the legal processing of forest crimes and (ii) the establishment of a Forest Crime Unit Lambusango (FCUL) that consists of informants, a response unit and journalist teams to monitor and report forest crimes. The FCUL detected various forest crimes, confiscated equipment and illegal timber and prepared cases for legal prosecution. As a result a number of people were arrested; the trials were still ongoing at project closure.

Component C: Public Awareness

Expected Outcome: Public Awareness amongst communities on Buton Island of the biological importance of the Lambusango forests and their management regulations increased.

Rating: Highly Satisfactory

Management Objective:

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:

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 2008.*

From 2005 to 2008, the knowledge of the communities surrounding LFMA was assessed via questionnaires with regards to the forest-related rules and regulations, including questions on the

protected endemic flora and fauna. The knowledge of those surveyed increased steadily over the lifetime of the project: in 2008 alone, 91% (n=194) of those interviewed knew more about forest rules and regulations than in 2007.

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 2008.

To assess this criterion, a survey was conducted at the start of the project in 2005 (n=45) and in 2008 (n=93) to assess the awareness of the existence of LFMA in the main towns on Buton Island, Bau Bau and Pasarwajo. The number of those who knew about LFMA increased from 33% to 67%; hence, the criterion was met among those interviewed. However, given the small sample size of the survey and the fact that the survey was only conducted in the main two towns, it is not possible to assess with certainty whether the criteria was met amongst the general population of Buton Island. Nevertheless, given that a lot of material about LFMA and its fauna was distributed in various forms around LFMA, it is likely that the level of knowledge did increase considerably at least in southern Buton. This was also confirmed during supervision mission as by the end of the project the communities around Lambusango Forest were very aware of LFMA.

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 2008.

Early on during project preparation it was envisaged to convert the Wanda Wolio house into a field center. However, this activity was dropped prior to the start of project implementation due to budgetary constraints and should have been removed from the performance indicators.

Over the duration of the project, 32 university students from most local universities attended an 8 week training course at Labundo Forest Centre, which is the forestry building in Labundo village. Hence, most local universities, but not most students, used the resources of the centre. Further, learning materials were developed based on the information available in the Labundo Forest Centre and distributed to all schools on Buton. All schools in Buton did therefore indirectly use the resources of the Labundo Forest Centre at some point over the project period.

Outputs:

1. Promote global significance of Lambusango Forest through development of local-specific teaching materials and awareness rising of Lambusango Forest constituents and stakeholders at local and national level.

The project produced a large number of materials for education and awareness raising purposes that were distributed widely among local and/or national stakeholders. These included (i) the production of posters that were distributed across Buton, (ii) the publication of various articles about conservation and Lambusango Forest in different journals and magazines, (iii) hosting regular talk shows on radio, (iv) distribution of villages boards on forest regulations and conservation, (v) the publication of a monthly newsletter, and (vi) the publication of a number of conservation-related books, including two with short stories for children.

Component D: Capacity Building

Expected Outcome: Capacity amongst Indonesian managers and scientists improved to ensure similar schemes could be introduced into their districts.

Rating: Satisfactory

Management Objective:

None established.

Benchmark performance criteria:

None established.

Outputs:

1. Grant aid for undergraduates to gain field experience in biodiversity and socio-economic assessment of the performance of such management schemes.

Over the project period, 24 undergraduate students received grants to attend training and gain field experience in collecting biodiversity and socio-economic data in the Lambusango Forest.

2. Training of Indonesian PhD students in the main aspects of the biological monitoring programs to enable them to develop and implement similar monitoring schemes in other districts.

The project supported three Indonesian students to undertake dissertation-based PhDs in British universities on the topics of (i) the use of bird and butterfly communities as indicators of forest change, (ii) the assessment of forest change using satellite imagery and observational data on selective logging and rattan collection, and (iii) estimation of the Anoa and macaque populations using genetic markers. Their PhDs involved field work at the project site and training in biological monitoring, including with regards to DNA marking and analysis, GIS, remote sensing and advanced biological survey techniques. By the end of the project, the PhD students were well equipped to replicate such monitoring schemes in other districts.

