

List of Abbreviation and Acronym

| | |
|-----------|--|
| APJMB | <i>Asosiasi Petani Jambu Mete Lambusango Buton</i> (Lambusango Cashews Farmer Association) |
| APJMB | <i>Asosiasi Petani Jambu Mete Barangka Buton</i> (Barabgka Cashews Farmer Association) |
| APJMM | <i>Asosiasi Petani Jambu Mete Matanauwe</i> (Matanauwe Cashews Farmer Association) |
| BCFA | Barangka Cashews Farmer Association |
| BDFO | Buton District Forestry Office |
| BIPHUT | <u>B</u> adan <u>I</u> nventarisasi dan <u>P</u> emetaan <u>H</u> utan (Agency for Forest Inventory and Mapping) |
| BKSDA | <u>B</u> alai <u>K</u> onservasi <u>S</u> umber <u>D</u> aya <u>A</u> lam (Natural Resource Conservation Centre) |
| BPD | <u>B</u> adan <u>P</u> erwakilan <u>D</u> esa, Village Parliament |
| BRI | Bank Rakyat Indonesia |
| Camat | Head of sub-district |
| CARE | Canadian based NGO |
| CFMP | Community Forestry Management Forum |
| COREMAP | Coral Reef Rehabilitation and Management Project |
| Danramil | Head of sub-district army |
| DFID | Department for International Development |
| DPRD | <u>D</u> ewan <u>P</u> erwakilan <u>R</u> akyat <u>D</u> aerah (District Parliament) |
| FCUL | Forest Crime Unit Lambusango |
| FGD | Focus Group Discussion |
| FLO | Fairtrade Labelling Organization |
| Gerhan | Gerakan Rehabilitasi Hutan dan Lahan, National wide government project for land rehabilitation and reforestation |
| GIS | Geo-Information System |
| G-KDP | Green Kecamatan Development Program |
| GPS | Geo Positioning System |
| ICRAF | World Agroforestry Center |
| JC | Just Cashews |
| Kapolsek | Head of sub-district police officer |
| Kecamatan | Sub-district |
| KRPH | <u>K</u> epala <u>R</u> esort <u>P</u> olisi <u>H</u> utan (<i>Head of Forest Ranger at Kecamatan Level</i>) |
| KT | Kalende Tribe |
| KUHP | Kitab Undang-Undang Hukum Pidana/criminal law |
| LEAD | Legal Empowerment & Assistance for the Disadvantaged |
| LED | <u>L</u> embaga <u>E</u> konomi <u>D</u> usun/sub-village cooperative |
| LFCP | <u>L</u> ambusango <u>F</u> orest <u>C</u> onservation <u>P</u> roject |
| LK | Laporan Kejadian (crime evidence report) |
| LPEMD | <u>L</u> embaga <u>P</u> emberdayaan <u>E</u> konomi <u>M</u> asyarakat <u>D</u> esa/village cooperative |
| LSM | Lembaga Swadaya Masyarakat, non-government organization (NGO) or civil service organization (CSO) |
| MCFA | Matanauwe Cashews Farmer Association |
| Muspika | <u>M</u> usyawaharah <u>P</u> impinan <u>K</u> ecamatan (Leaders Forum at sub-district level, composed of Camat, |

| | |
|---------------|---|
| | Kapolsek and Danramil) |
| NGO | See LSM |
| OFA | Oyster Farmer Association |
| Opwall | Operation Wallacea Ltd |
| OWT | Operation Wallacea Trust |
| PC | Producer Certification |
| Perdes | <i>Peraturan Desa</i> , village regulation |
| PKI | Partai Komunis Indonesia/Indonesian Communist Party |
| PM | Project Manager |
| Polres | District Police |
| Polres | Police office at District level |
| Polsek | Police Office at Kecamatan level |
| PPKAN | Pekan Penghijauan dan Konservasi Alam Nasional |
| PPNS | Penyidik Pegawai Negeri Sipil (Civil Police Investigator) |
| PT HBI | PT Hijau Bumi Indonesia |
| PT SSN | PT Supa Surya Niaga |
| PT SSN | PT Supa Surya Niaga |
| Rp | IDR |
| RS | Remote Sensing |
| SKSHH | <u>S</u> urat <u>K</u> eterangan <u>S</u> ahnya <u>H</u> asil <u>H</u> utan (legal document to transport forest products) |
| SOP | Standard Operating Procedure |
| TBI | Tropenbos International Indonesia |
| TIME | Tourism Indonesia Mart & Expo |
| ToT | Training of Trainer |
| TTL | <u>T</u> ask <u>T</u> eam <u>L</u> eaders |
| UNDP | United Nation Development Program |
| UPTD | <i>Unit Pelaksana Teknis Daerah</i> , technical implementing unit of district agency at sub-district level |
| USD | US Dollar |
| VCEP | Village Conservation Extension Program |
| WBOJ | <u>W</u> orld <u>B</u> ank <u>O</u> ffice <u>J</u> akarta |
| WCP | Wildlife Conservation Products |

Lambusango Forest Conservation Project, South East Sulawesi, Indonesia

Progress, Achievements, Lessons Learned and Outlook (June 2005 – February 2008)

Table of Contents

| | Page | |
|------------|---|-----------|
| I | Introduction | 7 |
| II. | Progress, Achievements, Lessons Learned and Outlook | 9 |
| | A.1. Formation of a Community Forest Management Forum (CFMP) as a mature organization able to conduct independent conservation movements | 9 |
| | A.1.1. Improving Forest Governance Policy | 10 |
| | A.1.1.1. Monthly regular meeting at Kecamatan | 10 |
| | A.1.1.2. Organized meetings with District Parliament (DPRD) and government | 10 |
| | A.1.1.3. Forum refused the development of oil palm plantation in Kecamatan Lasalimu | 10 |
| | A.1.2. Changing community attitude toward sustainable forest resource Management | 11 |
| | A.1.2.1. Forum developed conservation campaign boards | 11 |
| | A.1.2.2. Forum facilitated the development of village conservation regulation | 11 |
| | A.1.2.3. Forum developed faith based conservation campaign | 13 |
| | A.1.2.4. Forum organized planting of <i>Ficus sp (Beringin)</i> in Kakenauwe Village | 13 |
| | A.1.2.5. Forum facilitated the discussion with Wabou community to control forest encroachment | 13 |
| | A.1.2.6 Forum developed Village Conservation Extension Unit | 16 |
| | A.1.3. Strengthening community based forest protection | 16 |
| | A.1.3.1. Forum paved the way in solving the root of illegal logging problem in Wining Area | 16 |
| | A.1.3.2. Forum facilitated alternative income sources in Wagari | 16 |
| | A.1.3.3. Forum assisted coconut oil home industry in Kancinaa | 18 |
| | A.1.3.4. Forum organized training on organic fertilizer and pesticide | 19 |
| | A.1.3.5. Forum developed community based forest protection | 20 |
| | A.1.4. Discussion: Outlook | 20 |
| | A.2. Development of sustainable livelihoods models on several villages surrounding Lambusango Forest through village conservation contract facilitation scheme | 23 |
| | A.2.1. Village Business Development | 24 |
| | A.2.1.1. Promote Ginger farming in Lambusango | 24 |
| | A.2.1.2. Intensified seasonal crops | 26 |
| | A.2.1.3. Control wild pig (<i>Sus scrofa</i>) population | 26 |
| | A.2.1.4. Facilitated Fairtrade Certification on Barangka and Matanauwe Villages | 26 |

| | |
|---|-----------|
| A.2.1.5. Facilitated Cashews Export to UK (WCP scheme) | 30 |
| A.2.1.6. Developed cooperation with PT. Supa Surya Niaga | 31 |
| A.2.1.7. Training on Cashew Processing for APJLMB | 33 |
| A.2.1.8. Development of orange plantation in Lasembangi Village | 33 |
| A.2.1.9. Expanding orange plantation in Sukamaju and Wolowa Baru Villages | 35 |
| A.2.1.10. Strengthened oyster farming in Watumotobe Village | 36 |
| A.2.1.11. Selling 'Anoa' coffee to UK market (WCP) | 38 |
| A.2.1.12. Developed Tree Nursery Model in Wajah Jaya | 39 |
| A.2.1.13. Promoting Lambusango Ecotourism Market | 39 |
| A.2.1.13.1. Amartia Society/Angsa Indonesia Tour and Travel (Amartia) | 39 |
| A.2.1.13.2. Contract to Bonny Syafei for Marketing Lambusango Forest eco-Tourism Product in Bali and surrounding areas. | 40 |
| A.2.1.13.3. Training on home-stay management for Kakenauwe villagers | 41 |
| A.2.1.13.4. Facilitated field work of 120 undergraduate students and 2 foreign tourist | 41 |
| A.2.2. Discussion | 42 |
| A.2.2.1. Lesson learned | |
| A.2.2.1.1. Relation between business development and village conservation contract | 42 |
| A.2.2.1.2 Strategy to Develop Village Business | 43 |
| A.2.2.2 Outlook | 45 |
| A.2.2.2.1. Cashews | 45 |
| A.2.2.2.2. Coffee | 46 |
| A.2.2.2.3. Ginger | 46 |
| A.2.2.2.4. Seaweed | 46 |
| A.2.2.2.5. Orange and other fruits | 47 |
| A.2.2.2.6. Oyster | 47 |
| A.2.2.2.7. Linking associations with Bank Credit | 47 |
| A3. Provision of enabling conditions for better forest management and sustainable rattan extraction | 49 |
| A.3.1. Provision of enabling conditions for better forest management | 49 |
| A.3.1.1. Workshop on spatial planning, transmigration, and mining | 49 |
| A.3.1.2. Sponsored local government officials to attend spatial planning training | 51 |
| A.3.1.3. GIS in service training | 51 |
| A.3.1.4. Monitoring forest destruction hotspots | 52 |
| A.3.1.5. Organized Basic Geo-information System and Remote Sensing Training | 52 |
| A.3.1.6. Organized the Development of GIS Forum | 53 |
| A.3.1.7. Launching GIS Forum | 53 |
| A.3.1.8. Organized Geo Positioning System (GPS) Training for forest rangers | 55 |
| A.3.2. Provision of enabling conditions for sustainable rattan extraction | 55 |
| A.3.2.1. Rattan Inventory | 55 |
| A.3.2.1.1. Rattan standing stock in Lambusango Forest | 56 |
| A.3.2.1.2. Socio-economic rattan collectors | 56 |
| A.3.2.1.2. Procedure to obtain legal rattan extraction permits | 59 |
| A.3.3. Discussion | 59 |
| A4. Preservation of the forest boundaries at the point at which the project proposals were announced | 62 |

| | | |
|---|--|-----------|
| | | |
| B1. Strengthen forest crime law enforcement | | 62 |
| | | |
| B.1.1. Forest Guardians Recruitment | | 63 |
| B.1.2. Regular Patrols and Road Investigation | | 64 |
| B.1.3. Inclusion of GIS/RS Analysis to support Groundtruthing | | 65 |
| B.1.4. Involved Local NGO | | 66 |
| B.1.5. Some Important Achievements | | 66 |
| | | |
| B.1.2. Discussion: Lessons learned and Outlook | | 62 |
| | | |
| C.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 | | 72 |
| | | 72 |
| C.1.1. Development and Distribution of Personal Organizers | | 72 |
| C.1.2. Development and distribution of three Posters | | 72 |
| C.1.3. Development and distribution of 'Lambusango Lestari' Newsletter | | 72 |
| C.1.4. Publication of two serial Children's short story Books | | 73 |
| C.1.5. Developed and Installed Wall magazine in 53 Secondary Schools | | 73 |
| C.1.6. Development and distribution of Biodiversity and Conservation Handbook | | 73 |
| C.1.7. Monthly Talk show in Radio Lawero | | 74 |
| C.1.8. Conservation Essay Competition for Senior High School | | 74 |
| C.1.9. Installed Conservation campaign boards | | 75 |
| C.1.10. Developed and installed wildlife conservation campaign boards | | 75 |
| C.1.11. Developed education materials to support local content curriculum | | 75 |
| C.1.12. Publication of Green Nationalism Book | | 76 |
| | | |
| C.1.2.3. Discussion: Achievements | | 76 |
| | | |
| D.1. Grant aid for undergraduates to gain field experience in biodiversity and socio-economic assessment of the performance of such management schemes | | 78 |
| | | |
| 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 | | 79 |
| | | |
| D.3. Improved Capacity Buildings of Forest Rangers and PPNS | | 80 |
| | | |
| F.1. Promotion | | 81 |
| | | |
| References | | 82 |

List of Tables

| | | Page |
|---------|---|-------------|
| Table 1 | Ginger initiative planting in Lambusango: planting material assistant in 2005 and harvested gingers in 2006 | 25 |
| Table 2 | Village Business Development Initiative and Village Conservation Contract | 44 |
| Table 3 | GIS/RS Training Participants | 53 |
| Table 4 | Survey sites and numbers of transects/plots | 55 |
| Table 5 | Number and distribution of respondents | 57 |
| Table 6 | Summary of rattan name and dimension | 58 |
| Table 7 | PhD students, universities, promoters and associated cost | 79 |

List of Figures

| | | Page |
|----------|---|-------------|
| Figure 1 | Ginger initiative planting in Lambusango: planting material assistant in 2005 and harvested gingers in 2006 | 18 |
| Figure 2 | The dynamic of gingers production and price (2004-2008) | 25 |
| Figure 3 | Producer Certification of APJMM | 32 |
| Figure 4 | Expected additional income from orange plantation in Lasembangi Village | 34 |
| Figure 5 | Organization and principal working procedures of GIS Forum | 54 |
| Figure 6 | Transects and sample plots design | 57 |
| Figure 7 | Percentage of dominant species | 58 |
| Figure 8 | Income sources comparison, between rattan collection and rainfed farming | 59 |
| Figure 9 | Procedure for rattan extraction lenience scheme | 61 |

List of Boxes

| | | Page |
|---------------|--|-------------|
| Box 1 | Procedure on <i>Perdes</i> Facilitation as implemented by Forum | 12 |
| Box 2 | History of Wabou Hamlet | 13 |
| Box 3 | Seaweed Farming in Wagari Village | 18 |
| Box 4 | LSM OWT Activities After Completion of LFCP | 22 |
| Box 5 | Sukarno, a Pioneer Farmer from Lasembangi | 35 |
| Box 6 | Example of Village Conservation Commitment/Contract | 43 |
| Box 7 | Ir. Syafei Kahar vision on LFCP | 49 |
| Box 8 | Forest Crimes Unit Lambusango (FCUL) | 63 |
| Box 9 | Mining concession entered Lambusango Wildlife Sanctuary Area (Bau-Bau, Kendari Pos, February 22, 2007) | 67 |
| Box 10 | The Buton Regent Pro PT Yuman Jaya Tama (Pasarwajo, Kendari Pos, February 25, 2007) | 68 |
| Box 11 | Lambusango encroachers put in jail (Pasarwajo, 28 February 2008, Kendari Pos) | 69 |

Appendices

| | | Page |
|----------------|---|-------------|
| Annex A | Revised Project Description | 83 |
| Annex B | Revised Project Outputs | 84 |
| Annex C | Meeting Notes (PM and TTL) | 88 |
| Annex D | Meeting Notes (PM, TTL and BKSDA) | 90 |
| Annex E | Undergraduates and secondary school students receiving grants | 91 |
| | | |

I. Introduction

Operation Wallacea Trust (OWT), with World Bank as implementing agency, received USD 975,000 medium scale *Global Environment Facility (GEF)* fund to run *Lambusango Forest Conservation Project (LFCP, GEF-TF 054815)*. The original life time of the project was between September 1, 2004 and January 31, 2008. The grant agreement was signed by the World Bank Indonesia Country Director (*Andrew Steer*) on March 29, 2005 and countersigned by OWT chairman (*Rt. Hon. Kenneth Clarke QC, MP*) on April 10, 2005. Due to delayed first fund disbursement, the project was only effectively started since June 1, 2005.

So far, the project has received four times World Bank supervision missions. First was conducted by *Mr. Sumaryo Soemardjo* (WBOJ, consultant) and *Bryony Morgan* (Junior Professional Associate, EASEN) on November 7 – 12, 2005. Second supervision with special emphasis on financial management and procurement was conducted by *Mrs Novira K. Asra* (WBOJ, FMR Specialist) and *Mr Ilham Abla* (WBOJ, procurement specialist) on August 23-25, 2006. The third supervision, which was also called as mid-term reviews, was conducted by *Mr. Sumaryo Soemardjo* and *Bryony Morgan* on December 3 – 10, 2006, and added by the visit of Task Team Leader (TTL) *Dr. Tony Whitten* on February 15-19, 2007. Until third supervisions, the project performance has been rated as satisfactory.

As stated in the covering letter of the aide-memoire dated January 29, 2006, *'The mission was pleased to find that the project team had themselves taken a critical review of project progress, and had identified areas where implementation had been problematic, and made suggestions for potential improvements. The mission found that project implementation until the half of project life to be satisfactory, and commend the project team in Buton for their enthusiasm and professionalism. However, as part of the mid-term review, the mission advised to adjust the project design and budgetary allocations in order to obtain the maximum conservation outcomes possible over the lifetime of the project. This should be finalized over the next few weeks following further detailed discussion between the Bank's Task Team and Operation Wallacea Trust staff on possible reallocations of grant proceeds and possible project extension so that an amendment to the Grant Agreement can be prepared.'*

As a follow up of mid-term reviews recommendation supported with discussion with TTL and the Head of BKSDA (see *Annex C and D*), on March 6, 2007 the PM sent a document entitled *'Proposed Adjustment on Project Design and Budgetary Allocation'* to OWT, TTL and *Bryony Morgan*, the document was prepared for Trustee Meeting held in London on March 12, 2007. Based on the summary of above mentioned document, on August 2007, OWT submitted undated letter to the Bank requesting amendments to the project description, an extension of the closing date and grant reallocation. In response to OWT request, on September 19, 2007 the Bank issued amendment to Letter of Agreement dated March 29, 2005, the letter was signed by World Bank Indonesia Country Director (*Joachim von Amsberg*), where the Bank accedes to OWT requests and agrees, accordingly, to: (a) amend the project description as set out in subparagraphs A.1 through F2 of paragraph 1.2 of the Annex to the Letter Agreement; (b) reallocate the

grant proceeds as shown in the table of withdrawal of grant proceeds in paragraph 4.2 of the Annex to the Letter Agreement; (c) establish December 31, 2008, as the latter date for purposed of section 4.3 (b) of the Annex to the Letter Agreement. The amendment letter was countersigned by OWT chairman (*Rt. Hon. Kenneth Clarke QC, MP*) on October 2, 2007. The revised specific objectives can be inspected on *Annex A*, while the detail outputs (as outlined on the '*Proposed Adjustment on Project Design and Budgetary Allocation*' prepared by the PM on March 6, 2007) are presented in *Annex B*.

This report summarizes achievements, lesson learn and outlook of LFCP implementation (June 1, 2005 to March 5, 2008) on the basis on revised specific objectives and outputs as outlined in the amended letter of agreement signed by the Bank on September 19, 2007.

II. Progress, Achievements, Lessons Learned and Outlook

A1. Formation of a Community Forest Management Forum (CFMP) as a mature organization able to conduct independent conservation movements

The formation of Forum is part of an exit strategy of the LFCP, meaning that Forum is expected to follow-up and sustain conservation program that have been initiated by the project. Forum as representative of civil society should become important pressure group for the implementation of good forest governance in Buton District. Forum is not the substitution or opposition of the Government, but a strategic partner of the Government. Authority to manage forests remains in the hand of the government, but Forum as a representation of civil society take role on influencing forest governance policy. Forum as community-based organization is an independence organization; however considering the future role of Forum as facilitator and driving agent of conservation movement, its existence should be recognized, accepted and politically supported by local authority.

Forum members are mainly composed of village elders (Lambusango forest constituents), supported with forest stakeholders, i.e. NGOs, Universities, and head of government agencies (*ex officio*). Forum members have been recruited, organization structure and its associated board has been formulated since September 24, 2005. However, due to political rivalry, between the elected Forum Chairperson (*Pak Mahufi*) and the Regent/*Bupati* (*Pak Syafei Kahar*), the organization has not received political endorsement until March 22, 2006. As such, between September 24, 2005 until end of March 2006, Forum was practically dormant. Only after the previous Forum Chairperson¹ was replaced by his vice chairman (*Pak Abdul Syukur*), then Forum received political endorsement from *Bupati* (March 22, 2006). The political endorsement was materialized through the issuance of *Bupati* Decree No. 211/2006 on May 17, 2006².

After receiving clear sign of endorsement, since the middle of April 2006, Forum conducted successive public gatherings in each sub-district to socialize its legal existence, its vision and missions, and shopping ideas from their constituents. Since May, 2006 LFCP has started to delegate part of its tasks to the Forum, especially on: (1) Improving forest governance policy; (2) Changing community attitude toward sustainable forest resource management; (3) Strengthening community based forest protection. This was aimed at providing exercise and learning process for the newly established Forum. LFCP has gradually handed-over its task and now many conservation works previously done by LFCP has been handled by the Forum.

¹ On January 18, 2006, *Pak Mahufi* was appointed as caretaker of *Bupati* Wakatobi District.

² *Pak Syafei Kahar* was successfully secured his position during July 2006's Buton Regent Election. He was appointed as the Buton District for the second period (2006–2011) in October 5, 2006.

Since January 2007, Forum management has been decentralized at kecamatan level, meaning that all activities and decision are organized at sub-district level, while District Forum coordinator mainly acts as a political symbol.

The following are list of activities conducted by the Forum and its associated achievements from May 2006 until end of February 2008.

A.1.1. Improving Forest Governance Policy

A.1.1.1. Monthly regular meeting at Kecamatan

Monthly meeting is regularly organized by head of sub-district (*Camat*) every beginning of the month in Kecamatan office aiming at coordinating progress, monitoring and evaluation of development as well as understanding its associated problems and constraints. The meeting is attended by *Muspika* (*Camat, Kapolsek, and Danramil*), head of UPTDs, *Puskesmas* (public health center), extension workers and village headmen (*Lurah and Kepala Desa*). Since February 2007, Forum coordinators at all kecamatan have received invitation from Camat to attend the regular monthly meeting. This can be considered as fundamental achievement, as the existence of the Forum has been appreciated by government structure at grass root level providing wider space for the Forum to control forest governance policy from internal government structure at the grass root level.

A.1.1.2. Organized meetings with District Parliament (DPRD) and government.

Since May 19, 2006, Forum has started to organize meetings with parliament and government on forestry development issues, so far 5 meetings have been conducted by the Forum; i.e. May 19, 2006, August 23, 2006, December 8, 2006, April 15, 2007 and 9 January 2008. The last meeting was conducted in Watumotobe (capital of Kecamatan Kapontori) and organized together with '*Pekan Penghijauan dan Konservasi Alam Nasional/PPKAN*'. The meeting was attended by the Regent (*Pak Bupati Buton, Pak Syafei Kahar*). *Pak Bupati* asked to the Forum and its networks to intensively fighting forest crime through intensive vigilance and surveillance. He stated '*anyone who bravely report and show forest crime evidences of encroachment and illegal logging supported with photo and willing to be an eye witness in the court will be awarded with new motor-bike*';

A.1.1.3. Forum refused the development of oil palm plantation in Kecamatan Lasalimu

Since January 2006, there was a strong issue that *PT. Wira Caraka Adi Lasalimu* intended to develop 15,000 has of oil palm plantation in Kecamatan Lasalimu (*Sri Batara, Lasembangi and Wasuamba villages*), there was no information on the area extent of proposed plantation area. However, considering the limited arable land in those villages, the proposed oil palm plantation areas would certainly be developed at the expense of Lambusango Forests. On April 2006, LFCP together with Forum members conducted field investigation and interviewed elders in those villages; there were pros and cons concerning the oil palm issues among community living in those three villages.

Some villagers have had over expectation on the benefit of the project, while some are pessimistic considering the experience with the company³. During meeting on May 19, 2006, Forum expressed the disagreement of the oil palm development to government; this was supported by district parliament. In fact, on May 23, 2006, the government refused the development of oil palm plantation in those villages.

A.1.2. Changing community attitude toward sustainable forest resource management

A.1.2.1. Forum developed conservation campaign boards.

From May till mid June 2006, Forum organized the making of conservation campaign boards (planks) involving all Forum members and partner (network) at village level. The boards were installed in all villages surrounding Lambusango Forest. The size of plank ranged from 60 x 40 cm² until 100 x 60 cm². The boards contain various conservation messages, such as '*Lambusango forest is our life and the future of our grand- children*', '*No cutting without planting*', '*Cutting forest will create floods and landslide*', '*Forum is ready to help you to save Lambusango Forest*' etc. The main objectives of the activity were: (1) raising awareness and sense of belonging of local community to the Lambusango Forests; (2) public declaration and socialization the existence of Lambusango Forest Management Forum; (3) general forest conservation campaign; (4) raising sense of belonging of local community to the Forum. The cost for the making of 50 planks was shared between LFCP and Forum. LFCP provided the paint, while the rest of the cost was left to Forum members and partner.

A.1.2.2. Forum facilitated the development of village conservation regulation (*Perdes*).

Since May 2006, Forum has facilitated the formulation process of village's conservation regulation (or popularly known as *Perdes*, See Box 1). During September, 2006, Forum facilitated the formulation of Kakenauwe *Perdes* and continued with Siotapina, Labuhandiri and Siomanuru. The results of *Perdes* have been checked by TTL during his visit on February 2007 and later also checked by senior staff of BDFO. There were some inconsistencies in the content, while some verses were contradictory with Forestry Law No 41/1999. During June – August 2007, those mistakes were corrected and efforts were made by the Forum to re-socialize the revised *Perdes* to communities in four villages in November 2007.

³ In 1990s, PT. Wira Caraka Adi Lasalimu (together with PT Tirta Rimba Raya) hold official permits to develop cacao plantation in the area, but the company only logged thousands hectares of forests in Lasalimu Selatan, while the cocoa plantation has never been in existence. The destructive logging has alleged association with the cause of 1999 flash food in the Sub District.

Box 1. Procedure on Perdes Facilitation as implemented by Forum

1. Initiation Phase

- (1) Forum members (living in the targeted village) conduct door-to-door approaches with key leader/elders of civil society of the village (primarily indigenous people and local communities).
- (2) When key leader/elders have convinced on the need of Perdes as a common stage to conserve forests surrounding their village, then Forum members will organize small group meeting involving village head, head of village representative body (BPD) and key elders of civil society. In this meeting, Forum members supported by Sub-District Forum Coordinator encourage the meeting participants on the importance of village commitment on sustainable village resource management.
- (3) When key leader/elders of the village agreed to develop Perdes, then Sub-District Coordinator will contact Forum Secretary to discuss facilitation schedule.

2. Special Groups Facilitation Phase

- (1) Village Meeting-1: Socialization of Perdes concept (involving all households).
- (2) Focus Group Discussion-1: Understanding diverse forest conservation perception among gender and different socio-economic groups (female, male, poor, elite, young generation, old generation) in the village.
- (3) Focus Group Discussion-2: Listing types of required conservation measures to conserve forest and other natural resources among gender and different socio-economic groups in the village.

3. Drafting Phase

Based on ideas collected during initial facilitation, and understanding the critical forest ecosystem within and surrounding the village, Forum develops the draft-1 version.

4. Village Meeting Facilitation Phase

- (1) Village meeting-2: Facilitators explain the draft-1 version thoroughly and note villager's feedbacks.
- (2) Forum together with village elders (leaders) develops draft-2.
- (3) Village meeting-3: Facilitator together with village elders (leaders) explains draft-2 and note villagers' feedbacks.
- (4) Forum together with village elders (leaders) develop draft-3 (if necessary)
- (5) Village meeting-4: Facilitator together with village elders (leaders) finalizes the draft.

A.1.2.3. Forum developed faith based conservation campaign

During April-June, 2007, Forum in collaboration with Buton District Religion Office developed preaching materials on Lambusango Forest conservation for Moslem faiths. The eighty one pages book which contains of 12 preaching materials is intended for Friday prayers in the mosque (*Kumpulan Khotbah Jumat Konservasi Hutan Lambusango*). The book has been distributed to all village mosques surrounding Lambusango Forest. After receiving the book, it is expected that preacher will be willing to preach on Lambusango Forest conservation topic at least once out of four or five Friday prayers a month. During August, 2007, Forum Coordinator (*Pak Abdul Syukur*) in collaboration with Buton District Religion Office socialized the book in six kecamatans. The socializations have been attended by Preachers and Moslem faiths' extension workers.

A.1.2.4. Forum organized planting of *Ficus sp* (*Beringin*) in Kakenauwe Village

During May 2007, Forum Coordinator of Kecamatan Lasalimu (*Pak La Aete*) organized Kakenauwe (Labundo-Bundo) villagers to plant *Ficus benyamina* (*beringin*) on the Lambusango Nature Reserve. About 400 seedlings were planted alongside the Labundo-Bundo River.

A.1.2.5. Forum facilitated the discussion with Wabou community to control forest encroachment

Wabou is a new hamlet (400 ha, about 100 households, see *Box 2*) within the Lawele Village (Kecamatan Lasalimu), developed in state production forest land and close to Lambusango Wildlife Reserve. So far, there has been no clear vision and decision from Buton District government, allow or not allow the development of the new settlement. By rule, conversion of state forest land to other purposes (status) cannot be conducted without consent of the Ministry of Forestry.

Box-2: History of Wabou Hamlet

Wabou hamlet is located in the upstream area of Sinapuli catchment which discharges to Lawele Sea. The hamlet is situated about 6 km from the main road of the Lawele village, near Lapuli hamlet, on the way up to the Lambusango forests. During dry season, the area can be reached by car. Apart from its fertile soil and gentle terrain, the area has abundance water resource, about 31 spring-waters originated from the area; those are the main source of drinking and irrigation water of the Lawele village.

Entering the hamlet, one can see a tidy settlement area which stretched out (north to south) along 2 km hamlet road. The settlement is surrounded by dense and undulating forested hills. At present, the hamlet is composed of 62 semi-permanent houses. Three houses have television, parabolic antenna and generator, while three shops selling food and daily household needs. The hamlet has a mosque, big meeting hall, health center and a state-own elementary school. Most of inhabitants are engaged on rainfed agriculture, the main crops are rice, maize, sweet potato, coconut, cashew, water-melon and banana. The planted crops have high yield compared to ordinary agriculture in Lambusango. Those crops are mainly for subsistence used, while the surplus are sold or bartered with

fish of *Bajo* tribe in Lawele market. There are three chainsaws in the hamlets. Logging activities seem to be very important as source of cash. So far, the settlement areas and all the cultivated land are located in the production forest.

Settlement History: Lawele (until 1986) was the capital of Lasalimu sub-district. Since 1960s till the end of 1970s, Buton was politically known as the basis of Indonesian Communist Party (*PKI*). After the failed coup of the *PKI* in September 30, 1965 (historically known as *G30S/PKI*), the central ('new-order') government set Buton as the target area for communist eradication. As most Butonese government officials were identified (by the Central Government/Jakarta) as members of communist party (which was prohibited since 1965), then Jakarta decided to change most of Butonese government officials (including police and military officials) with outsiders, mainly the '*Bugis*' tribe (the most dominant tribe of South Sulawesi). In 1970s, the Camat Lasalimu was occupied by a *Bugis* person (*Pak Djufri*), he is known as '*Camat Djufri*'. He was so powerful and cruel.

Kalende tribe (KT) is one of Buton forest-dwelling communities had shifting cultivation customary forest practices. They lived in forest area, which is in the present time known as Wabou hamlet. During 1970-80s was characterized by the adoption of policy instruments that reflected the government's complete rejection of local community forest access, including formal contempt towards forest dwellers' lifestyle and resource management practices. Forest communities were considered 'backward' and thus need of integration into mainstream society, and their shifting cultivation method was deemed economically unproductive and ecologically destructive. The negative ideological inclination toward forest-dwelling communities resulted in a set of policies that attempted to keep them away from the forest (i.e. resettlement) or aimed at transforming their customary forest practices into lifestyles more in keeping with policymakers' preference (e.g. sedentary farming, urban-based livelihoods). Because it was believed that shifting cultivation was driven by desperate economic need, resettlement and permanent agriculture programs were seen as potential means of raising farmers' living standards (i.e. the farmers would, theoretically, be relocated in areas more accessible to government services and employment opportunities).

With the above government mindset, in 1970s *Camat Djufri* relocated KT from forest (i.e. from forest dwellers to villager, from shifting into sedentary farming) to Lawele village. Some KT who refused to live in Lawele village decided to migrate to Ambon. While most of KT successfully relocated to the Lawele village. Government provided 20 ha land, and every newly settled family was given a small wooden house. The resettlement area is currently known as *Kawuna-wuna* hamlet. Until 1990s, KT experienced some economic difficulties and remained 'backward'. Government efforts to change KT from shifting into permanent agriculture were unsuccessful. Some KT gradually return to forests and re-engaged shifting cultivation. The Ambon riot in 1999 has displaced KT members back to Lawele village. As there is not available land in Lawele, most of them returned to Wabou. These activities were continuously followed by other inhabitants. Many of them relocate their wooden house to Wabou.

Struggle to be a legal village: In 2005, Wabou inhabitants sent a proposal to Camat Lasalimu to legally acknowledge their settlement areas as a new village. They forced Head of Lawele Village to support their proposal. They also sent letter to Head of Buton District Forestry Office's Technical Implementing Unit in Lasalimu to enlarge their village.

The restless of Lawele villagers to Wabou settlement: The Lawele Village Head refused to support the proposal of the Wabou inhabitants to be a legal village. Most of Lawele villagers are threatened with the continuous enlargement of the settlement. As Wabou area is the headwater catchment of Sinapuli River as a source of sawah irrigation water. As a result, environmental effects (decreasing water discharge) have been felt by irrigated rice farmers (\pm 200 households) in the Lawele valley.

Why ‘Wabou’ has a strong position: The present of supernatural key elders in Wabou has allowed the settlement to gain political support from some influential political leaders in Buton.

Forestry Program: 25 ha of the land were defined as part of a land rehabilitation program (teak) designed by Buton District Forestry Service in 2005.

On December 26, FCUL conducted patrol in Wabou and found new encroachment area (about 20 ha) at the expense of dense Lambusango rain forest. To response to rapid encroachment, on February 27, 2008, LFCP asked Forum and local government to search over suitable solutions for Wabou.

On February 27, 2008 Forum supported with LFCP and Buton District Government organized meeting involving all relevant stakeholders at grass-root level, such as Camat Lasalimu (*Pak Mursal Zubair*), Buton District Forestry Office (*Pak La Tahana Hamasy*), Police (*Pak H. Mustamir*), Army (*Pak Darmili*), Head of Lawele Village (*Pak Muhamad Badar*), Forum Coordinator (*Pak Abdul Syukur*), Forum Secretary (*Pak Sabarudin*) and Coordinator Forum Kecamatan Lasalimu (*Pak La Aete*) and Kapontori (*Pak La Dara*). The objective of the meeting was to develop practical ‘win-win solutions’ to control forest destruction in this area. The meeting was conducted in the meeting hall of Wabou Hamlet (11 – 14 o’clock) and attended by all households’ heads of Wabou inhabitants (95 persons).

With Forum facilitation, the meeting committed six actions plan:

- (1) Formulation of Village Regulation on Forest Conservation in Lawele Village.
- (2) Buton District Government will install boundary markings of Wabou Hamlet.
- (3) Wabou inhabitants are committed to control illegal logging.
- (4) Buton District Government will improve access road to Wabou Village to ease transportation of agriculture products.
- (5) Wabou community, with the assistance of government and Operation Wallacea trust, committed to develop alternative income generation.
- (6) Wabou community committed not to open new forest land without government permit.

A.1.2.6 Forum developed Village Conservation Extension Unit

On February 2008, Forum in cooperation with BKSDA (Resort Labundo-Bundo) established Village Conservation Extension Unit (VCEU), the unit is a community based extension which provided information services to villagers on: (1) legal status of forest in which share boundary with particular village; (2) understanding the boundary of state forest; (3) How to trace forest boundary marking; (4) understanding role of forest; (5) Basic forestry regulation: list of activities which are allowed and not allowed to conduct within Lambusango Wildlife Reserve, Kakenauwe Nature Reserve, production and protection forest. This information is critically important and necessary for rural community, as they often break forest law because simply they do not aware on forest regulation. So far, the unit has 16 members which mostly composed of conservation cadres of BKSDA from Kecamatan Lasalimu. The establishment of the unit was aimed as a model, and will be replicated to other kecamatan surrounding Lambusango Forest.

A.1.3. Strengthening community based forest protection

A.1.3.1. Forum paved the way in solving the root of illegal logging problem in Wining Area.

Since December 2006, Forum has conducted serial meetings with *PT Buton Asphalt Indonesia (BAI)*, *PT Sarana Karya* and *PT. Putindo* to stimulate the development of 'corporate social responsibilities' in the Wining area and surrounding, in response to the rampant of illegal logging due to lack of income generation activities in this area. Forum representatives (led by *Pak Rustam*, Forum Coordinator of Kecamatan Pasarwajo, and Headman of Wining Village) put pressures to those companies to solve unemployment problems in this village. This effort was successfully drawn serious commitment of those companies. Since April 2007, 200 out of 436 productive employees have been employed by *PT BAI* and *PT Putindo*, and until January 2008, this has increased to 339 leaving only 96 persons under employment. They receive USD 2.8 wage per day. As a result, since May 2007, forest destruction in this area has been significantly reduced.

A.1.3.2. Forum facilitated the development of alternative income sources in Wagari (Toruku) Village

Forum has facilitated the development of alternative income sources (seaweed farming) in Wagari Village. The village, located adjacent with Kakenauwe (Labundo-Bundo) village, is notoriously known as the source of illegal loggers and has long history of jealousy with villagers from Kakenauwe Village. The underlined reason is that communities from Wagari have not yet been involved as workers (porters, guides) and service providers (home-stay etc.) in the *Operation Wallacea Ltd's* scientific tourism activities. Wagari is a poor village located at the tip of Lawele Gulf. The Gulf has a gentle wave and little freshwater discharge of the Toruku River, leading the area is highly suitable for seaweed farming where planting can be conducted 12 months a year. Considering this, on July 2007, LFCP invited Forum to facilitate the development of seaweed farming in this area. During the time, only one villager, named *La Peo (Pak La Peo)* who has started cultivating seaweed in the Gulf. *Pak La Peo* had tried to ask their



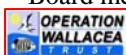
fellow villagers on seaweed farming, but failed as most of them no capital or inclined to gain fresh money from logging. With the development of seaweed farming in Wagari Village, it was hoped that this will enable to distract their livelihoods from logging to seaweed farming.