3. Improve capacity building of forest rangers and PPNS through on the job trainings which are tailored to site-specific circumstances.

A number of training workshops were provided to forest rangers and PPNS (crime investigators). One of the priority areas was the legal processing of forest crimes as the project team identified a large need for capacity building and knowledge building. This was deemed important as prosecution of offenders was delayed due to the lack of evidence and expert testimony. Twelve forest rangers and PPNS were therefore given training on forest law and regulations, gathering evidence and processing of forest crimes. They were also trained in the use of GPS and GIS software to make monitoring more efficient and enable forest rangers to collect geographic information on forest crimes. This training increased their competence in the judicial processing of forest crimes and resulted in several prosecutions.

Component E: Adaptive Management and Monitoring

Expected Outcome: Abundance of key biodiversity species and groups increases through success of the adaptively-managed program.

Rating: Unsatisfactory

1. Management Objective:

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

Benchmark performance criteria:

1. To ensure forest coverage of the LFMA does not decline by 2008.

Changes in forest coverage was assessed through satellite imagery; however, due to high cloud cover images from 2004, 2006 and 2008 only could be compared, and even those were partially covered by clouds. The comparison of the images did show some loss of forest cover exceeding the amount of forest regeneration. However, given the uncertainty associated with potentially mis-classifying clouds as forest loss, the implied change in forest cover is not statistically significant.

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 2008.

Anthropogenic impacts include a wide range of activities, such as clear felling, selective logging, rattan collection and other forms of human disturbances. Clear felling is covered by the first benchmark performance criteria of this component. The comparison of the satellite images could not reliably distinguish between selectively logged and unlogged areas. However, closer investigation of 11 areas identified as 'hotspots' of forest change in and around conservation forest based in significant variation of NDVI (normalized difference vegetation index), was carried out. This work identified two sites of concern where forest cover seemed to have decreased over the project period.

The number of forest trails around six study sites was recorded each year as a proxy for human usage of the surrounding forest. The number of forest trails increased in all sites from 2004 to 2005, indicating an increase human usage. However, compared to 2004/2005 the numbers of trails decreased in the 2006/2008 period. The two sites (Wabalamba and Wahalaka) with highest trail numbers are important areas for rattan collection and selective logging.

Overall, there was evidence of human impact, however there was no clear evidence that this impact was significant.

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

Surveys of rattan cans were conducted to assess the sustainability of the extraction. However, it was not possible to reliably measure rattan extraction rates because research permits were not granted for the conservation forest in 2007 and because of limited GPS accuracy in the forest. Beyond these limitations, the survey did not find signs of unsustainable rattan extraction between 2006 and 2007 (n=23) for three out of the four main commercial species present (for these species growth exceeded reduction due to harvesting). For one rattan species (*Calamus zollingeri*), total extraction rate exceeded growth rate.

2. Management Objective:

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

Benchmark performance criteria:

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 2008.

Bird surveys were conducted in the conservation and limited production forest yearly from 2005

and 2008 using the Variable Circular Plot methods (point counts with distance estimates to each contact) at six node camps with four transects each. This survey did not indicate any significant difference in bird community between the least disturbed and the more disturbed habitats from 2005 to 2007; hence, the criterion could not be assessed as set out initially. Overall diversity indices showed no significant changes over the three year period. The project team did however, find a decline in density of most of the 19 most common bird species regardless of whether they were associated with disturbed or less-disturbed forest. It is not clear whether the reason for this is anthropogenic or due to other factors.

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 2008.

Studies of the herpetofauna did not result in identifying species clearly associated with levels of forest disturbance. No data are therefore available for this criterion.

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 2008.

Operation Wallacea Ltd. was not able to provide the extensive surveying effort necessary to assess the diversity of insectivorous bat species indicative of undisturbed forest; hence, no data are available for this criterion as did not prove cost-effective.

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 2008.