The following facilitation has been conducted by the Forum: (1) FGD with various community groups to understand the underlined causes of economic problem in Wagari Village (5 - 10 August 2007); (2) Socialization on the proposed seaweed business development (August 23, 2007); (3) Formulated detail actions plan (August 25, 2007), the committed credit is Rp 1,600,000. The interest rate is 1 percent and pay-back period is 10 months;; (4) Established LPEMD⁴ *Bunganaponda* (September 1, 2007); (5) Formulated LPEMD boards members⁵; (6) Formulated LPEMD's constitution (September 5, 2007); (7) Organized training on cooperative management (September 8, 2007); (8) Organized training on financial administration (September 10, 2007); (9) Registered legal existence of LPEMD *Bunganaponda* to *Hamid Priyogi, SH* Law Firm in Bau-Bau (September 11 – 25, 2007); (10) Developed village conservation contract (September 11-20, 2007); (11) Provided in-kind capital (USD 3,000) and equally distributed to 15 LPEMD members (September 25, 2007). Every farmers received 50 plastic ropes (each rope has a length of 75 m), plastic bottles (for float) and seaweed seedlings; (12) Initiated seaweed planting in Lawele Bay (September 28, 2007 to date); (13) At the end of January 2008, LFCP provided cash-capital (USD 500) to enable LPEM to purchase and market its product members directly to Bau-Bau, so as to cut marketing chain.

Achievements until end of February 2008: (1) members of LPEMD has increased from 15 to 25, this has been about 30 % of total households in Wagari Village; (2) Harvest cycle is conducted every 40 days, the product of first harvest was mostly used as seedling source. At present, most of the farmers have conducted second harvest. On average each farmer can harvest 300 kg dry seaweed (the current price is Rp. 6000 or USD 0.7 per kg or Rp 1,800,000 or USD 196 per one and half month); (3) Now the mouth of Lawele Gulf has been full of ropes, this has seriously hampered boats passage which used to transport timbers from Lambusango Forest to Wakatobi; (4) There has been a growing awareness that they cannot build a better life if they remain rely on forest cutting. Some of them have started to see their future and gaining their self confidence after starting with seaweed farming; (5) Seaweed farming has attracted some Wabou villagers (*Pak Hasyim*) to start working on seaweed farming; (6) In the future, LPEMD is expected to become village bank and marketing body which will not only cover seaweeds farmers or its products, but all economic actors and products from the village.

⁴ LPEMD ((Lembaga Pemberdayaan Ekonomi Masyarakat Desa/village cooperative)

⁵ Board members of LPEMD Bunganaponda: Chairman: *La Peo*; Secretary: *Musdin*; Treasurer: *La Sahuni*.



Box 3. Seaweed Farming in Wagari Village

Since October 2007, Wagari Village, Kecamatan Lasalimu has received capital investment to develop seaweed farming. The investment was provided by LFCP after completion of serial facilitations given by Forum members of Kecamatan Lasalimu led by *Pak Aete* which aimed at developing of LPEMD or village save and loan cooperative. At the beginning, LPEMD *Bunganaponda* had 15 members; each member received in-kind capital of Rp. 1,600,000 (USD 175), mostly in the form of 50 plastic ropes (each rope has 75 m length), 10 plastic bottles (for float) and seaweed seedlings. Lifetime of investment is 2 years, meaning that after 2 years, all plastic ropes and bottles will be ill-function. LPEMD *Bunganaponda* defined an interest rate of 1 percent, and pay-back period of 10 months.

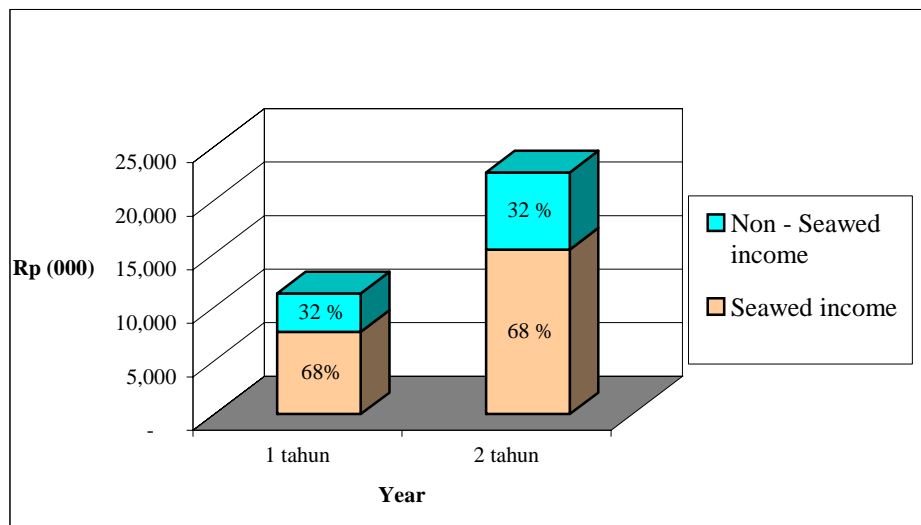


Figure 1. Proportion of income sources from seaweed and non-seaweed

Seaweed (*Eucheuma sp*, *Gracilaria sp*) has short-lived cycle; from planting to harvesting is about 40 days. After harvesting, farmers have to dry-out for about 5 days, the ratio between wet and dry seaweed is 8 to 1, 8 kg wet seaweed become 1 kg dry seaweed with 20 percent water content. Average total production is about 320 kg dry seaweed per farmer. Price of dried-seaweed at farmer gate is Rp. 6,000/kg; as such every harvest farmer will obtain Rp 1.920.000. On average farmers able to harvest 4 times a year. Assuming the price is stable; farmers will receive Rp 7.680.000 (USD 835) per year or Rp 15.360.000 (USD 1,700) during two year. As such, Return of Investment (ROI) is 4.8 (income/investment), or 9.6 during two year. This number is considerably high, meaning that farmers will capable to return its investment less than one year. Based on base-line survey (before the implementation of seaweed farming) the average income of Wagari villager is Rp 3,600,000 (USD 390), after the implementation of seaweed farming, this enable to raise income until 68 % per year. The income will be higher when seaweed farmers enable to raise its investment capital.

A.1.3.3. Forum assisted coconut oil home industry in Kancinaa

Learning from experience gained by their fellow Forum members from Kecamatan Lasalimu in developing LPEMD *Bunganaponda*, Forum members in Pasarwajo and

Wolowa (coordinated by *Pak Arifuddin*) have tried to exercise similar activities. The target is women based home industry to produce small-scale coconut oil in Kancinaa Village. At present, most coconuts in Lambusango are dried and sold as copra. In Kancinaa Village, there is a group of women who processed the coconut into fried oil; this is a remnant of old practices where every household wife has to prepare her fried oil from coconut which taken from their home garden.

Despite the coconut fried oil are more tasteful and healthy compared with widely used oil palm oil, coconut fried oil are only short-lived, the duration-use is only two weeks. The price of fried oil is Rp. 8,000 per liter (or much cheaper than oilpalm oil, especially after the sharp rising of oilpalm oil price during the last one year). On average coconut milk of 5 coconuts are produce 1 liter fried oil. It takes at least 8 hours cooking to process coconut milk into fired oil coconut. Given the average price of one coconut is Rp. 1,500, so why do women in Kancinaa still eager to process coconut into fried oil? The answer, they take advantage on its side product, i.e. fried oil residue resulted from fried oil processing. About 35 gram of residue is produced from 1 liter fried oil processing; the price of residue is Rp. 20,000 per kg. More importantly, as outlined above, the business is getting promising after sharp rising of oilpalm price oil, now is about Rp. 15,000 per liter or nearly doubled compare to coconut oil.

The following facilitation has been conducted by the Forum: (1) Conduct Focus group discussions to facilitate the need to develop LED (village cooperative) to support economic development of coconut oil producer and other relevant small-scale business in Kancinaa; the committed credit is Rp 250.000 – Rp 500.000. The interest rate is 1 percent and the maximum loan in 10 months; (2) Established LED *Tunas Jaya* (November 3, 2007) and formulated LED boards members⁶; the members was 8 persons; (3) Formulated LED's constitution (November 8, 2007); (4) Organized training on cooperative management (November 12, 2007); (5) Organized training on financial administration (November 15, 2007); (6) Provided capital (USD 440) to LED *Tunas Jaya* which distributed as loan to 8 LED members (USD 55 per member). Until end of February 2008, the members of LED Kancinaa has raised into 10.

A.1.3.4. Forum organized training on organic fertilizer and pesticide

Forum in cooperation with agriculture extension workers of Lasalimu Selatan Sub-District, *Pak Ngadiono* and *Pak Madju*, organized one day field training on the making of organic fertilizer and pesticide. The training was held on *Pak Amrin Sene's* home garden in Labuandiri Village (December 17, 2006). The numbers of training participants were 26 persons, composed of key-farmers representatives of Kecamatan Lasalimu.

The rationale behind the organization of this training: Slash and burn agriculture is still widely practice in Lambusango areas due to poor soil fertility and poor agriculture inputs. Farmers tend to open new land to gain optimum yield. Unfortunately, this often conducted at the expense of state forest lands. Most farmers have many land patches

⁶ Board members of LED *Tunas Jaya*: Chairman: *Wa Ode Marsiah*; Secretary: *Wa Ode Marsiati*; Treasurer: *Wa Ode Sanafia*.

which poor productivity due to lack of management. The problems have underlined the expanding forest encroachment surrounding Lambusango Forest. Improved land husbandry can be seen as alternatives to control rate of land encroachment. In this training farmers are trained on how to make fertilizer and pesticide from agriculture waste (shrub, bushes, corn leaves etc.) using M-4 enzyme.

A.1.3.5. Forum developed community based forest protection

In response to severe problems on forest encroachment and illegal logging in all over boundary of Lambusango Forest, since July 2006, Kecamatan Forum Coordinators level and all forum members and partners at village level has been active on community based forest protection. They have monitored the occurrence of forest crimes in their own areas. If Forum members find any destructive activities or irregularities, they have to report to Kecamatan Forum Coordinator, whom subsequently makes formal report to Buton District Forestry Office/BDFO (UPTD and KRPH), BKSDA and copied letter to Sub-District Police (*Polsek*) and District Police (*Polres*). One of outstanding case was the confiscation of transported illegal timbers in Waondo-Wolio (Kapontori Sub-district). Thanks to *Pak Zahunu (Forum member)* who reported his findings to Polsek Kapontori which immediately followed with confiscation of 80 m3 illegal timbers.

A.1.4. Discussion: Outlook

Most of local community have been so enthusiastic with the existence of Forum, as this body represents those who have been worrying with forest destructions and have been hopeless to the future fate of their forest.

The scope of Forum activities has gradually developed from time to time, starting with small and simple practical work such as making sign boards, planting trees, report the occurrence of forest crimes in their village. Then its roles have moved on political surface, such as attending monthly meeting in kecamatan, organize meetings with parliament and government officials, and finally Forum has taken part on improving community livelihoods, such as formulation of Perdes, solving the roots of destructive logging in several areas such as seaweed farming development in Wagari, solving unemployment problems in Wining and seeking over win-win solution on land acquisition problem in Wabou.

The roles taken and achievements attained by Forum have been satisfying as those have been done by local community and it is only a side jobs. Considering the weak capacity of government, and increasing pressures to Lambusango Forest, especially on future mining activities (such as oil exploration, oil exploitation and asphalt quarrying), Forum have become an important *watchdog* on government policy and development practices which may affect on forest destruction and declining local community welfare.

It is different with conventional NGOs and parliament members which are dominated by intellectual elites in town and thereby have a 'distance' with the hot-spot problem, Forum and partners have no distance with the problem, as they often become objects or direct victims of unsustainable development. The roles taken by the Forum during the last

two years are considered as important local community capacity building, they have been trained ‘to help themselves’, ‘to raise and to solve their own problem’. As such Forum is expected to be the first component which should be exists and maintain its roles after the completion of the project.

Forum can continuously play as a conservation development facilitators (motivators) working both for local community and government. Forum can sustain the current roles to assist local community to improve land management to save water resource, develop alternative sustainable livelihoods to conserve Lambusango Forest and seeking over solution of natural resource conflicts among communities⁷. On the other hand they become an important government partners at grass root level to socialize government policy related to natural resource conservation (such as socialization of forest boundary markings, forestry law and local government regulations), while at the same time channel community aspiration (feed-back) and forest crimes evidences to government and law apparatus.

Understanding the need of sustainable funding to support the operational cost of Forum, efforts have been made by OWT to search over new funding. On July 14, 2007, OWT submitted two proposals (**a.** Capacity building of the Lambusango Community Forestry Management Forum; **b.** Conflict Resolution on Land Ownership Disputes in Lambusango Forest) to LEAD/UNDP SE Sulawesi. Unfortunately, both of them failed to follow second round of selection phase. On October 26, 2007, OWT submitted letter of application as sub-contractor of DFID/Multi-stakeholders Forestry Program (British Embassy), and again OWT was refused to follow pre-qualification phase. The only secure funding after December 2008 is the World Bank/CIDA under Green-Kecamatan Development Program (G-KDP), however, among 6 kecamatans surrounding Lambusango Forest, only one (Pasarwajo) which will receive funding of the G-KDP project. At any rate, OWT will still be exist at least until December 2010, as such technical assistance to Forum can be maintained in longer period, See *Box 4*.

⁷ The most relevant forest conservation issues related with local community is the role of forest to maintain water resource (dry-season base-flow), as local community has experienced water shortage after deforestation. In fact, the most destructive deforestation is conversion into rainfed agriculture. The conflict over forest destruction in the upstream area and water resource depletion in the downstream has occurred in Lawele Village. See *Wabou* case.

Box 4. LSM OWT Activities After Completion of LFCP

Formerly *Operation Wallacea Trust* is known as a UK based charity whose aim is to obtain grants and other funding for conservation management programs throughout the world. The establishment of LSM⁸ OWT as Bau-Bau based (local) NGO originally was not by design, the LSM was initially set up as a conduit to receive funding from GEF/World Bank for LFCP. It was established to comply with World Bank procedure, especially to enable to open Special Account at the Indonesian Bank (BNI) on project site to administer GEF/World Bank funding. The opening of Special Account is only possible if it is conducted by Indonesian legal entity organization; due to the reason LSM OWT was then established and registered by *Hamid Priogie SH* as local NGO.

Later, it was realized that the establishment of the LSM OWT has provided double impacts and 'blessing in disguise' for LFCP and OWT. After implementing LFCP activities on the highest standards during several years, LSM OWT⁹ has progressively developed to become respected and reliable local conservation organization in SE Sulawesi. As results, since November 2007, LSM OWT has received another World Bank/CIDA funding (USD 750,000) to deliver environmental training and awareness under Pilot Green Kecamatan Development Program (G-KDP) in SE Sulawesi Province (Kolaka, Muna and Buton Districts) until December 2010.

The G-KDP has acquired better positioning for LSM OWT to sustain the established conservation actions in Lambusango Forest, since the project will enable to maintain the existence of LSM OWT in Buton for longer period. LSM OWT will also enable to strengthen LFCP's exit strategy after the completion of the project. On the other hand, LFCP has provided 'golden bridge' for LSM OWT to become a strong and respected conservation organization in Sulawesi.

⁸ *LSM* (Lembaga Swadaya Masyarakat) is Indonesian term word for *NGO* (Non Government Organization) or *CSO* (Civil Service Organization).

⁹ During early stage of development, people were unable to differentiate between LSM OWT and Opwall Ltd, as the latter has been well-known in SE Sulawesi prior the existence of LSM OWT, while the logo is nearly similar, apart from both institutions were born from the same parents. Later, after intensive explanations have been made on many occasions during LFCP implementation, people have started realized the difference between both institutions.

A2. Development of sustainable livelihoods models on several villages surrounding Lambusango Forest through village conservation contract facilitation schemes.

Village business development and *Village business development contract*¹⁰ were not appeared on the original *Project Brief*. Approach in improving income generation in the proposal was different with the project implementation. Village business contract, according to the Project Brief, would be conducted by allowing exploitation of the production areas of forest in exchange for preventing continuing illegal logging and hunting in conservation forests. This scheme is widely known as *social forestry* (SF) concept. Looking at the grass root level, local wisdom of Lambusango community has been much eroded, especially since the arrivals of Ambonese refugees since 1999. Generally speaking, granting state forest concession rights to local community is considered to be ill-suited either as ways to empower community or to conserve the remaining natural state forest resource. There have also been enough example in this country, that this will only attract ‘free riders’ which make the whole forest resource become open access and leaving local community misery, the environmental problem would be severe, given most of Lambusango Forest grown in limestone substrate. Community empowerment (and thereby forest conservation) should conversely be conducted by reducing community dependencies to forest products. It is believed that forest conservation cannot be simply achieved by changing main forest actor, from business entity to local community. Conservation program should be able to provide enabling condition for local community to conduct conservation measures; this could partly be done through development of sustainable livelihoods models for community living surrounding natural state forest areas.

Considering the above, after *Global Environmental Facility (GEF)* endorsement, but prior to the grant agreement sign-off by the World Bank, in January 2005, LFCP proposed budget reallocations to the World Bank, within existing budget lines, and so the total funds allocated to each component remains the same as in the original *Project Brief*.

The reallocations were made following the decision not to fund the development of the Waondo-Wolio old house as a centre for public education and community, as these functions could be handled by *Operation Wallacea Ltd*, and to instead invest more heavily in the village business development element of the program, which appeared to have been under budgeted to make the schemes attractive enough to the villagers. The funds reallocated to the village business development scheme were to be used for contract costs for technical advice; direct costs associated with running the scheme, and for village business grants.

¹⁰ *Village business development contract* is designed as a village based commitment to stop illegal activities in the forest in exchange for technical and capital assistance given by LFCP to develop village business. The developed village business should be used as an alternative income, rather than only additional forms of income.

A.2.1 Village Business Development

A.2.1.1. Promote Ginger farming in Lambusango

The potential of terrestrial agriculture based economic development in Lambusango is relatively poor, due to thin soil, poor productivity, pig raids as well as lack of irrigation system. In the beginning of 2005, ginger had a good price (Rp 5000 - 6000/kg, USD 0.55 - 0.67), many traders from Kendari looked over this products in Lambusango, while gingers only planted in four villages, i.e. Summersari, Siotapina, Wajah Jaya and Labuandiri. Given the limited choice, ginger was seen as promising agriculture product which can raise village economic development in relatively short time. The development of ginger planting in 5 villages (*Table 1*) was aimed as models for village business development which was expected to bring bigger participants on village conservation contract, especially when the first harvest has successfully demonstrated significant income generation. With this initiation the numbers of ginger village producers raised from 4 became 9 in 2006.

LFCP provided capital input (in-kind) to farmer groups to grow 3 – 4.3 ha of ginger. The capital input is composed of (1) Ginger planting material about 2.1 – 2.9 ton; (2) Agriculture production inputs (organic fertilizer and pesticide). After successful harvesting, farmers were expected to return the capital (in-cash) to LFCP, which will consist of: (1) Cost of ginger planting materials; (2) Cost of organic fertilizer and pesticide. The returned capital was expected to be managed as a revolving fund to promote similar types of village business.

To develop better market access and linking with bank credit during July 2006, facilitation was given on the development of *Asosiasi Petani Jahe Lambusango* (Lambusango Ginger Farmers Association). The formulation of the association was held on July 27, 2006 at Summersari Village¹¹.

¹¹ **Chairman:** *Laramuna* (Harapan Jaya); **Vice-chairman:** *Ahmad* (Summersari Village Head); **Secretary:** *Untung Suyitno* (Summersari). **Head of Sections,** Production: *Ngadiono*; Post-harvest: *Maju*; Marketing: *Lainu*. **Sub-district coordinator,** Kapontori: *La Udu*; Lasalimu: *Abdul Rahim*; Siontapina: *Sarjono*; Wolowa: *Halifa*; Pasarwajo: *Siriton Baidin*.