Monitoring surveys of butterfly species were conducted in 2006 and 2007 through a combination of point counts and transect walks. At the disturbance levels present in Lambusango Forest, the data analysis showed that butterfly communities were very similar between the least and the more disturbed forest areas. Overall diversity of the main butterfly families present did not change significantly between 2006 and 2007 (in both years 85 species were recorded at the three survey sites).

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 2008.

The executing agency was not successful in attracting the relevant experts to assess this criterion.

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.

At the disturbance levels present in Lambusango Forest, the herpetofauna did not prove to be a good indicator group to detect forest disturbance. Collecting data on insectivorous bats was not cost-effective. The studies found that both butterfly and bird communities were similar in the least disturbed forest in comparison to the more disturbed forest. However, some difference emerged if birds were grouped into feeding guilds: frugivores (fruit eating birds) were more abundant in less disturbed forest, whereas insectivores (insect eating birds) were more numerous in more disturbed forest. Among the groups studied, birds were therefore the best indicator of anthropogenic impacts on forest. Given that forest disturbance were relatively low in Lambusango Forest, the effect of larger forest disturbance on species groups is likely to be more

severe.

3. Management Objective:

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

Benchmark performance criteria:

1. Ensuring the population of the Buton macaque shows no long term trend of decline over the period to 2008.

Macaque surveys were conducted in 2005 and 2008 along the four transects in each of the six node camps. The Lambusango population seems to be stable (42 and 44 individuals were recorded in 2005 and 2008, respectively), though there are uncertainties over actual population size because of difficulties in assessing average group size. The data collected over two years are insufficient to discern long-term trends.

2. Ensuring the population of the new tarsier species shows no long term trend of decline over the period to 2008.

Initial data collection for this criterion showed that tarsier species were more abundant in disturbed than in less disturbed forest. The tarsier species were therefore not a good measure for undisturbed forest and no further data were collected to assess this criterion.

3. Ensuring the population of anoa shows no long term trend of decline over the period to 2008.

The track data collected from 2005 to 2008 were used to determine occupancy and detection probabilities. The data suggested that the Anoa distribution in Lambusango forest is stable; however, population levels declined during the project period.

Anoa hunting was assessed through a survey carried out in 2007, during which 173 respondents from 43 villages were interviewed about anoa consumption and hunting. Eleven respondents reported to have been hunting anoa between 2004 and 2006. The survey also recorded 24 hunted anoa over this same period. A VORTEX simulation model showed that these offtake levels are unsustainable; only a complete hunting ban would allow the population to reach again the carrying capacity of the habitat. These findings were conveyed to the IUCN Anoa working group and brought to the attention of the *Bupati* and CFMF.

4. Ensuring the population of the Sulawesi wild pig shows no long term trend of decline over the period to 2008.

The track data collected from 2005 to 2008 suggest that the population and distribution of wild pigs seems to be stable in Lambusango.

Outputs:

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

This was achieved through the establishment of the above performance benchmark criteria of the second management objective under this component.

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

Such a monitoring scheme was established and implemented through the above performance benchmark criteria of the third management objective under this component.

3. 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.

Socio-economic changes were monitored through surveys conducted in and around Lambusango Forest as outlined in the performance benchmark criteria under Component C. As the surveys were not carried out consistently, there are limitations to the conclusions that can be drawn from the data. Furthermore, it was hard to attribute the findings conclusively to the project.

4. 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.

This was not completed.

Component F: Promotion of Approach

Expected Outcome: Other Districts adopt similar management strategies for their locally and nationally controlled forests.

Rating: Unsatisfactory

Management Objective:

None established.

Benchmark performance criteria:

None established.

Outputs:

1. Presentation of the results of the Project to key officials of the Beneficiary in view of obtaining their support for introducing similar schemes elsewhere in Indonesia.

The project's results were presented to various key officials of the Beneficiary, including at a roundtable meeting at the Ministry of Forestry. A similar presentation was held by the Project Director in Makassar attended by the Heads of BKSDA and National Parks of Sulawesi.

2. 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.

The lessons learned and achievements of the project were distributed throughout Indonesia. Various magazine articles were published reaching a wide audience, including articles sent to all East Indonesian Districts via BaKTI News (i) on the financial and conservation benefits of the certification of fair-trade cashew to local communities and (ii) on the overall outcomes and conservation benefits of the projects. The articles indirectly conveyed the benefits the local government gained from the project, namely pride about their forest and the will to conserve it. Similar articles were published in Tempo Magazine and the Indonesian Nature Conservation Newsletter, and were sent via email to the West Indonesian Districts. A step-by-step guide on

how similar schemes could be introduced into other Districts was not produced. It is however, questionable whether similar schemes can be set up without any start-up financing.

Trust Fund Development Objective:

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

With reference to its Overall Development Objective and the above discussion it is concluded that that the project successfully developed an innovative local management regime to conserve the existing biodiversity by (i) introducing the concept “Lambusango Forest”, (ii) successfully putting in place the Community Forest Management Forum conducting conservation initiatives independently, and (iii) working with the local communities to develop alternative livelihoods, thereby reducing the pressure on the resources of Lambusango Forest. Prior to the project the different forest categories (i.e. Production Forest, Limited Production Forest, Protected Forest, Wildlife Reserve and Nature Reserve) were regarded and managed as independent entities. Through the project team’s efforts these entities were recognized as one unit (Lambusango Forest) by the local communities and local governments. While the necessary elements for conservation were put in place and field supervision documented success in many areas, the monitoring and evaluation system of the various indicators was not as successful as hoped, in part because research permits were not granted in one year due to corruption. It is therefore not possible to unequivocally conclude whether the globally significant biodiversity was conserved through the project’s efforts.

Furthermore, the project team developed partnerships with a number of national and local conservation organizations and initiatives. Information about the project outcomes and lessons learned were exchanged; however, no example is known to date where a similar conservation approach was adopted as a result of this project. The latter is not surprising given the time it typically takes for project conception, preparation and start of implementation.

3. Efficiency

Describe the degree to which the Trust Fund activities have been efficiently implemented, in terms of their associated costs, implementation times and economic and financial returns.

Trust Fund activities were efficiently implemented in terms of associated costs by the executing agency, the Operation Wallacea Trust. The activities included small grants to the local community for businesses in the form of revolving funds, which maximized the use and financial return of these funds. The start of the project was slower than expected due to several delays, including in the delivery of the TF funds and a slow project start-up. Following the start-up phase the implementation times of the activities proceeded efficiently.

4. Development Impacts, including those that are Unintended/Unrelated to TF Objectives

Discuss all other outcomes and impacts achieved under the Trust Fund (including unintended, positive and negative). Where relevant, discuss how the Trust Fund has contributed to the development/strengthening of relevant institutions, mobilization of other resources, knowledge exchange, recipient policy/program implementation, replicable best practices, introduction of new products, New Forms of Cooperation with Other Development Institutions/NGOs, etc., which would not have been achieved in the absence of the Trust Fund.

The activities and outcomes of the project reached beyond biodiversity conservation by using forest management as a vehicle for contributing towards sustainable economic development of the local communities. In doing so the project applied a very bottom-up oriented approach to conservation and development. It developed and strengthened various institutions and organizations, including in particular the CFMF and various community groups and associations. The contribution of the CFMC was recognized by the local government, who as a result allocated funds for some of their activities, thereby mobilizing additional funds beyond the co-financing expected at the start of implementation. The CFMF was further invited to government meetings and therefore lend voice to the local communities.

The lessons learned from this project further contributed towards conservation beyond Indonesia and the East Asia region. The executing agency, Operation Wallacea, is present in a number of other countries. As a result Operation Wallacea has applied some of the lessons learned on monitoring to project sites in Honduras (Cusuco National Park) and South Africa (Kruger National Park). The Lambusango project team was also in discussion with the Peace Park Foundation, which established 14 transboundary parks in southern Africa, about the lessons learned on species indicators for measuring biodiversity trends.