Table 1. Ginger initiative planting in Lambusango: planting material assistant in 2005 and harvested gingers in 2006

| Village | Kecamatan | planting materials (ton) | Number of Households | Area (ha) | Harvested ginger (ton) | Percentage of harvested to planting material+ |
|--------------|------------------|--------------------------|----------------------|-----------|------------------------|---|
| Kakenauwe | Lasalimu | 2.1 | 17 | 3 | 2.7 | 1.3 |
| Lawele | Lasalimu | 2.1 | 20 | 4 | 4.5 | 2.1 |
| Wajah Jaya | Lasalimu Selatan | 2.2 | 15 | 2.3 | 30 | 14** |
| Harapan Jaya | Lasalimu Selatan | 2.9 | 98 ¹² | 4.3 | 28 | 9.7 |
| Winning | Lasalimu Selatan | 2.1 | 12 | 3 | 5 | 2.3 |
| | | 11.4 | 162 | 16.6 | 69 | |

+ Normal ratio between planting material and harvested ginger is 1:10

* Most successful (1:14), farmers had been experience in planting gingers

Unfortunately, the adverse drop of ginger national price during 2006¹³ led the scheme failed to raise farmers income and thereby efforts to enforce conservation actions (*Figure 2*). The newly promoted Vice Bupati (*Pak Ali La Opa*) who promised to market ginger to Middle East countries was not successful either. Serious efforts have been made to explain the situation to farmers. During October 2006, the project conducted village to village gathering, meeting with all farmers involved on the ginger planting scheme to restore trust. Considering the unexpected situation, the revolving scheme was not strictly applied. Winning and Wajah Jaya villages return ginger seedlings at the same amount they had received to the project. To avoid chaotic situation, LFCP purchased harvested gingers from Harapan Jaya and Lawele (USD 2,300). The purchased gingers were distributed to several villages for planting materials [Ambuau (4.5 ton), Matanauwe (4 ton), Wolowa Baru (4 ton), Matawia (4.6 ton), and Waleona (2 ton)]. With this initiation, total ginger village producers become 14 in 2007 (see *Figure 2*).

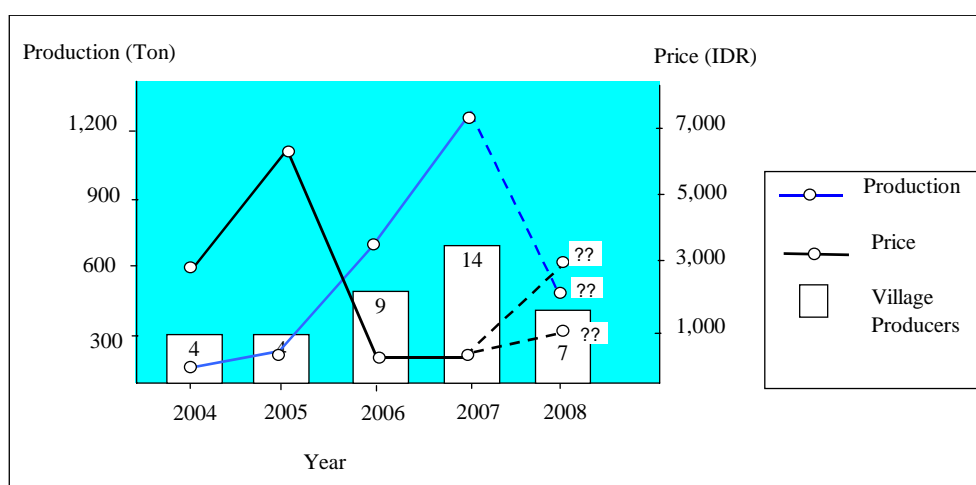


Figure 2. The dynamic of gingers production and price (2004-2008)

¹² All households (98) in Harapan Jaya Village received planting materials; as they were willing to receive smaller amount of planting material.

¹³ Ginger price was very low (USD 0, 17 per kg). The underlined problem is the peak of harvesting season in East Indonesia occurs at the same time with West Indonesia regions, supported with big festival (*Idul Fitri*) when farmers need extra cash money.

During October–mid November 2006, efforts were made to introduce ginger home industries processing on three villages (*Harapan Jaya*, *Wajah Jaya* and *Sumbersari*) which have the highest ginger production in Lambusango. Five types of ginger based instant beverage were introduced; (1) *ginger*, (2) *ginger coffee*, (3) *saraba*, (4) *skoteng*, and (5) *ginger tea*. Unfortunately, those efforts did not receive sufficient attention from farmers. LFCP also searched alternatives market by sending samples and its price to various buyers in Java. In mid December 2006, LFCP was contacted by buyers from Bandung, West Java. They agreed to make trial buying of 25 tons. In response to this, LFCP facilitated *Lambusango Ginger Farmers Association (LGFA)* to buy gingers from Summersari Village (26 tons) and organize transportation from Summersari Village to Bandung. The shipment was conducted on January 5, 2007, and had reached Bandung on January 12, 2007. The whole process had been successfully facilitated; *LGFA* had gained useful experience in marketing ginger outside Buton.

A.2.1.2. Intensified seasonal crops

In November 2006, taking experience from ginger having long planting duration, attention was then given on seasonal crop intensification. In contrast with ginger, the crop can be harvested within short-period (2-3 months) and mainly used to supply local market. Facilitation of seasonal crop development was given by providing certified seeds to farmers, such as rice, onion, groundnut and vegetable. The targeted area was Lambusango Barat (Kecamatan Kapontori), Waondo-Wolio (Kecamatan Lasalimu), Siontapina, Sangia Arano, and Harapan Jaya (Kecamatan Lasalimu Selatan). This initiation was mainly aimed to restore trust to the project and was not designed to develop village conservation contract.

A.2.1.3. Control wild pig (*Sus scrofa*) population

The main problem of agriculture development in Lambusango is pig raids. All plants except ginger and orange plantation are destroyed by wild pig (*Sus scrofa*, non protected animal). To protect rainfed agriculture land, farmers mostly fence their land using timber shelves (or stones), those measures have made further depletion of forest resource, which in turn effect to severe wild pig raids. To reduce vicious circle cause and effects, during December 2006, efforts have been made to support pig hunting to control wild pig population in Kecamatan Lasalimu. Considering that wild pig hunting is not popular in most of villages in Kecamatan Lasalimu Selatan (dominated by Moslem), the project has facilitated the development of three hunting teams which composed of Balinese from Siotapina Village. The three hunting teams hunt pigs on rainfed land surrounding the production forest. The project provided pig net, flash lights and field shoes for three pig hunter teams. This initiation was mainly aimed to restore trust to the project and was not designed to develop village conservation contract.

A.2.1.4. Facilitated Fairtrade Certification on Barangka and Matanauwe Villages

Cashew is the most significant agricultural products from Buton and surrounding islands. Annual shell-cashews (unprocessed cashews, *gelondongan*) production from 53 villages surrounding Lambusango Forest is 1300 tons. Cashews in Lambusango area is ‘grown

naturally', about 40 % of cashews in Lambusango area have been quite old (about 30 years old, the optimum production of cashew ranges between 10 – 20 years old). Harvesting season is from November/December – January/February, the quality of harvest depends on rain intensity (the lighter the better) and frequency (the higher rain frequency of modest intensity is the better) and wind speed (the lighter wind speed is the better) during flowering seasons. Except Barangka Village, most farmers in Lambusango do not sell cashews kernel.

The post harvest processing (from shell to dry cashews kernels/water content 8 %) are the following; (1) Sun-drying shell-cashews for (about) two days to open the shell; (2) Open cashews shell using (modified) knife; Normally, 1 person is able to open 30 kg shell-cashews per day; (3) Sun-drying cashews for 1 day to enable to open the tiny cashews skin; (4) Sorting cashews quality (cashew kernels: whole, half/split, pieces/broken); (5) Packing; for local market 1 kg/pack, but for inter-local market (Batam, Surabaya, Makassar), normally 80 kg/box. During harvesting season farmers sell Rp. 4000-7.000 (USD 0.5 – 0.8) shell-cashews/kg (at farmer gate), while the price of dry cashews kernel (dependent on quality) ranging from Rp. 38.000 – Rp. 45.000 (USD 4 – 5). Ratio of wet shell-cashews to dry cashew kernels is 4:1 or 4 kg unshelled-cashews become 1 kg dry cashew kernels.

Most farmers sell shell-cashews to middlemen, which subsequently sell to big Indonesian cashews and to a certain extent also Anglo-Indian¹⁴ Cashews trader which seasonally (October – February) open their branch office in Bau-Bau. The Indian traders usually buy dry shell-cashews. Some middlemen also sell to Bau-Bau and Lombe (Muna Island), where some big cashews traders from Surabaya, Kendari and Makassar, Jakarta open their branch offices. Several local traders in Lombe buy large quantity of cashews during peak harvest season, the shell-cashews are sun-dried then keep in the storage; this will enable them to process shell-cashews for the whole year.

Efforts to link Fair-trade and Lambusango Forest Conservation

OWT as conservation organization expect that any development and empowerment initiatives will affect to better conservation efforts. OWT precepts that there is a big opportunity to link fair-trade certification with better conservation efforts as FLO certification require good environmental conservation management. In fact, generic fair-trade standard has a strong environmental protection requirement. Referring to *Generic Fair-trade standard*, the association has to appoint a member of the association as *Coordinator for Implementation of the Environmental Standards*. He or she should be given a written job description and provided a budget.

'The producers' organization ensures that its members protect the natural environment and makes environmental protection a part of farm management. The organization is expected to facilitate the development, implementation and monitoring of producers' operational plans with the aim of establishing a balance between environmental

¹⁴ India is known as one of the biggest cashew exporters in the world, 40 % of the production is imported from Indonesia.

protection and business results through the use of a combination of measures including crop rotation, cultivation techniques, crop selection, careful use of inputs such as fertilizers and pesticides and, as relevant, shade production. The organization ensures that its members minimize the use of synthetic and other off-farm fertilizers and pesticides, partially and gradually replacing them with non-synthetic and on-farm fertilizers and biological methods of disease control. FLO encourages small producers to work towards organic practices where socially and economically practical. Producers are encouraged to minimize the use of energy, especially energy from non-renewable sources. The organization is expected to maintain a management system consistent with its size in order to ensure organizational control of those areas for which it is responsible and to monitor production by its members through the use of recognized inspection and verification methodologies”.

So far, OWT has made the following efforts: (1) develop farmers association as pro-poor and pro-environmental protection organization; (2) Assist the associations to develop environmental standard operating procedures which clearly cover actions to conserve Lambusango Forest (to include logging, hunting, encroachment etc.).

When the associations are finally certified and shown a good performance, and provided significant affects on economic, social and environmental development, this will hopefully attract surrounding villages to join the existing associations, and thereby the economic, social and environmental development aspects of the surrounding villages will be maintained on long-term basis.

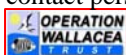
Chronological of Fair-trade Facilitation Process:

June 2005: OWT provided sub-contract (USD 10,000) to *Just Cashews/Earth Hero*¹⁵ to assist OWT to facilitate fair-trade certification process and cashews export from Lambusango area.

August 2005: JC staff (*Kate Idzorek*, JC’s Operations Manager) visited Lambusango, she facilitated OWT (on behalf of Lambusango community) to apply fair-trade certification to FLO.

September 2005: OWT facilitated several meetings of farmer’s representatives of 53 villages to develop *Lambusango Buton Cashews Farmers Association/Asosiasi Petani Jambu Mete Lambusango, Buton/APJLMB*). The association was developed to empower cashew farmers/producers surrounding Lambusango forests to promote their bargaining position against conventional traders. The association was expected to act as a vehicle of cashews farmers to negotiate with partners and related parties, and become a forum to share information/capacity. The establishment of legally registered association is also a basic requirement to comply with fair-trade certification standard.

¹⁵ Cashews exporter company, address: Cashews 3215 Central Ave NE, Albuquerque, NM 87106, USA, contact person: *Jim Neustel*, e-mail: jim@earthhero.org



October 2005: OWT on behalf of APJLMB applied for fair-trade certification to FLO. The first data set submitted to FLO and associated FLO's questioner for the registration of nut producers.

August 2006: *Mr. Rajashingham* (FLO Inspector) visited Lambusango. After visiting the fields and had various discussions with local communities and APJLMB board members, he raised three major suggestions: (1) APJLMB should be institutionally strengthened; especially on democracy, participatory and transparency; (2) APJLMB has to develop central processing unit to ensure consistencies in production, quality and delivery, and (3) APJLMB has to demonstrate their capability to export high quality processed cashews product. In fact, until the visit of *Mr. Rajashingham*, OWT (as facilitator) was not well-informed on the basic requirements to comply with FLO certification standards. As such, it was not surprising when the basic principles of fair-trade requirements were poorly met by APJLMB.

December 2006: OWT received FLO-Cert Inspection Report sent via e-mail (undersigned by *Frank Brink Schneider*, Director Producer Certification) by *Mrs Silke Kohschmitt* and *Mr. Dilip K. Chandy*. The letter stated that Asosiasi Petani Jambu Mete Lambusango (APJLMB) is not yet Fairtrade certified and not allowed to trade its products under Fairtrade conditions. In order to be certified, APJLMB must fulfill the preconditions described in Part D of the inspection report. Fulfillment of the given preconditions will be verified by document review. The preconditions are valid for one year from the day of the certification decision. At any time within this period, Asosiasi APJLMB is requested to send the documents to FLO-CERT to verify the fulfillment of the preconditions.

Understanding the way how cashews farmers association should be managed following three principles (participation, transparency and democracy), and realizing the large coverage area of the APJLMB, OWT started rethinking its facilitation areas. Realizing its limited resource to provide intensive facilitation over large coverage area, since December 2006, decision was made to reduce facilitation villages, from 53 villages of six sub-districts to only focus at one village within one sub-district, i.e. Barangka Village, Kapontori Sub-District.

January/March 2007: With new envisage to complying with FLO generic standards, since March 2007, the whole facilitation process has been repeated in Barangka Village. This was composed of: (1) Developed SOP on financial administration (March 1, 2007); (2) Registered legal existence of the BBCFA to *La Ode Muhamad Taufik*, SH Law Firm in Bau-Bau (March 26, 2007); (3) Developed SOP for environmental protection and management (April 22, 2007); (4) Appointed Coordinator for Implementation of the environmental standards (April 29, 2007); (5) Organized meeting to socialize and the use of fair-trade premium¹⁶ (May 5, 2007); (6) Opening BBCFA's Bank Account (September 21, 2007).

¹⁶ The proposed use of fair-trade premium: (1) rehabilitate kindergarten school and cashews storage/ware house; (2) Improve drinking water pipes and sanitation; (3) rehabilitate village hall building.

May 2007: OWT has started to communicate with *Miss Astrid Felicia* (FLO contact person in Indonesia) and later on with *Mr. Xavier HUCHET* (FLO Regional Coordinator Southeast Asia). From the communication, new idea was emerged to add another village facilitation site located in the eastern part of project area. The selected village is Matanauwe, Siontapina Sub-District.

July 2007: Since July 2, 2007, OWT has provided facilitation in Matanauwe Village which drew heavily experiences and lessons learned obtained from previous process in Barangka Village. The following fair-trade facilitations have been conducted for Matanauwe Village: (1) FGD on three sub-villages (hamlets) to socialize fair-trade (as opposed to free-trade) and the urgent need to establish farmer association/cooperative; (2) Formulation of board members of the *Matanauwe Cashews Farmer Association* (MCFA) in democratic manner (July 15, 2007); (3) Formulation of MCFA Constitution (July 22, 2007); (4) Developed Standard Operating Procedure (SOP) on financial administration (August 4, 2007); (5) Organized meeting to socialize and the use of fair-trade premium (August 12, 2007); (6) Developed SOP for environmental protection and management (August 25, 2007); (7) Appointed Coordinator for Implementation of the environmental principles (August 28, 2007); (8) Registered legal existence of MCFA to *Hamid Priyogi, SH* Law Firm in Bau-Bau (September 29, 2007); (9) Opening MCFA's Bank Account (October 9, 2007).

October 2007: OWT developed progress report on preconditions fulfilment and sent via DHL on the beginning of November 2007. Based on consultation with FLO, it was defined that APJMM (MCFA) to replace APJMLB position, while APJMB/BBCFA was considered as new application. As such, the coming visit of FLO will be considered as the second inspection for MCFA, but the first inspection on BBCFA.

January 2008: MCFA (APJMM) has been fully certified, and can trade under Fairtrade conditions provided they have an FLO certified exporter until the date specified on the certificate. The reason why the certificate is valid until March 31, 2008 only is the fact that the annual renewal audit for APJMM is pending. Should FLO-CERT not be able to audit APJMM before this date, APJMM will receive a valid certificate from FLO. APJMM is the first cashews producer in Indonesia which is fully certified by FLO (PC Certified)¹⁷. The existence of APJMM in Matanauwe has affected to price stabilization at village level.

A.2.1.5. Facilitated Cashews Export to UK (WCP scheme)

The first export of cashew kernel from Barangka Village was planned during the visit of *Kate Idzorek* (JC's Operations Manager) in mid February 2007, and since the beginning

¹⁷ PC means in this case "Producer Certification". In fact FLO-Cert has two main departments: PC (Producer certification) for cooperatives and TC (Trade certification) for exporters, importers, processors. The contact person at PC is *Mrs Silke Kohlschmitt* (s.kohlschmitt@flo-cert.net) and *Dilip Chandy* (d.k.chandy@flo-cert.net). The contact person at TC is *Mrs. Katharina Klein* (k.klein@flo-cert.net).

of April 2007, 2 tons of first class ('whole') Barangka cashew kernel (with 500 kg 'split' and 200 kg 'broken') was ready to pack and export. However, until end of July 2007, JC did not show their commitment to facilitate export as promised.

While, LFCP and Barangka Cashews Farmer Association were disappointed with '*Just Cashews*' commitments, a new hope emerged after *Dr. Tim Coles* (on July 30, 2007) decided to put investment on Lambusango cashews under the framework of *Wildlife Conservation Product (Anoa Cashews)*. LFCP was organized meeting between *Dr. Tim Coles* and members of Association at Barangka Village on August 1, 2007. Considering the cashews stock has been about 5 months, and the quality will be about to decline unless packing will be done very soon. *Operation Wallacea Ltd* agreed to conduct prepayment (USD 6,875¹⁸, or about 50 % of total cost), the fund will partly be used by LFCP to facilitate packing, complete export procedure and payment transport cost. The problem, both *Operation Wallacea Ltd* and *LFCP* are still unaware on the UK standard on food requirements. It was then realized that problem on export cashews facilitation is not a matter of preparing best cashews products at farmer level, but more importantly is to understand foreign trade regulations and exact buyer needs and requirements. We decided to let association sell the cashews, and the next export will be conducted after harvesting in December 2008.

Since January 2008, OWT has facilitated the processing of 1.5 tons cashews. OWT has appointed PT SSN as an exporter and Sucofindo to check the product quality and will issue Food Health Certificate. PT SSN¹⁹ will improve the quality of the kernels and facilitate *Sucofindo* test in Surabaya and then pack in vacuum and send from Surabaya Port to UK. All export documents are arranged by PT SSN in Surabaya on behalf of OWT and send the documents to Opwall Ltd. About one and half tons cashew kernel is expected to leave Surabaya for UK in the middle of March 2008.