5. Overall TF Outcome

Justification for overall outcome rating, taking into account the Trust Fund's relevance, achievement of each TF development objectives, efficiency and development impact. (Rating Scale would be consistent with the six point scale used in ISR/ICR: Highly Satisfactory (HS), Satisfactory (S), Moderately Satisfactory (MS), Moderately Unsatisfactory (MU), Unsatisfactory (U) and Highly Unsatisfactory (HU))

Provide results framework or indicators provided by the M&E system (including baseline and actual). See above under C.3

Overall, the TF outcome is rated as Satisfactory. The justification for this rating is the successful completion of the majority of activities and most of the expected outputs, although the ambitious monitoring system put in place was not sufficient to report on a number of the benchmark performance criteria.

D. Risk to Development Outcome

1. Follow-On Results and/or Investment Activities

Identify and provide a description of the role played by this TF that led to those follow-up activities or investments checked below. (Check all that are applicable):

Activity/Investment:

Recipient/Other Investment; Grant Project/Program; Bank Project;
 IFC Financial Project/Activity, Other (explain)

The local government allocated funding in 2008 (Rp. 40 million) and 2009 (Rp. 60 million) to support the activities of the CFMF and the GIS Forum. Both forums were established through this TF and have proven very successful.

2. Replicability

Describe and rate the extent to which the Trust Fund has generated useful lessons and methodology that are replicable in other sectors and/or regions.

The conservation issues faced in the project area are the same as those experienced in forests throughout Indonesia and around the globe; hence, the achievements and findings of this project are highly relevant to solving conservation problems globally. In particular, the business and alternative livelihoods models that were developed through this project and linked to village conservation contracts were innovative, bottom-up driven and successful, and could be replicated elsewhere. The same applies to the CFMF and the Forest Crime Unit Lambusango. For these reasons the extent to which the TF generated useful lessons and methodology that are replicable is rated as Satisfactory.

3. Overall Risk to Development Outcome

Rate how likely, and for how long, the outcomes will be sustained after completion of Trust Fund activities, and the likelihood that some changes may occur that are detrimental to the achievement of the TF development objectives. These may include factors such as technical, financial, economic, social, political, environmental, government ownership/commitment, other stakeholder ownership, institutional support, governance and natural disasters exposure. (Rating Scale would be consistent with the four point scale used in ISR/ICR: Negligible to Low (L), Moderate (M), Significant (S) and High (H)).

The overall likelihood that the project outcomes will be sustained is Moderate. The project made an important contribution towards increasing the knowledge of the local community about the forest, its importance and values. The level of ownership of the local community towards the village businesses, the conservation contracts and the

CFMF was very high. This was aided by the CFMF's Chairman being a popular, charismatic, retired civil servant with political aspirations; it will be difficult (though by no means impossible) to replace him when his term in office is completed. The local government recognized the benefits of the CFMF and the GIS Forum by allocating funds towards their activities during the last 6 months of the project and after project closure. However, these funds are inadequate to sustain the yearly activities of the CFMF or of the GIS Forum, and their fate is therefore uncertain in the long-term. The same applies to the Forest Crime Unit Lambusango. The government also increased the budget from 17 to 45 forest patrols yearly in Lambusango Forest. Although a very good outcome, this budget is still not sufficient. Overall, financing the protection of Lambusango Forest remains therefore a concern.

There are also technical and economic factors that might put the sustained running and further development of the village businesses at risk. As market prices for various products vary, some of the village business may become more or less profitable. For example, during the project the prices of ginger dropped markedly, such that the business development based on ginger was not successful in one of the villages. Furthermore, direct export of the village products (such as coffee and cashew) beyond local markets is a lengthy and complicated process. It is questionable whether these steps can be mastered by the local communities without outside support or a sympathetic entrepreneur.

Some of the risks will be mitigated by the sustained presence and long term commitment of the executing agency, Operation Wallacea Trust, and Operation Wallacea Ltd. The latter was involved in the area long before the project started, bringing scientists and students to Lambusango Forest to conduct biological research. The fact that the annual biodiversity monitoring program itself is run without external support by a national NGO, Lawana Ecotone, which comprises mainly local staff, raises the ownership by the local community and contributes towards the sustainability of the project outcomes. These activities will continue and will provide a platform for sustained dialogue and involvement with the local communities and government in order to contribute towards the long-term conservation of Lambusango Forest.