A.2.1.6. Developed cooperation with PT. Supa Surya Niaga

Since November 2007, after the absence of *PT Hijau Bumi Indonesia (HBI)*, LFCP looked over other trade company which can facilitate cashews export to UK. After searching in Surabaya, LFCP finally had deal with *PT. Supa Surya Niaga (PT SSN²⁰)*. The company was not only interested on cashews trade, but also other agriculture products. After several discussions, PT SSN decided to build warehouse in Bau-Bau. During December 2007 till January 2008, LFCP supported the establishment of warehouse. In return, PT SSN has arranged cashews delivery to Surabaya; improve cashews quality, vacuum packing and transporting to UK. The existence of PT SSN in Buton will support business development in Lambusango. So far, PT SSN has introduced the use of moisture tester and cashews shell opener, by using the tools opening cashews shell become faster and hygienic.

¹⁸ The prepayment of *Operation Wallacea Ltd* arrived at project site on August 22, 2007

¹⁹ *Suppiah Krishnan*, www.herbspice.com, www.indonesiacashews.com, supasurya@indo.net.id

²⁰ PT SSN together with *PT Comextra Majora* and *PT Sekar Alam (Finna)* is the major cashew kernel exporter in Indonesia (*Peter Jaeger*, jaeger@accordassco.biz, *press.com*).




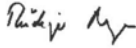
| | |
|---|---|
|  | PC Certified |
| <p>Asosiasi Petani Jambu Mete Matanauwe Jl. La Balawa No. 25, Kelurahan Wajo, Kota Bau-Bau Sultra 93726, 93726, Sulawesi Indonesia, INDONESIA</p> | |
| <p>This confirms that the above producer organisation is certified by FLO-Cert GmbH against FLO Standards and is authorised to sell the following FLO Fairtrade Products.</p> | |
| <u>FLO Status</u> PC Certified | <u>Product(s)</u> Nut Oil Seed: Cashew |
| <p>This certificate is valid until 31 March 2008</p> | |
| <u>FLO Certification ID</u> 4402 | <u>Date of Issue</u> 22 January 2008 |
|  | |
| Ruediger Meyer, Managing Director | |
| <small>FLO Cert GmbH, Bonner Talweg 177, 53129 Bonn, Germany Tel +49 228 24930 Fax +49 228 249 3120 www.fairtrade.net</small> | |

Figure3. Producer Certification of APJMM

A.2.1.7. Training on Cashew Processing for APJLMB

So far, Lambusango farmers have preference to sell shell-cashews (*gelondongan*), rather than kernels. In Lambusango only farmers from Barangka village are used to process cashews²¹. By selling unprocessed cashew, opportunity loss (potential added value loss) at farmers level is at least Rp 2600 (USD 0.2) per kg²² or Rp 2,600,000 per ton. The main reasons why farmers reluctance to process cashew are: (1) lack of skill in cashew processing; (2) Poor information on cashew-kernels market; (3) Lack of capital and the need on immediate cash after harvesting.

Training of Trainer (ToT) was organized to socialize cashews processing techniques to key members of *Buton Lambusango Cashew Farmers Association (APJLMB)* whom they subsequently become counterpart on cashews processing training in each kecamatan. The training was held on November 19, 2005 at the hall of Barangka Village and attended by 12 participants (every kecamatan sent two participants). Training material consisted of 12 cashew nut cutters, 24 kg of shell-cashew and 15 copies of cashew processing standard operating procedures. Instructor gave one-hour theory, and followed by practical exercise for 7 hours. The LFCP in coordination with the (APJMLB) then followed up the ToT with cashews farmers training in each kecamatan during harvesting season 2005 and in August 2006²³. Those trainings were attended by 20-30 participants; each participant received one cashews nut cutter.

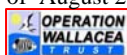
A.2.1.8. Development of orange plantation in Lasembangi Village

Lasembangi Village is located at the northern foot-slope of Siontapina Mountain. The area has a deep fertile mineral soil. The village does not experience water shortage as most villages surrounding Lambusango forest. Water sources, either from stream and well are abundant during all seasons allowing two planting seasons a year. However, many farmers still engage on (illegal) logging activities. Experience from Lambusango show that community unable to rely on their livelihoods on logging activities, they quickly gain money, but quickly spend it up, the more dependent on resource extraction, the more poor their welfare. This phenomenon has been realized by villagers, but in many cases, they have not had enough capital to relieve from vicious circle of poverty

²¹ Barangka is the only village in Buton Island which has closed business relationship with Lombe (Muna Island). The latter area is the centre of cashews processing in Buton and Muna Islands. During harvesting seasons (November - December) thousands tonnes of shell cashews flows to Lombe. The dried shell-cashew stored in warehouses. This is the reason why Lombe can produce cashew kernels for year round. In 1998, twenty farmers from Barangka attended cashews processing in Lombe. Since then processing activities have gradually developed in the Barangka Village. At present, Barangka has become 'Little Lombe', however, cashew-processing activities only occur during and several (4-5) months after harvesting season.

²² **Opportunity loss** calculation: 4 kg shelled-cashew becomes 1 kg processed cashew. The price of shelled-cashew (*gelondongan*) is Rp. 5,000 per kg, while processed cashew is 32,000 (at farmer gate). The cost to process per kg cashew is Rp. 1,500.

²³ It was conducted during the visit of *Mr. Rajashingham* (FLO Inspector for South East Asia countries) during the end of August 2006.



and natural resource degradation. In this context, *Pak Sukarno* is the best farmer model to those who want to relieve from the vicious circle.

Pak Sukarno (see *Box 1*) is a person behind the development of orange plantation in Lasembangi Village, in 2005, the total orange plantation in Lasembangi was about 7 ha, this is owned by *Pak Sukarno* and his fellow villagers (*Pak Bakri* and *Pak Royo*).

Orange fruiting season is all year around and harvest can be conducted everyday. With 2 ha orange plantation, on average, one can harvest 30 kg per day; the price is Rp.1000 per kg, or about Rp. 30.000 (USD 3.25 per day). During the peak fruiting season (June-August), the orange yield reaches 15 - 20 tons/ha (July and August), and can earn up to USD 2,000/ha. This is indeed considerable amount of income in Buton rural area.

In November 2005, in response to LFCP offer, *Pak Sukarno* agreed to enlarge orange plantation to cover larger numbers of villagers in his village. First involved 13 selected villagers and covered 5 ha land. LFCP provided loan of Rp. 10,000,000 (USD 1,100) to 13 villagers to procure planting material (2,000 seedlings, Rp.5000/seedling). Farmers will return the loan (about Rp. 765.000/USD 80 per farmer) for 24 months starting in June 2006.

The project is used to say 'loan' to farmers, to raise their spirit of work, as they have to return the money. LFCP avoid saying 'grant', as this will be a disincentive to villagers; they will ease using the received capital which lead to failure. LFCP also avoid providing cash-capital, as this will open possibilities to use money for other purposes.

By saying loan, it does not mean that LFCP will take benefit out of the GEF grant; the pay-back money from villagers will be kept by OWT and return to villagers as additional capital or manage as revolving fund. In fact, the loan performance of Lasembangi villagers is considerable to be good, so far 50 % of capital has been returned.

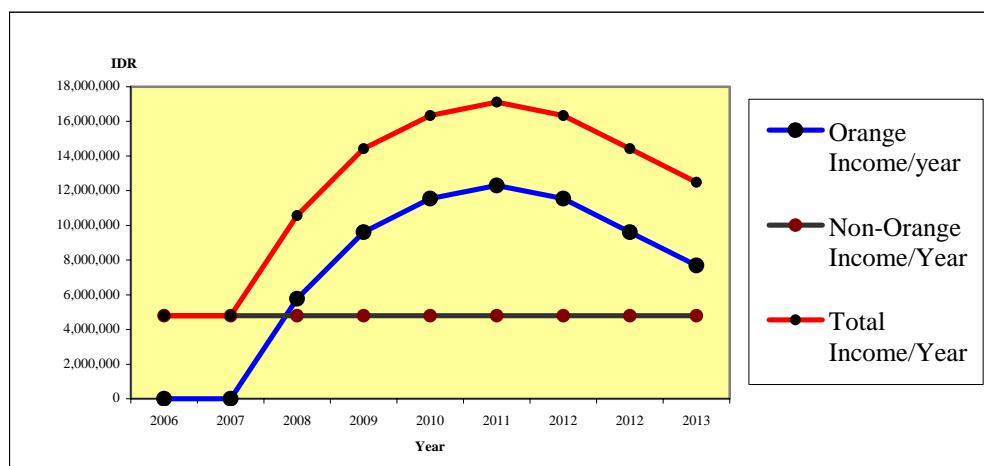


Figure 4. Expected additional income from orange plantation in Lasembangi Village

On February 19, 2007, during the visit of TTL in Lasembangi, *Pak Sukarno* expressed his proposal to further enlarge orange plantation in his village. According *Pak Sukarno*, by enlarging the plantation, the jealousy among villagers in Lasembangi can be eliminated.

Taking into account that optimal production of orange plantation is from year 3 to year 6 (see *Figure 4*), the established 5 ha orange plantation in 2006 will start to produce in August 2008 and the total productive orange plantation will become 12 ha. If this add with another 10 ha, in 2010 Lasembangi will be expected as prime producer of orange for Buton Island. So far, Lasembangi orange only able to supply fruit demand surrounding villages, as the production capacity still limited, while Bau-Bau orange market has still dominated by 'Kambara' orange from Muna Island.

LFCP agreed with *Pak Sukarno* proposal, and since July 2007, he started developed 4000 seedlings. The seedlings are planned to be grown by another 40 villagers (10 ha). This will be ready to plant in March 2008.

'Lasembangi' orange planting materials develop through grafting. The under stem is *Citroen* (*C. aurantifolia*), while the upper stem is *Keprak Siem* (*C. medika*). To develop planting materials, one should first develop nursery of *Citroen*, it takes about four months (stem diameter 2 – 3 cm) before ready to be grafted with *Keprak Siem*. According to *Pak Sukarno*, *Citroen* is selected as under stem because of its strong stem, large rooting system, disease-resistance and long-lived. The plant should be regenerated after 10 years age.

A.2.1.9. Expanding orange plantation in Sukamaju and Wolowa Baru Villages

Following the success of Lasembangi village to develop and expand orange plantation, efforts were made to involve other farmers outside the village to follow the success story of Lasembangi. To do so, on September 5 - 10, 2007, LFCP organized key farmer's training/internship (*magang*, 8 farmers) on orange farming in the plantation area of *Pak Sukarno* (Key farmer). The invited farmers were from Sukamaju (SP 10, 5 farmers) and Wolowa Baru (3 farmers) Villages. A set of equipment specially procured from East Java (stem scissor, graft knife), planting materials and agriculture inputs (growth hormone, fertilizers etc.) was made available for every farmer to enable to apply their skills upon their immediate arrival at their own land. With intensive assistance provided by *Pak Sukarno*, since October 2007, an orange (RC, *Citroen*) nursery has been developed in Sukamaju Village. When the under stem nursery have been ready, *Pak Sukarno* will provide on the job training in Sukamaju village to bring the current nursery site to become center of orange planting materials development in East Lambusango.

Box 5. Sukarno, a Pioneer Farmer from Lasembangi

Pak Sukarno (50 years old), a Javanese married man with three children, started his career as a professional farmer in 1981, when he jointed government's transmigration program in Tinanggea, Konawe Selatan District (SE Sulawesi mainland). He visited Lasembangi in 1995 and directly loved with Lasembangi as the place has better soil than Tinanggea. 'The village has a good quality of soil and water, while land resources are still abundant. Unfortunately, some people have no patience and want to earn money easily by cutting trees' said *Sukarno*.

In 1995, *Sukarno* brought 20 orange planting materials from Tinanggea upon his visit to his brother (*Pak Agus*) who had lived in Lasembangi as rattan collectors since 1992. He asked his brother to conduct trial planting. In 1996, *Sukarno* revisited his brother and found that Lasembangi is highly suitable for orange plantation. After bought two ha land in Lasembangi, he decided to move from Tinanggea to Lasembangi and started to plant 'Siamese' orange seedlings from Tinanggea. In 1998, he followed on-the-job-training on grafting provided by CARE and since then he enable to produce orange seedling materials by his own.

Apart from managing 4 ha orange plantation, he also breeds goats and chickens. On average, he can sell 20 goats per year (USD 1,000) and 100 kg chicken eggs (USD 40) per week. From his integrated farming, he has been self-sufficiency of agriculture input. He makes uses of animal (goats, chickens) dung as manure (organic fertilizer) for his orange, cocoa and vanilla plantations, the latter are still at the development stage. In 2007, *Sukarno* was elected as 'best-performance of farmer in Buton District' (*Petani berprestasi*), for this he received government grant of USD 2,000, 1 unit of hand tractor (USD 2000). The farm land has been selected by Buton Government as farmer training center (*Pusat Pelatihan Pertanian Petani Swadaya/PAS*). In the near future, he planned to develop coffee, papaya, rambutan and nanas in his farm.

A.2.1.10. Strengthened oyster farming in Watumotobe Village

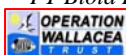
Community based oyster farming is occurred in the Kapontori Gulf, as the gulf has clean, modest waves, and there is also a flow of nutrients from the estuarine ecosystem. The main sources of nutrients come from Lambusango forest, as the area is the headwater catchment of Kapontori River, which discharges its water into the Kapontori gulf. There are two villages located along the coastal line of Kapontori Gulf, i.e. Lambusango and Watumotobe.

Pak Zahunu is the key person on oyster farming business development in Kapontori Gulf. Since 1970s, *PT Selat Buton*²⁴ is the only buyer of oyster juvenile, as such the market pattern was monopolistic and farmers always become the losers. Farmers grow oyster juveniles (half pearl snail nursery) for 4-8 months and sell to *PT. Selat Buton*²⁵ (Rp. 500 - 700/oyster). The company needs another 6 months to process oyster juvenile to half pearl and finally into ready sold-made jewelry. The end products are mostly exported to some Asian countries.

So far, farmers have no power to bargain with main oyster buyers, i.e. *PT. Selat Buton* and *PT Biota Lestari*²⁶. Oyster Farmer Association was needed, mainly for the following reasons: (1) To organize farmers in order to strengthen bargaining position on oyster juveniles trade; (2) To stimulate the development of oyster-based home industry; (3) To

²⁴ *PT Selat Buton* was established in 1930 by a Japanese businessperson. During 1960s, the business was handed over to an Indonesian businessperson (*Pak Syamsyul Arief*), who modified the main products from full to half-pearl. Since then, the factory has absorbed many local workers; the workers' settlement surrounding the factory in the early 1970s became a *Palabusa* village (now under jurisdiction of Bau-Bau Town). The company is now led by *Ir. Nasir Arief*. The site managers are *Pak Bance* and *Pak H. Udin*. The factory is located at the Palabusa Gulf; it is about 20 km from Bau-Bau toward Kapontori.

²⁶ *PT Biota Lestari* was established oyster industry (2005) and it is located at Lambusango Village.



develop a new market for both oyster juveniles and oyster-based home industry products;
(4) To raise the access of oyster farmers with the local bank credit.

With LFCP facilitation, the Oyster Farmers Association (OFA) was established on July 29, 2006, the Chairman: *Zahunu* (Watumotobe Village); Vice-chairman: *La Ode Poto* (Watambo Hamlet); Secretary: *Azhar SPd* (Watambo Hamlet). Treasurer: *La Abo* (Watumotobe Village).

Some activities done by OFA:

(1) Training on oyster farming and processing in Watumotobe Village: The objective of the training is to provide skilful labours to support the development of oyster business development in Lambusango and Watumotobe villages. It was conducted before the existence of OFA, but supported by the key members of association. It was conducted for two days (28 and 29 January 2006) and attended by 40 participants, 10 of them are teenagers. At the first day of the training, *Pak Zahunu* discussed the prospect of oyster, its biological behaviour (including, the natural enemy). He also explained oyster ecology and the need to conserve Lambusango Forest to prevent sedimentation in the Kapontori Gulf. The theory was followed with in-door practical exercise. At the second day, all participants directly went to the rafts and practical exercise was given on the spot. Three rafts were provided for this exercise and every participant had a chance to inject 10 oysters. The injected oysters were returned to the raft and the results can be inspected after six months. A special note was given in every injected oyster so then the results of the exercise of every participant can be evaluated.

(2). Developed Bamboo nursery in Watumotobe and Lambusango Timur Villages: 220 rafts currently installed for oyster farming in Kapontori Gulf, 80 % are made from casuarinas trees. Each raft needs 100 trees, and they need to rebuild every 4 years. As such, the annual trees demand for rafts in those villages are 4500 trees. If this process continue, the future of Lambusango Forest will be threatened, which further affect on the sustainability of oyster farming. In response to the problem, since the start of last rainy season (December 2006), OFA facilitated the development of bamboo nursery in Watumotobe (100 seedlings) and Lambusango Timur Villages (500 seedlings). All seedlings have been planted in private on March 16, 2007. The survival percentage of the planting was poor as April and May 2007 were extremely dry.

(3) OFA defined common price for PT Selat Buton: On August 2006, OFA determined uniform prices (Rp. 800 per oyster). The price was agreed by PT. Selat Buton, and it was maintained until November 2007. In response to the rising price, since December 2006, PT. Selat Buton together with Palabusa community has developed oyster farming in Palabusa Gulf. With new oyster supply from Palabusa, the OFA started being unstable, as some members (due to urgent needs) sold their oyster below its committed price. Since then OFT has been in trouble in defining common price.

(d) OFA developed working cooperation with District Marine Office and PT Bio-Bahari: In September 2006, OFA signed working cooperation with Buton District Marine Office to develop 50 oyster farming rafts. The government granted the rafts as

working capital to poor fishermen. Joint cooperation has been in progress between OFA and *PT Bio-Bahari* (Surabaya based company). OFA is willing to supply oyster seeds to the company as well as providing technical assistance, while the company will help OFA to market their product.

A.2.1.11. Selling 'Anoa' coffee to UK market (WCP)

In Lambusango area, small holder coffee plantations widely occur from Lasalimu Selatan, Siontapina, Wolowa and Pasarwajo Sub-Districts. Among those areas, Wakaokili village is well-known as a central production of coffee in Lambusango. During the economic crisis in 1999, the Wakaokili villagers had windfall profits from the good price of cash-crop, especially coffee. The village area shared border with the southern part of Lambusango forests, the village is located near Kaongkaongkea River, on the main road between Bau-Bau and Pasarwajo. Based on recent inventory of extension worker (*Siriton, 2006*), the area of coffee plantation in Wakaokili village is 84 ha, about 90 households involved on coffee production. Farmers normally sell coffee in the form of dried cherries; the price is Rp. 8,000 or USD 0.9 per kilogram. Peak of harvesting season is normally between July and September. Coffee cherries produced in Wakaokili are being grown in an 'organic' way (i.e. without chemical pesticides, herbicides or fertilizers). The average yield of *robusta* is between 300 – 350 kg cherries per ha. The poor yields are mostly attributed to the fact that coffee trees are not maintained; trees are old, and pruning and cleaning of the grounds are not regularly undertaken. Since many coffee estates are located near settlement areas, farmers only pick ripe cherries (red ones). After harvesting, coffee cherries are fermented overnight, in sacks, buckets or other storing apparatus. Cherries are then washed to remove the mucilage, followed by drying. Drying is done in an open, flat space such as the yard or roadsides. Raised platform are never used for drying. After a few days of drying, dry cherries are then sold to collectors or are kept for a time until collectors arrive or the price is more favourable. If a farmer has sufficient quantity of beans, he may bring it directly to Bau-Bau to be sold.

LFCP in cooperation with Operation Wallacea Ltd. (*Dr. Tim Coles*) intended to promote added value of Lambusango coffee, the harshness of *robusta* beans has been dealt with by mixing them with another bean from Honduras. By helping farmers to sell coffee at fair price will reduce farmer dependencies of forest resource, and thereby support in-situ Anoa conservation.

Market network will be developed in UK involving some Student Associations of UK Universities, while the processing quality and the packaging will be improved. Coffee marketing will be conducted through *Anoa* conservation campaign. By purchasing Lambusango coffee with good price, the buyers have helped Anoa conservation. In October 2006, LFCP sent 50 packages of processed *Anoa*' coffee (200 gram per packet) to UK, while on January 2, 2008, in response to Opwall request, LFCP sent 60 kg of *Anoa* coffee beans via post to UK, this has been arrived in Opwall office on March 5, 2008.

A.2.1.12. Developed Tree Nursery Model in Wajah Jaya

Since April 2007, LFCP has facilitated the development of village nursery business model in Wajah Jaya village (*Pak Ramli*) to produce teak (*Tectona grandis*) seedlings and indigenous species such as biti (*Vitex sp*), bayur (*Pterospermum sp*) etc. The production capacity is of 50,000 seedlings every four months. The teak seedlings produced by the nursery have been accredited/labeled by Province Seedling Centre (*Balai Benih Sulawesi Tenggara*). Watershed Management Agency (BP-DAS) has bought teak seedlings from the nursery model to implement National Land Rehabilitation and Reforestation Movements Project (*Gerakan Rehabilitasi Hutan dan Lahan/Gerhan*) in Lambusango. Since the existence of the nursery, *Gerhan Project* does not need to buy seedlings from outside Buton Island. The seedlings production will also be used to support planting campaign in Lambusango, especially '*planting compulsory program*' for brides and bridegrooms. The latter program has been recently launched by Sub-district Religion Affair Office (KUA) Lasalimu.

A.2.1.13. Promoting Lambusango Ecotourism Market

A.2.1.13.1. Amartia Society/Angsa Indonesia Tour and Travel (Amartia)

Amartia was selected to receive an Eco-tourism Development Grant (USD 10,000) for six months (August 2005 – January 2006) and started to work together with LFCP since August 2005. The proposed achievements of the LFCP Project Tourism Development include: (1) Increase the number of visitors to experience the Lambusango and Kakenauwe forests, especially domestic clients; (2) Increase the number of local families surrounding the forest who gain benefits from the tourism development (emphasizing economic benefits); (3) Promote self-reliance or sustainability of local tourism businesses; and (4) Demonstrate that tourism development initiatives will lead to minimizing threats to the forest ecosystem. Below is list of outputs of Amartia.

a. Travel tour product development. Forty tour products have been developed, which connect Buton Island and its surroundings with other Sulawesi most known tourist destination. Buton mainland highlighted Lambusango Forest and nearby dive location such as to Wakatobi Marine Park. The products are also connecting Buton with nearby island such as Muna Island, and small islands surrounding Wakatobi Marine Park. The main objective of Buton tour products development is to connect Buton and its surroundings (include to Muna Island and Kendari as the main entrance to Buton) with most familiar Sulawesi tourist destination such as Makassar, Toraja, Bunaken, Tangkoko and Minahasa Highland, including volcanic experience tour programs²⁷. It is expecting, that in future, Buton and its surroundings to be part of Sulawesi main tourist destination.

b. Travel catalogue development. It is composed of a list of tour products, which is promoting Buton Island and its surroundings to be one of main Sulawesi tourist destination. It is subject to be modified by tour organizers. The catalogue is composed of 12 pages, with dimension 19.75 x 29.50 cm, and printed for 500 copies using 120gr matt paper.

²⁷ Detail itinerary of the total 42 tour programs is provided in separated document.

c. *Development of three Posters.* A series of posters, each of these are (a) Visit Buton Map; (b) Buton Wildlife and Nature Reserve; and (c) Buton Marine Park and Coral Islands. Each poster have dimension of 60 x 50 cm and printed for 500 copies with high quality paper of 120-gram matt paper type. Fifty posters have been disseminated during sales activities to various tour and travel companies. Each poster was design with bilingual language: English and Bahasa Indonesia. Corel and Adobe design software packages has been major instrument for its design.

d. *Disseminate Lambusango Tour Products to the Berlin International Travel Bazaar (ITB).* With the assistance of Yogyakarta Provincial Travel Association, project has facilitate the dissemination of 100 brochures and tour catalogues to be delivered and sold during ITB event through Tunas Indonesia Tour and Travel. There has been no feed-back on trade activities during ITB until this report submitted to GEF/Lambusango Conservation Project.

e. *Direct Mail Services.* Amartia delivered Lambusango promotion materials to 25 organizations, mainly tour and travel agents in Indonesia and 5 International with have concern with tourism for nature conservation such as delivered Lambusango brochures, catalogue and CDs to NC-IUCN tourism programme.

f. *Direct promotion activities.* Those activities have been conducted in Jakarta, Yogyakarta, Bali, Makassar and Kendari. Project has been assisted by several travel agents; they are (a) Bali Arjuna Travel; (b) Angsa Indonesia Yogyakarta; and (c) Cendana Travel Makassar. Project provides information about Lambusango to agents in forms of (a) detail tour products, (b) travel catalogue, (c) CDs, (d) brochures, (e) posters and (f) information of Lambusango website.

A.2.1.13.2. Contract to Bonny Syafei for Marketing Lambusango Forest eco-tourism Product in Bali and Surrounding Areas

Operation Wallacea Ltd has quite successful to market Lambusango Forest for European market. Every July-September, hundreds of students and scientist come to Lambusango Forest to conduct research or to enjoy the beauty of the forests. The activity has provided significant additional income to Kakenauwe Village and the surroundings. Unfortunately, it only occurs during July-September, and only a few villages which are influenced by the ecotourism activities. As such, there is a need to market Lambusango Forest outside *Operation Wallacea Ltd* tourists' season, both for foreign (and domestic tourists in Bali and Jakarta).

LFCP with the support of *Dr. Tim Coles* sub-contracted *Bonny M. Syafei* (*Operation Wallacea Site Manager*) for three months (6 November 2006- February 5, 2007, USD 3,750) to market Lambusango Forest *Adventure Tour* product to tour operators, expatriates, students, companies and other relevant parties in Bali, Jakarta and surrounding areas. *Bonny* acted as liaison person between tour operators/eco-tourists and *Lawana Ecotone* (Bau-Bau based tour operator) and will develop long-term market networking for Lambusango Forest eco-tourism product. In the mean time, *Lawana Ecotone* designed a 6 days/5 night's tourism package with start and finish points in Bali or Jakarta.



The following was activities and outputs done by *Bonny M. Syafei* during the period of contract: (1) Learning the nature of tours and travel company selling adventure tour in Bali to develop list of reliable tour and travel company to work with; (2) consultation of itinerary (6 days/5 nights) with foreign tourist and researchers in order to develop itinerary which met with foreign tourists; (3) design brochure and printed for 2000 copies; (4) put 300 brochures at international departure terminal of Ngurah Rai Airport; (5) put 200 brochures at domestic departure terminal of Ngurah Rai Airport; (6) put 100 brochures at Café Black Canyon, Tuban-Bali; (7) put 100 brochures at *Kudeta* café, Jl. Raya Seminyak, Kuta-Bali; (8) develop working cooperation with Panorama Tours DMC, Bali Holidays Tour and Travel, Tour East Indonesia, KORI Restaurant and Bar, Paradise Bali Holidays Tours & Travel and Kaboa Management Training; (9) follow-up the working cooperation.

A.2.1.13.3. Training on home-stay management for Kakenauwe villagers

On 15 August 2005, LFCP conducted program socialization in Buton District Tourism Agency. The agency showed their great interests and willingness to organize joint activities and share funding on relevant activities. Two activities were agreed, i.e. (a) Promote Lambusango tourism in the Royal Tourism Indonesia Mart Expo (Royal TIME²⁸) in Yogyakarta, 23-25 September 2005 (this was conducted by Amartia); (b) Joint training on home-stay Management for Kakenauwe villagers. In December 2005, the agency established a wooden home-stay in Kakenauwe village which is aim as an ideal home-stay model. The joint training was held from 7 – 10 December 2005 with 45 participants, 30 from Kakenauwe Village, while 15 from other villages located in the surrounding of Lambusango forests.

A.2.1.13.4. Facilitated field work of 120 undergraduate students and 2 foreign tourists

LFCP has opened new market of Lambusango Forest, especially as fieldwork and research area destination of Indonesian undergraduate students in SE Sulawesi. From 12-17 May 2007, 120 undergraduate students (Faculty of Agriculture and Forestry) conducted fieldwork in the Lambusango Forest. At the same time, LFCP facilitated the visits of three foreigners [*Tjale Boorsma*, *Mirriam Bremer* (from Utrecht University, The Netherlands) and *Bob Stalman* (from America)].

²⁸ TIME is the biggest International travel market in Indonesia; it is designed to facilitate the Indonesian tourism community with international tourism tour organizers. The event was organized by Indonesia tourism network organisations such as *Garuda Indonesia*, *Air France*, ASITA, Indonesia Tourism Promotion Board and the Yogyakarta Province. The event was attended by 23 countries, it include *buyers*, *sellers* and *press*. Indonesian *sellers* were from the tourism business community from 17 provinces throughout Indonesia.

A.2.2. Discussion

A.2.2.1. Lesson learned

A.2.2.1.1. Relation between business development and village conservation contract

The development of village business in this project is not a matter of developing models on alternative sustainable livelihoods, but also as tool to establish conservation commitment. In fact, it is not always easy to transform ‘village business development’ to ‘village conservation contract’.

The underlined reasons are: **(1)** Business investment needs time to produce profits, while villagers’ basic life needs often cannot wait until the time when the investment starts to produce revenue. The implication is that some of them still destruct forest while business investment has been initiated. This is the case for all villages where we developed business development; **(2)** total allocated budget for business development is about 9 percent of total budget. This is not too generous when looking the number of targeted villages (53 villages). Instead of distributing the fund to all villages, decision was taken to concentrate investment on selected villages²⁹ (see *Table 2*). Among selected villages, it is also impossible to involve all villagers. Apart from business need a trial process, the resource is not sufficient to cover all households within the village (75 – 515 households). As such, the first investment is only given to selected villagers (20 – 50 households). In this case, the developed ‘village conservation contract’ is only involved those who received direct investment, this is the case for Lasembangi, Watumotobe and Wagari Village (see *Table 2*); **(3)**. On other case, such as Kakenauwe, Matanauwe, Barangka and Summersari, village business conservation contract are legally binding to all villagers within village, as the expected benefit can reach most of villagers; **(4)** Care should be taken to use village business development as a tool to enforce ‘village conservation contract’, considering its volatile nature of business. Experience in ginger plantation in Harapan Jaya and Wajah Jaya Village may provide a good case for this. When ginger market price was high, villagers were eager to receive ginger planting material, they all expressed their strong commitment in ‘village conservation contract’. However, once the market price dropped, they (at least some) put LFCP as a ‘scapegoat’ of the overall failure and not committed with village conservation contract; **(5)**. Some villages which used to deal with government project had seen World Bank assistant from the ‘money’ point of view rather than the real benefit. Those were the case for Barangka and Watumotobe; **(6)** Village having unfavourable socio-economic conditions (such as village dominated by poor Ambonese refugees/Harapan Jaya) has inclined to rely on ‘everything’ to the project. When the business, because of external factor, failed to gain expected revenue they would not be accepted the condition³⁰.

²⁹ Selection criteria of villages: **(1)** Strategic position of the villages which determine degree of access and control of the villagers to the forest surrounding them; **(2)** the availability of economic infrastructure (accessibility/road access, storages, communication); **(3)** the potential business development in the area; **(4)** illegal logging problems.

³⁰ Following the chaotic situation in the Harapan Jaya village, the project finally decided to buy all the harvested gingers (about 20 tons, USD 100 per ton).

A.2.2.1.2 Strategy to Develop Village Business

With special reference on Lambusango experience, below are some notes for business initiation which may be useful for other area.

Strengthen running business: It is advisable to consider running business when defining business initiation, probability for success is high. This was the case for orange plantation development in Lasembang and seaweed in Wagari. Those villages had started orange and seaweed business before project intervention; as such the major role of the project is to enlarge economic scale and number of business actors.

Suitable with local farm culture: We have to understand the farm culture of most villagers before defining business initiation. If it is still slash and burn agriculture, it is difficult to change into intensive land cultivation within project duration. This is the case when LFCP introduced ginger planting in Kakenauwe, Lawele and Winning. The planting were not successful, as those villages are not used to deal with intensive farming (see *Table 1*);

Box 6. Example of Village Conservation Commitment/Contract

Village Forest Conservation Commitment Charter Lambusango Forest Conservation Defender Community Sumbersari, Kecamatan Siotapina

This charter is an expression of awareness of Sumbersari Village community to build better environment from various destruction and bequeath welfare for future generation. We are aware Lambusango Forest is an important natural resource and play important role as supporting life, water storage and source of genetic, flood prevention, maintain soil fertility etc. We are aware Lambusango Forest is home of thousands wildlife, a precious world heritage which deserve to protect and maintain its sustainability.

Lambusango Forest is a state forest land which consists of natural forest located in six kecamatans, i.e. Kapontori, Lasalimu, Lasalimu Selatan, Siotapina, Wolowa and Pasarwajo. Sumbersari Village is an area which share border with Lambusango Forest.

Understanding roles and functions of Lambusango Forest, today, Monday, 10th of December 2007, all community members which consisted of village government, key elders, religious leaders and all community components conducted general meeting to build commitment called 'Village Commitment to Conserve Lambusango Forest'

We are all community of Sumbersari Village committed: (1) we do not log timbers both for subsistence and business purposes; (2) we do not cut immature rattan and those which is located in the Lambusango Wildlife Reserve; (3) we do not hunt protected wildlife, such as Anoa, macaque, tarsier, hornbill, cuscus and others; (4) we do not enlarge agriculture land by encroaching state forest land; (5) we protect and safeguard Lambusango Forest from destructive logging done by any actors.

Sanctions for individual violators: (1) If one(s) violate the above commitments, the extracted timbers and its equipment (chainsaw or others) will be confiscated and owned by village government and one(s) have to write letter of statement that they will not repeat the

wrongdoings; (2) If person(s) who violated the commitment repeat the action for the second time, one(s) will be sentenced by all village community members. The violators have to wear clothes of leaves with full red ants, then bring to walk by many villagers around the village areas and have to shout loudly 'I am a forest destroyer' ... 'I am a forest destroyer'

Sanctions for village government: If village government is unable to stop forest crimes done by its villagers or outsiders, the village will not receive any business funding assistant both from Operation Wallacea Trust and Government.

Table2. Village Business Development Initiative and Village Conservation Contract

| Village | Kecamatan | Business Initiation | No village 's House-holds | No of beneficiaries' household in the village | Village/Farmer Group Conservation Contract |
|--------------|------------------|--|---------------------------|---|--|
| Barangka | Kapontori | - Cashews export -Fairtrade Certification | 600 | 450 | Village Conservation Contract |
| Matanauwe | Siotapina | - Cashews export -Fairtrade Certification | 513 | 132 | Village Conservation Contract |
| Sumbersari | Siotapina | -Ginger marketing -Training on ginger tea | 230 | 175 | Village Conservation Contract |
| Kakenauwe | Lasalimu | Eco-tourism | 75 | 75 | Village Conservation Contract |
| Winning | Pasarwajo | Employment facilitation on Asphalt company+ | 436 | 339 | Village Conservation Contract |
| Harapan Jaya | Lasalimu Selatan | Ginger plantation | 138 | 98 | Village Conservation Contract* |
| Wagari | Lasalimu | Seaweed | 105 | 25 | Farmer Group Conservation Contract |
| Watumotobe | Kapontori | Oyster processing | 253 | 75 | Farmer Group Conservation Contract |
| Lasembang | Lasalimu | Orange | 142 | 53 | Farmer Group Conservation Contract |
| Lawele | Lasalimu | Ginger | 360 | 20 | - |
| Wajah Jaya | Lasalimu Selatan | - Ginger - trees nursery | 215 | 15 | - |

* The sharp decline on ginger price had affected to failure on village conservation contract

Avoid providing free capital: Business development is entrepreneurship empowerment. While the source of project funding is grant, business facilitator should facilitate farmers (local community) commitment to return the provided capital for the sake of revolving fund and other reasons. Failure to enforce such commitment will seriously affect on poor empowerment, entrepreneurship, independency and responsible attitudes.

Avoid provide cash capital: The project should provide in-kind capital for business development to avoid villagers using cash-capital for irrelevant purposes.

Do not initiate blanket business initiation: The affect of failure will be severe, especially if there is no alternative. This is the case for gingers development in 2005. The business was developed in five villages, when the price of ginger dropped in 2006, the business development suddenly collapsed and local community lost trust to project.

Make use champion of the village: Business initiation will effectively developed when it is introduced through or with great support of local champion. This is the case when the project approached *Pak Sukarno* for orange plantation, *Pak La Peo* for seaweed farming and *Pak Sarjono* for Fairtrade facilitation.

Combined annual and seasonal crops: Learning from ginger planting, it is good if the introduced agriculture business combines between annual and seasonal crops. For instance, instead of only planting ginger which can be harvested after nine months, villagers could also be introduced with vegetables farming with can be harvested in three months.

A.2.2.2 Outlook

A.2.2.2.1. Cashews

It is the most potential Lambusango products for export. The problem, Lambusango is just shell-cashews producers, and not kernel. Different with ginger, cashew trade are simpler, considering that cashew is only produced in limited area in the world, while Indonesian cashews are available when other producers absent from the market. Key cashew producers in Indonesia are Buton, Muna and Flores. Muna and Buton shared 35% of Indonesian cashew production (95,000 ton/year). Different with Flores cashew (which is relatively young, there is new planting), the age of cashew trees in Lambusango has been old (about 30 years), while the optimum production for cashews is from 10 – 20 years.

Buton cashews were planted during *Pak Alala* (SE Sulawesi Governor during 1970s) era under *Gersamata Program*³¹ during 1980s; it was aimed at land rehabilitation (soil conservation), rather than for economic production. Later on, cashews become the most important industrial crop in Buton and Muna Islands, such as cocoa for Kolaka. Considering that the original aim was for land rehabilitation, cashews in Buton have irregular planting space, lack of maintenance and no weeding (except 1-3 month before harvesting season) and no fertilizer.

³¹ In 1980s, Governor of SE Sulawesi, *Pak Alala*, has set out province wide program named '*Program Gerakan Desa Makmur Merata*' (*Province Program for welfare villages /Gersamata*). This program conducted greening movement on critical land using horticulture and industrial crops, such as *rambutan* (*Nephelium sp*), cocoa, clove, cashews, coffee etc. Province Government distributed cocoa seeds generously to farmers and provided technical assistances by training Kecamatan agriculture extension workers to supervise planting and tending of cocoa plantation development.

Follow-up for cashews: (1) Farmers should at least store half of the harvested cashews in their storage which will enable them to produce cashew kernels for the whole year. During the last three years, LFCA has conducted cashews processing campaign, but this should be continued by local and national development actors; (2) Conduct cashews tree planting to replace old cashews trees; (3) Processing of cashew 'waste', such cashews shell (for castor oil), cashew 'fruit' (for syrup and food); (4) Better marketing. LFCP has initiated Fairtrade certification; invite PT. SSN, trial export to UK. This should be followed by local and national development actors.

A.2.2.2.2. Coffee

This is the most potential terrestrial agriculture products for trade in Lambusango after cashews. Considering its high stable price at local level (processed coffee Rp 18,000/kg, USD 2 per kg, while coffee bean is Rp. 8,000/kg, USD 0.76/kg), and also the potential national and international market, while the plant are highly suitable for most of Lambusango land, coffee cultivation are worth to be intensively developed in Lambusango. It is necessary to note that the widely grown coffee (tiny beans) in Lambusango has poor quality (in terms of taste and size) and low production capacity. LFCP has not yet put enough attention for coffee during the last three years, as such lot of work still required to make the business become one of sustainable income sources in Lambusango. Follow-up for coffee; (1) raise its production capacity by replanting using high yield coffee from Java (*Malang*), Sumatra (*Lampung*), South Sulawesi (*Toraja*); (2) Facilitate coffee export under the scheme of WCP (Opwall).

A.2.2.2.3. Ginger

From process point of view, the development of elephant ginger (*Jahe Gajah*) in 5 villages during 2005 and ginger seedlings distribution in 5 villages in 2006 have been successful. The planting and maintenance process has distracted community against destructive logging. The ginger case also provided lesson learned to farmers on the fluctuation of agriculture commodity, and the need to diversify its products. Understanding instability nature of agriculture price, the introduction of ginger seedlings has benefited farmer to add their agriculture assets (capital), this will be useful once the price of ginger are improving. Follow-up actions for ginger; (1) trial planting for red ginger (*Jahe Merah*); (2) diversify ginger products, such as dried and sliced gingers; (3) ginger tea processing.

A.2.2.2.4. Seaweed

Forum together with LFCP has enlarged seaweed farming in Wagari. The success of the business has potential to inspire and attract loggers from Wagari and Lawele Villages to develop seaweed in Lawele Gulf. Those who involve on seaweed business will be no time for destructive logging. Moreover, seaweed farming has declined destructive fishing, as community devoted their time on seaweed farming, and thereby less time for fishing. The use of *Potassium cyanide* for fishing has reduced dramatically, as farmers believe the negative affects of *Potassium* on seaweed growth. This effort need follow-up from Buton District Government and relevant development agents, such as: (1) Facilitate

the establishment of access road to Lawele Gulf for efficient transport of seaweed products; (2) Facilitate marketing; (3) Linking with the Bank; (4) Prevention the outbreak of seaweed disease.

A.2.2.2.5. Orange and other fruits

Fruits demands (except banana) in Buton are imported from other islands. Orange demand for Bau-Bau Town is taken from Muna Island, as Lasembangi orange production is only sufficient to meet demand of surrounding Lasembangi villages. In addition of LFCP initiation, much work still needed to enlarge and replicate current 'Lasembangi' orange plantation within Lasembangi and surrounding villages. LFCP has also tried to develop water melon in Lasembangi; the trial was also very successful, some other fruits such as pineapple, rambutan (*Nephelium sp*) are also worth to develop in Lambusango.

A.2.2.2.6. Oyster

Half pearl oyster farming in Kapontori Gulf during the last four years have experienced over production leading to poor price (now is between Rp 400 – 600). The gulf has contained of 219 oyster farming rafts involving 163 farmers with total production of 5 million oysters per year. While the major consumers, PT Selat Buton have only been able to absorb 1.2 millions oysters per year, as since 2006, the company has established oyster farming in Palabusa. Now, farmers have serious difficulties in marketing oysters; apart from PT SB, there are also buyer from Lombok and North Sulawesi, however this is uncertain, while transporting oyster by boat for long distance has implied on poor oyster survival. Considering the saturated market of half pearl oyster, it may be worth to change the current oyster cultivation with whole pearl (*Pinctada maxima*) which has a big demand. LFCP was interested to assist the trial of whole pearl oyster; however, until the writing of the report, *Pak Zahunu* has not been successful to obtain oysters seeds (juveniles).

A.2.2.2.7. Linking associations with Bank Credit

The role of financial agency (bank) as fresh capital sources on village business development is very important. In Buton, the bank credit recipients have been so far dominated by Chinese businessmen, little Butonese have been familiar with bank credit. The poor bank access is a bottle-neck on small and medium business enterprises (SMEs) development. Local SMEs are reluctance to build relationship with bank, as they normally suffer for long process and unaffordable bank requirements. As a result, they resort to middlemen with high loan interest.

So far, LFCP has developed 6 associations/cooperatives and all have been legally registered: (1) Asosiasi Petani Jambu Mete Lambusango Buton/APJLMB; (2) Asosiasi Petani Jambu Mete Barangka Buton/APJMBB; (3) Asosiasi Jambu Mete Matanauwe/APJMM; (4) Asosiasi Petani Jahe Lambusango/APJL; (5) Asosiasi Petani Mabe Lambusango/APML (Watumotobe and Lambusango Timur Villages); (6) Koperasi Bunganaponda (Wagari Village). One of the objectives to develop farmer association is to link association with bank credit.

The most relevant credit scheme for association in BRI Bank is so-called *Kredit Kemitraan/Partnership credit*. The fund is derived from 5 % of state owned enterprises benefit; the money is actually aimed as 'grant' rather than loan, however for the sake of entrepreneurship enhancement (education) the loan beneficiary shall return the money with its associated interest. Maximum loan is 25 millions rupiah (USD 2,780) with 1 % interest per month (12 % per year). Collateral is not required. Loan recipient's candidates should submit business proposals. If the proposal are considered to be feasible by BRI Branch, then BRI will pass the proposal to the BRI Head Quarter (Jakarta), the latter body will make the final loan decision.

There was an idea of the PM to put World Bank/GEF fund allocate for associations capital (say USD 10,000) in BRI Bank, then the money deliver to each association as loan from BRI. By doing this, association will seriously treat the grant as loan, as the fund is administered by BRI Bank, which will enhance entrepreneurship and responsibility (education), rather than LFCP provide a pure grant. However, the scheme was not allowed by the World Bank.

Follow-up: Efforts are needed by government and relevant development actors to maintain the life of association and link the associations to Bank credit.

A3. Provision of enabling conditions for better forest management and sustainable rattan extraction

A.3.1. Provision of enabling conditions for better forest management

A.3.1.1. Workshop on spatial planning, transmigration, and mining

The workshop was held at Betoambari Restaurant, Bau-Bau on March 21, 2006 (9.30 am – 17.00 pm). It was attended by 40 participants; consisted of 15 government staff, Forum member (20 persons), and University (5 persons). The workshop was opened by the Regent of Buton (*See Box 4*). The idea of the workshop was emerged during the World Bank Staff Supervision Mission in the beginning of November 2005. The idea came into surface during the meeting between the World Bank Staff with representatives of the Buton District government officials (November 9, 2005) in the Buton District Planning Office. Originally, the workshop was planned in December 2005, however due to those months are the busiest-months for the government, then this moved to March 2006. The workshop aimed at establishing ‘conservation discourse’ involving all development sectors within Buton District, especially to develop better spatial planning which can incorporate conservation objectives into regional development and to search over the trade-off between development and forest resource conservation. Workshop conclusions; (1) The need to review Buton District spatial planning developed in 2002; (2) LFCP was asked to facilitate the development of GIS laboratory and GIS training.

Box-7: Ir. Syafei Kahar Vision on LFCP:

“We need alternative income sources for community living surrounding Lambusango Forests”

On Tuesday, March 21, 2006, *Ir. Syafei Kahar*, the first person in the Buton District Government (Head of the District) was willing to attend opening ceremony of the Workshop organized by LFCP in cooperation with Forum. The workshop entitled “*Synchronizing Development and Forest Conservation: a closer look on mining, transmigration, and spatial planning policies in the Buton District*”.

Below is the free translation excerpted on some of his speech (without text):

Conservation idea and vision is nothing new for us. The problem is how serious its implementation. Conservation has become a new mainstream in natural resource management from center to local government; as such, I am pleased and hospitable the conservation program facilitated by Operation Wallacea Trust. I appreciate to the willingness of the World Bank and Global Environment Facility to support this project.

Developed countries have put great attentions to conservation problems in Indonesia. The role of tropical forests to control climate change and the sustainability of the world ecosystem has driven international funding to support conservation efforts on the high diversity landscape which still possible to be conserved. This seems to be well matched with Buton District as containing some of the best remaining tropical forest habitat on the entire Wallacea Zone. Buton District is acknowledged as one of the few remaining areas on either

in Sulawesi mainland and surroundings that still contains substantial expanses of relatively undisturbed lowland forests. That is why *Global Environment Facility* through the World Bank is willing to provide conservation investment in the forest.

In the opening ceremony of COREMAP program in Batauga about six months ago, I stated that coral reef destruction is not caused by human. I am sure, they never intent to destroy coral reef, but they just catch fish in the coral reef, which led to severe coral reef destruction, since they used bomb and poisons. During early 2000s, if we stand in Wara, we are often used to hear bomb blast to catch fish. Now, this does not happen anymore, as community from Wara to Wamengkoli has developed seaweed along coastal line. Community has conducted self-protection against their coastal resource. Local government has facilitated alternative source of income, while community has also been aware that bombs will destroy their seaweed and coral reef.

“Similarly, I am sure villagers who live surrounding the forest never intent to destroy their Forest. They just search over source of income generation by cutting trees, which affect to forest destruction. As such, the only way to prevent forest destruction is providing alternatives income sources. Indeed, no way to protect forest except provide alternative income sources outside forests”

In this context, I do appreciate to Operation Wallacea Ltd who annually facilitated the visit of hundreds foreign students volunteers to Labundo-Bundo. I am sure these activities are very useful to provide additional income source for Kakenauwe villagers, and thereby their commitment to conserve Lambusango Forest. However, I was surprised to hear that Operation Wallacea management used to pay quite low price for accommodation service provided by local community. For the sake of improving local community welfare, I suggest to Operation Wallacea to reconsider the current payment rate.

Local community will engage on logging activities in the absence productive works. Timber is a liquid economic source. If they have to plant maize, they have to wait for three months. However, if they log forest, they will directly get advance payment from the financiers to buy maize. I headed up Buton District Agriculture Service for ten years, and I found impossible to raise community income from smallholder agriculture. Food based agriculture just for the sake of staple food sufficiency!

There is still some opportunity to raise income sources from cashew plantation. The problems, farmers lack of technical skill. For instance, farmers are not used to thin their cashew plantation. They thought the more stands quantity per ha the bigger the production while in reality it is not true. Cashew trees need optimal space to allow better growth and minimize competition. Nevertheless, it is difficult to convince farmers without real example. This is just an idea, in which LFCP may be able to facilitate. I am sure the success of a project, such as LFCP, will be much dependent on the spirit of on-the-ground implementation process, and not merely dependent on the quantity of available fund.

Since April 2005, I have not issued any single forest extraction permit, and we had long established several forest products investigation post along the roads toward Bau-Bau town as we can see in Barangka, Wakoko and Kaongkakea. Ironically, as we realize that Lambusango forest's timbers can be easily found everywhere here in Bau-Bau town. It may be understandable, as ones who open and close the portal (in every investigation post) are human, while they receive very low salary. In this context, I am happy that the project has facilitated the establishment of Forest Crime Unit Lambusango.

I am totally intolerant with any forest destructions, apart from not issuing any single forest extraction permits, I am not allowed any ones who intent to build access road to the forest. Some key villagers surrounding Lambusango forests have persuaded me but I refused them, even when they assured me that their village would be 100 % elect me on the coming Election Day³². I do not care with that promise; I do not want to put environmental issues under my own short-term personal benefit.

Forest conservation is necessary for us, if forest have been heavily destructed or extinct; there will be no way to restore the forest in its original state. We will lose forever. I think there are still a lot of alternatives to find source of income except cutting forests and encroaching forest areas.

A.3.1.2. Sponsored local government officials to attend spatial planning training

LFCP funded 2 government officials (1 person from Buton District Spatial Planning and 1 person from Buton District Forestry Office) and 1 LFCP staff (Community Enforcement Coordinator) to attend training on ‘*Conservation and Spatial Planning*’ organized by The Nature Conservancy (TNC)/Conservation Training and Resource Center (CTRC) in cooperation with Faculty of Agriculture and Forestry, Hasanuddin University. The training was held in Kenari Hotel, from 17-21 April 2006. The commitment to sponsor training emerged during ‘*spatial planning, transmigration and mining*’ workshop on March 21, 2006. The three persons are members of spatial planning working group which will facilitate the establishment of new spatial planning concept that incorporate conservation objectives into regional development.

A.3.1.3. GIS in service training

The establishment of Geo-Information System and Remote Sensing (GIS/RS) laboratory is required to integrate enormous spatial data which have been collected by the project staffs, Operation Wallacea Ltd scientists, PhD students and undergraduate students. GIS/RS outputs are useful as a tool for awareness rising (say, to show level of forest degradation to Buton District Government) as well as to facilitate the development of spatial planning of the Buton District. To do so, LFCP has started to install GIS/RS software in two personal computers, and will specially use the computer for GIS/RS analysis. A professional GIS/RS trainer from Jakarta (*Pak Zaenuddin Hamidy*) was invited to provide on the in-service training for LFCP staff. This was held from 26 May - 9 June 2006. Apart from digitizing of several thematic maps, several areas allegedly under intensive logging or encroachment have been identified. Efforts have been undertaken to develop collaboration with other GIS/RS laboratories elsewhere, especially with *TBI* (Balikpapan, East Kalimantan) and *ICRAF* (Bogor). The specific objectives of the proposed cooperation are to share information (satellite imageries) as well as advance processing or printing.

³² During the speech (March 26, 2006), *Pak Syafei Kahar* would apply for the second round (five years) Buton Regent. Now, he has already been taking Bupati post for the second round.

A.3.1.4. Monitoring forest destruction hotspots

The GIS/RS team have been monitored the status of forest destruction on yearly basis. The distribution of forest destruction hotspots are examined, and subsequently followed by groundtruthing activities, to figure out the magnitude of degradation, identify the actors, as well as the way to secure and to restore them. The results of overall findings will be presented regularly in front of BDFO. This becomes a basis for forest protection strategy and law enforcement. So far, GIS/RS team has two serial Landsat TM imageries, i.e. 1991 and 2004, 2006 and 2007.

A.3.1.5. Organized Basic Geo-information System and Remote Sensing Training for Planner

The availability of high quality spatial data is fundamental for forest management, while the quality spatial data in Buton District is still poor. The underlined reasons are; (1) poor human resource capacity and (2) lack of coordination. So far, there are no single agencies in Buton having capacity to produce maps with reasonable accuracy. As a result, many decisions in natural resource management are taken on the basis of poor spatial data analysis leading to overlapping working areas among different agencies. It is not surprising if mining concession license is allocated in the state forest lands, or rattan concession permits is given in the conservation areas. Clearly, the availability of good quality spatial data is precondition to develop natural resource management planning. As such, improvements of spatial data are badly needed. All agencies responsible in natural resource management should be hand-in-hand to develop basic spatial data (maps) to avoid conflict on land use allocation/spatial planning.

Geographic information systems (GIS) are widely used as tools to analyze large amounts data in multiple datasets, while remote sensing (RS) techniques are used to collect and interpret data that are otherwise unavailable for geographically remote and inaccessible areas. LFCP initiated to introduce those tools to Buton District and BKSDA. However, GIS/RS training is only aimed as intermediate target; the most important one is to find reasonable entry point to facilitate dialogue among government authorities in improving spatial data and spatial planning process. The process is expected to stimulate transparency and spirit of sharing data and information, stimulate interest of local government on GIS/RS and thereby willingness to invest equipments by their own resource.

The training was officially opened by the Regent (*Bupati*), the training was conducted from January 29 – February 3, 2007. Training participants can be inspected in *Table 3*. A GIS Specialist (*Indra Suryadi*) from Tropenbos International Indonesia (TBI Indonesia) was invited as principal trainer to support *Hendra Gunawan* (LFCP's GIS Specialist/Sustainable Rattan Extraction Facilitator). At the end of the training, LFCP granted 2 GIS computers to BKSDA.

Table 3. GIS/RS Training Participants

| No. | Name | Agencies |
|-----|-----------------------------|---|
| 1. | Ir. La Ode Mpute | Economic Development Section-Buton District Secretary |
| 2. | M. Amaluddin M, S.S.,M.Si. | Ecotourism Development Section-Buton District Secretary |
| 3. | Bugiono, S.Hut. | BKSDA SE Sulawesi |
| 4. | Saidung, S.P. | BKSDA SE Sulawesi |
| 5. | Adhi Andriyansyah | BKSDA SE Sulawesi |
| 6. | La Ode Kaida | BKSDA SE Sulawesi |
| 7. | Saihudin | BKSDA SE Sulawesi |
| 8. | Eric Rustandi | BKSDA SE Sulawesi |
| 9. | Savitri Supraba, S.Kom. | Buton District Life Environment Office |
| 10. | Wahid Ode, STP. | Buton District Life Environment Office |
| 11. | Drs. Arufin | Buton District Life Environment Office |
| 12. | La Ode Rahmat Salim, S.Hut. | Forest Mapping Section - Buton District Forestry Agency |
| 13. | Indra Warsyadi, S.P. | Forest Utilization Section – Buton District Forestry Agency |
| 14. | Muhammad Arsyad Jalil, S.T. | Spatial Planning Section- Buton District Planning Agency |
| 15. | Mardiansa | Spatial Planning Section- Buton District Planning Agency |
| 16. | Ahmad Mulia, S.Pt. | Spatial Planning Section- Buton District Planning Agency |
| 17. | Sumartoyo, ST,MT | Spatial Planning Section- Buton District Planning Agency |
| 18. | Darfin Rawu, S.T. | Buton District Mining and Energy Office |
| 19. | Salehuddin, S.E. | Buton District Mining and Energy Office |
| 20. | La Ila, S.Pi. | Buton District Fishery and Marine Office |
| 21. | Yusniar, S.Pi. | Buton District Fishery and Marine Office |
| 22. | Fajar, S.St. | Buton District Land Cadastre Office |
| 23. | Hadjal, S.Sos. | Buton District Land Cadastre Office |

A.3.1.6. Organized the Development of GIS Forum

At the final session of GIS/RS training, facilitation was made to discuss post training activities, especially the development of GIS Forum. The idea was enthusiastically captured by all training participants. This was clearly indicated that the training has successfully improved participants' awareness on the important role of spatial data as a basis for development planning. The GIS Forum has two working groups, first is composed of the head of agencies as steering committees/policy working team, while the second is consist of GIS specialist of every agency acting as technical working team (see Figure 3). The technical working team was formed on March 5, 2007, whom *Pak Ahmad Mulia* (Buton District Planning Agency) was elected as Coordinator of technical team, while *Hendra Gunawan* (LFCP's GIS specialist) as co-coordinator.

A.3.1.7. Launching GIS Forum

To socialize the establishment of GIS Forum and to gain government support, formal public expose (launching) of GIS Forum was organized on Friday evening, February 17, 2007 in Betoambari Restaurant, Bau-Bau. This event was attended by Deputy Regent (*Pak Ali Laopa*), Assistant II of Secretary District (*Pak Nasir Andi Baso*), Head of BKSDA SE Sulawesi (*Pak Halasan Tulus*), *Dr. Tony Whitten* (Task Team Leader), *Kate Idzorek* (Just Cashews), several heads of District agencies, alumni of GIS training participants and members of GIS Forum.

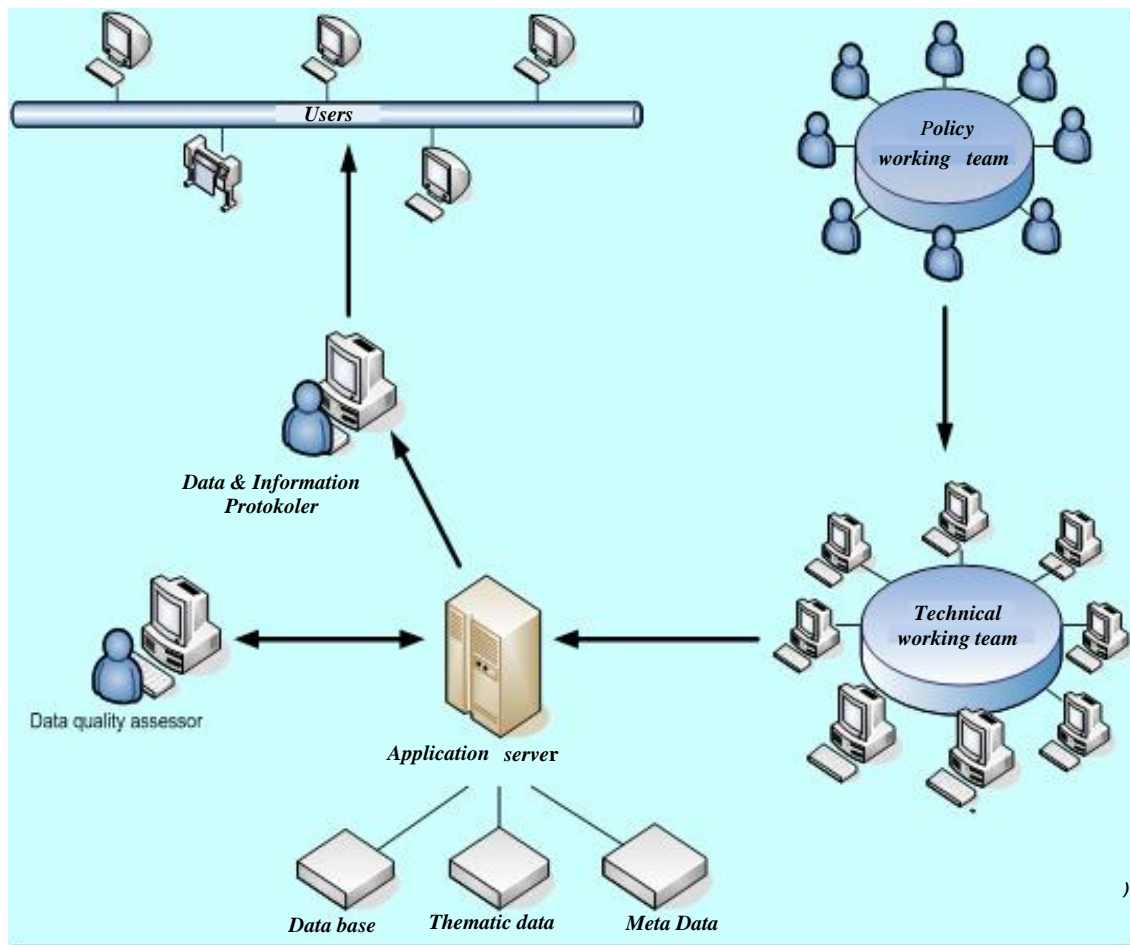


Figure 5. Organization and principal working procedures of GIS Forum

Achievements: GIS forum in coordination with Provincial Forest Inventory and Mapping Agency (BIPHUT) and Watershed Management Agency (BP-DAS) have developed the following maps; (1) The GIS Forum has been politically endorsed by Buton District Government with the issuance of Bupati Decree No. 518/2007; (2) delineated drainage/river system originated from Lambusango Forest on watershed unit basis; (3) in coordination with BIPHUT and Buton District Forestry Service defined forest estate boundary falling under different sub-district forestry service (UPTD); (4) in coordination with District Buton defined administrative boundary of sub-district and state forest area falling under different kecamatan boundaries; (5) putting geographic coordinate on the boundary line³³ map of Lambusango Forest (in progress).

³³ The state forest boundary line in the forestry map in Indonesia is an indicative boundary (not an exact boundary). The exact boundary is shown by geographic coordinate data which can be obtained from the mapping book (*Buku Ukur*). Efforts have been made to add the geographic coordinate on the existing map.

A.3.1.8. Organized Geo Positioning System (GPS) Training for forest rangers

GPS is a very powerful tool as unavoidable evidence in the court to show whether prosecuted forest crimes (illegal logging, encroachment etc.) located outside or within state forest land. During October 29 till 31, 2007, LFCP in collaboration with GIS Forum organized training on the use *Geo Positioning System* (GPS). The training was conducted on LFCP office and attended by 12 forest rangers (2 forest rangers per UPTD) of Buton District Forestry Service and 3 forest rangers of BKSDA (October 29 – 31, 2007). At the closing ceremony, LFCP granted 3 GPS to BDFO and 2 GPS to BKSDA.

A.3.2. Provision of enabling conditions for sustainable rattan extraction

A.3.2.1. Rattan Inventory

Rattan inventory surveys for part of Lambusango Forest have been conducted during the beginning of the project (2005/2006) and the results have been added to data set of *Atiek Widayati* (PhD student on sustainable rattan extraction, Northumbria University). The main objective of the survey is to understand how sustainable the rattan extraction in Lambusango Forests, socio-economic of rattan collectors and management performance of rattan extraction. The project has completed inventory of rattan standing stocks as well as understanding the underlined management problems linked with Buton District Forestry office capacity. The summary of findings is discussed below.

A.3.2.1.1. Rattan standing stock in Lambusango Forest

Rattan regeneration occurs almost everywhere, but mature rattan (ready-to-harvest, 6 – 8 years old) mostly occurs deep in the interior forests (wildlife reserve) and has been seriously depleted. Rattan collectors have to ‘hunt’ rather than just to collect rattan. The scarceness has caused rattan extraction to become more destructive than previously thought, to ease the collection of rattan, some collectors cut the entire tree where the desired rattan grows tightly entwined. To understand the current standing stock of rattan, survey was conducted on several sites in Lambusango Forests.

Table 4. Survey sites and numbers of transects/plots

| No. | Kecamatan | Village | Geographic Position (UTM) | Number of transects | Number of Plots |
|-----|------------------|------------|---------------------------|---------------------|-----------------|
| 1 | Kapontori | Wowoncusu | (475920; 9418658) | 4 | 16 |
| 2 | Lasalimu | Lawele | (498641; 9415498) | 4 | 16 |
| | | Lasembang | (500151; 9420233) | 4 | 16 |
| 3 | Lasalimu Selatan | Sumbersari | (502709; 9412548) | 4 | 16 |
| 4 | Wolowa | Wolowa | (493922; 9410830) | 4 | 16 |

In every survey site, four transects with 2,000 m length were established, the distance between transect was 500 m. On every line transect, four sample plots (50 x 10 m²) were made, the distance between sample plots was 500 m (*Figure 6*). The collected data on every sample plot include species; diameter, and cane length. Only rattans with cane length more than 10 m were recorded.

Fifteen³⁴ rattan species were found, while the prominent species in terms of size, abundance and distribution are **Lambang** (*Calamus ornatus*), **KB** (*Calamus sp.*), **Batang** (*Daemomorops sp.*) and **Torumpu** (*Calamus koordersianus*). Among four species, Lambang was the most dominant. The average rattan standing stocks (regardless its species) ranged from 2.4 – 3.2 ton/ha.

A.3.2.1.2. Socio-economic rattan collectors

Socio-economic survey of rattan collectors was made on several villages surrounding Lambusango to understand the contribution of rattan extraction activities on household economic of rattan collectors. Rattan collectors in Lambusango are mainly rainfed farmers who live surrounding the forests. Most of rattan collectors are married men with average age of 36 years with three children, the level of education varies, i.e. elementary school (44 %), junior high school (33 %), senior high school (21 %). As the main job is rainfed farming, collecting rattan is done on irregular basis along the year. They normally get orders from rattan extraction holders. Two rattan species, *Lambang* and *Batang*, are the most preference to collect, due to the easiness of collection, its abundance, their weight and price. Rattan collections are widespread during dry season; where alternative jobs are limited.

Collecting rattan is hard job and high risk, despite its poor price at the collector gate (Rp 500 – 700/kg or USD 0.04 – 0.06). People should have strong muscle to cut and to pull rattan, then drag them along hilly terrain. They have to go before dawn and arrive after dusk; they also often have overnight in the forest. However people still have high preference to collect rattan, as this is a job which can provide considerable cash in relatively short period. If they plant maize, they have to wait for at least three months, while collecting rattan can draw cash within a short period (3 -5 days), some collectors frequently receive advance payment. Based on the survey, it was found that income from rattan is nearly double compared with rainfed farming (see *Figure 8*).

Once collecting rattan, collectors can gather 60 – 80 kg rattan in two-three days, during a month they can (on average) collect 600 – 1,000 kg rattan. From 70 rattan collectors who were interviewed, 45 persons told rattan collection as the main job. From those persons, 6 respondents told that apart from rattan, they are also involved on logging activities (as porters), honey bee collection and wildlife poaching.

³⁴ (1) Batang (*Calamus zollingeri*); (2) Batu (*Calamus sp.*); (3) Buta (*Calamus sp.*); (4) Bulu (*Calamus sp.*); (5) Jaramasi (*Calamus leiocaulis*); (6) Kabe (*Calamus sp.*); (7) Kai Sisau (*Calamus minahassae*); (8) Tohiti (*Calamus sp.*); (9) Torumpu (*Calamus koordersianus*); (10) Lambang (*Calamus ornatus*); (11) Kakiki (*Calamus sp.*); (12) Noko (*Daemonorops robusta*); (13) Mombi (*Calamus sp.*); (14) Pisi (*Calamus leptostachys*); (15) Umol (*Calamus symphysisipus*).

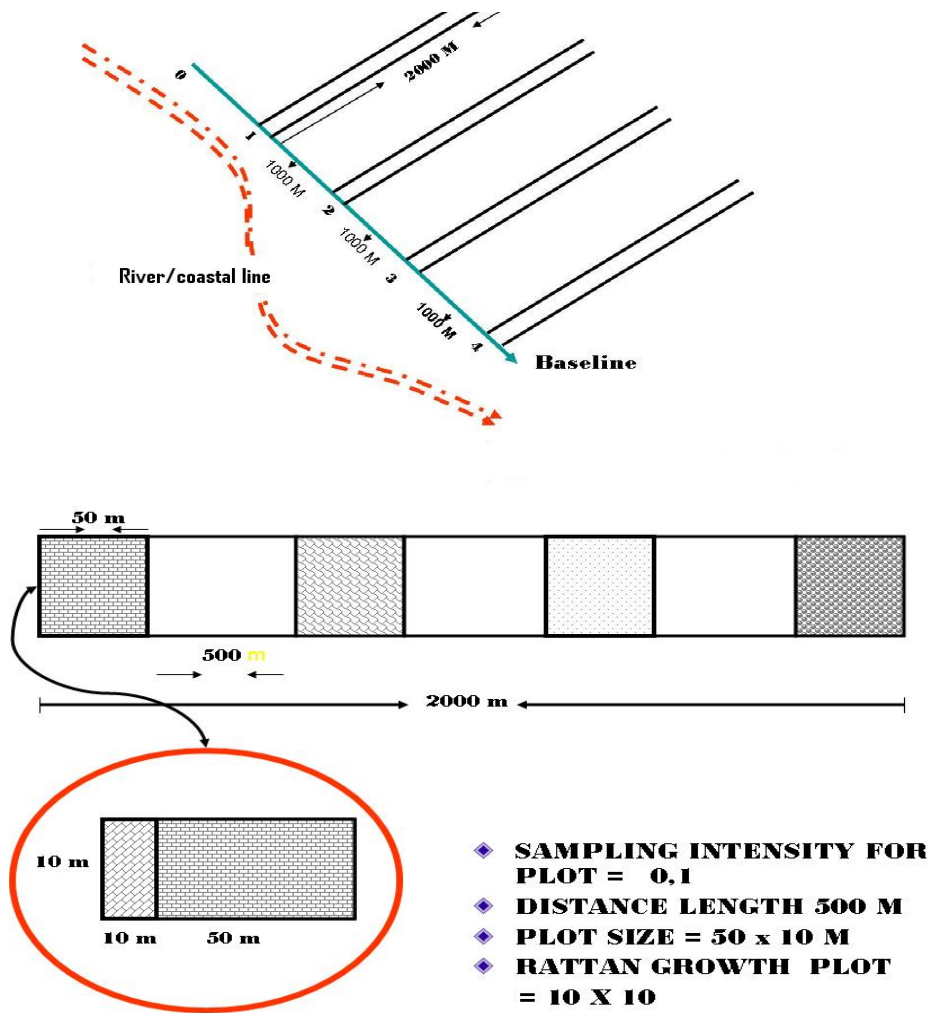


Figure6. Transects and sample plots design

Table5. Number and distribution of respondents

| No | Kecamatan | Village | Number of Respondents |
|-------|------------------|--------------|-----------------------|
| 1 | Kapontori | Waondo-Wolio | 9 |
| 2 | Lasalimu | Lasembangi | 17 |
| | | Kamaru | 8 |
| | | Suandala | 5 |
| 3 | Lasalimu Selatan | Wajah Jaya | 5 |
| | | Siomanuru | 5 |
| 4 | Pasarwajo | Wining | 13 |
| 5 | Siontapina | Siontapina | 5 |
| | | Labuandiri | 3 |
| Total | | | 70 |

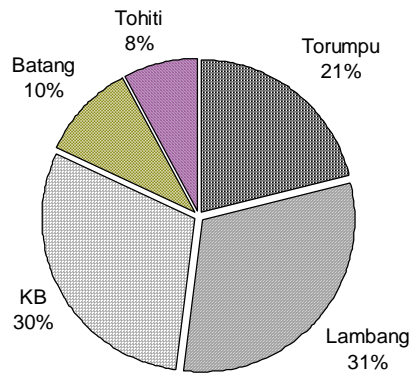


Figure 7. Percentage of dominant species

Tabel.6. Summary of rattan name and dimension

| No | Local name | Scientific name | Average Cane length (m) | Average Diameter (mm) | Average Joint length (cm) |
|----|--------------------------------|-----------------------------|-------------------------|-----------------------|---------------------------|
| 1 | Rotan Batang | <i>Calamus zollingeri</i> | 30-60 | 20 – 60 | 20 – 60 |
| 2 | Rotan Jermasin/Kaisisau/Siompu | <i>Calamus leocojolis</i> | 50 – 60 | 6 – 10 | 15 – 40 |
| 3 | Rotan Umbul | <i>Calamus simphysipus</i> | 25-46 | 15 – 2 | 20 - 45 |
| 4 | Rotan Tohiti | <i>Calamus inops</i> | 40-70 | 20-30 | 15 - 20 |
| 5 | Rotan Lambang | <i>Calamus ornatus</i> | 30-80 | 30 - 40 | 40 - 70 |
| 6 | Rotan Tarumpu | <i>Calamus koordesianus</i> | 30-40 | 8 -30 | 30 - 60 |
| 7 | Rotan KB | <i>Calamus sp</i> | 30-50 | 5 – 10 | 20 - 50 |
| 8 | Rotan Noko | <i>Daemonorops robusta</i> | 40-80 | 25 - 60 | 25 – 60 |

Some rattan collectors believe that rattan productivity in Lambusango could be maintained in sustainable manner. As they have a rule in rattan collection, those are: (1) Rattan collectors only cut mature rattans, without taking care with this they believe that rattan collection will be unsustainable, moreover young rattan has low price; (2) Rattan collector never cut all mature rattan in one cluster, but leaving 2–3 canes for regeneration. It seems to be rattan depletion is unavoidable as rattan collectors continuously increase, while forest cover gradually decline, at present, rattan collectors have to walk 20 – 25 km in the forest interior to extract rattan.

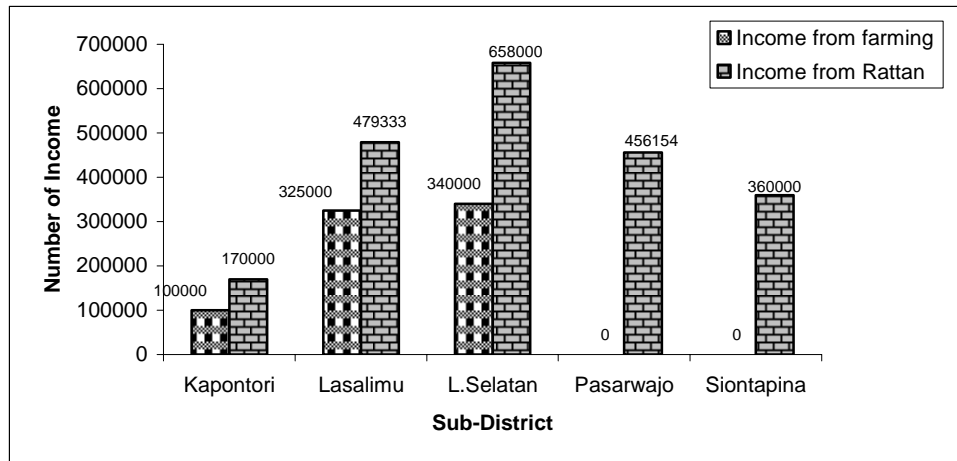


Figure 8. Income sources comparison, between rattan collection and rainfed farming

A.3.2.1.2 Procedure to obtain legal rattan extraction permits

Applicants submit formal request to the Regent with copy to the Head of the Buton District Forestry office (HBDFO). A set of documents are attached to the letter, i.e. identity card, map of rattan extraction sites, recommendation from the Head of Sub District Forestry office (Ka-UPTD³⁵) and company profile (see *Figure 9*).

The Regent instructed the HBDFO to establish rattan inventory team to check whether the proposed sites are feasible, either from ecological and rattan standing stock point of views. The team are consist of six persons, 4 persons are the representatives of BDFO, 1 person from environmental service, and 1 person from economic section of the District Secretary. Rattan inventory is conducted with 10 % sampling intensity. All the cost incurred for the survey is borne by the applicant.

The outputs of inventory team are: (1) rattan inventory report with technical recommendation of allowable extraction volume; (2) ecological feasibility with environmental management and monitoring. If the team recommends that the proposed extraction sites area is feasible, then the Regent will issue legal rattan extraction permit. Upon the issuance of the permit, the Regent asked Head of BDFO to develop surveillance team, to monitor the rattan extraction implementation.

A.3.3. Discussion

Despite rattan collection is one of important source of income for local communities; the way of rattan extraction should be managed in strict manner to maintain the sustainability of rattan. The problem is much related to the Buton District Forestry Office as technical agency which has authority to issue rattan licensing scheme.

³⁵ Ka-UPTD, Kepala Unit Pelaksana Teknis Daerah

First, there is a ‘misinterpretation’ of government regulation No 34/2002 (revised with No.9/2007), and its associated Ministerial Decree No 6884/2002, it stated that ‘*District government has authority to issue legal permit to collect rattan 20 tonnes for maximum 1 year period and permit could be re-awarded after completing the required procedure*’. In reality, rattan permit could be provided until 200 tonnes, allowing one permit holders to hold until 10 permits. **Secondly**, rattan exploitation license and its associated document to transport forest products are not fully decentralized at district level. According to government regulation No. 34/2002, the authority to collect forest products is fully decentralized at district level. Provincial government (SE Sulawesi Province Forestry Office) only serves the administration procedure demanded by district forestry office. In reality, provincial government still rules the authority of district government. For instance, when ones experience difficulties to obtain rattan collection permit or documents to transport forest products (due to the procedures are not properly followed) from district government, they can still try to get the permits or other required documents through provincial government. **Third**, there is improper procedure on the issuance of rattan permit. Such as improper rattan inventory, poor sampling intensity, rattan permit applicant should bear the cost of rattan inventory (allowing applicant to dictate the result of rattan inventory) etc. There are strong indications that those just a ‘formality’ rather than doing serious and following strict procedure. **Fourth**, there are no clear boundaries of rattan concession. As such