E. PERFORMANCE

1. Bank

Rate and justify rating on how well the Bank carried out its specific responsibilities assumed under the Trust Fund. If the TF financed Secretariat functions, describe how well the Secretariat carried out its roles and responsibilities, and its exit strategy, if any. If the Bank is executing Recipient work on behalf of Recipient, describe how well the rationale for Bank execution (as specified in the IBTF) was realized. (Rating Scale would be consistent with the six point scale used in ISR/ICR: Highly Satisfactory (HS), Satisfactory (S), Moderately Satisfactory (MS), Moderately Unsatisfactory (MU), Unsatisfactory (U) and Highly Unsatisfactory (HU))

The Bank's performance is rated as Satisfactory. The Bank team was in regular email exchange with the project team and carried out yearly supervision missions to the project site.

2. Recipient (for Recipient-executed TFs only)

Rate and justify rating on how well the different tasks that were expected from the Recipient under this Trust Fund were carried out. (Rating Scale would be consistent with the six point scale used in ISR/ICR: Highly Satisfactory (HS), Satisfactory (S), Moderately Satisfactory (MS), Moderately Unsatisfactory (MU), Unsatisfactory (U) and Highly Unsatisfactory (HU))

The Recipient's performance is rated as Satisfactory. Overall the staffing, procurement, financial management, office management, relations with the government and local communities were handled well. The monitoring and evaluation of the indicators was not under the control of the Recipient, but conducted by Operation Wallacea Ltd.

F. LESSONS LEARNED / RECOMMENDATIONS

Describe the most significant positive and negative lessons learned from the success or failure of the grant activity and, as appropriate, make constructive recommendations for each stakeholder involved (Donor/Bank/Recipient/Development Community)—based on the assumption these stakeholders might decide to undertake a similar activity at a future time.

The project developed a number of successful conservation strategies, namely the CFMF, the Forest Unit Lambusango and the development of village businesses linked to conservation contracts. The village businesses showcase how local development can be linked to sustainable forest management. Through these activities the project team also employed a highly bottom-up approach by successfully involving the local community. This and the extensive awareness program contributed towards a strong ownership by the local communities, who saw the project team as a partner for local development. Through developing and strengthening community associations, in particular CFMF, the project also gave a voice to the community. The CFMF acted as a platform for lobbying the government to oppose oil palm plantations and mining in and around Lambusango Forest.

The support of the local government was further very important in the successful implementation of different project activities. At least in part as a result of the project, the *Bupati* decided not to issue any new wood collection permits, allocated funds to the CFMF and the GIS Forum and threatened to dismiss the sub-district heads if forest protection was not enforced.

The monitoring system was the weaker part of the project. The performance indicators agreed on at the outset of the project were very ambitious. During project implementation

some of the indicators proved less appropriate than initially envisaged and it was not feasible to collect data for others. The lack of consistency, as those who collected the data for a specific indicator changed between years, further complicated the comparison of the datasets between years for some of the indicators. For future projects, it would seem better to have the same organization conduct both the monitoring and implementation of the other project activities, rather than two different organizations as was the case in this project. Having one organization would ease supervising the monitoring activities during missions, such that indicators can be changed early on in the project if they do not prove as appropriate as initially thought.

The biological monitoring scheme also produced lessons on what methods and species groups were most cost-effective and relevant for protected area and forest management. These lessons were written up in a forest monitoring report. The latter discusses the headline indicators of forest quality and makes recommendation to managers.

G. ICM PROCESSING AND COMMENTS

1. Preparation

TTL at Approval: Tony Whitten

TTL at Closing: Tony Whitten

Comment of TTL at Closing:

Prepared by (if other than TTL): Drafted by Judith Schleicher

Date Submitted to Approving Manager:

2. Approval

Manager:

Date Approved by Manager:

Manager's Comment:

3. TFO Evaluation of ICM Quality

TFO Reviewer:

TFO Rating on the Quality of ICM (*Satisfactory or Unsatisfactory*):

Comment and Justification for Rating Given by TFO:

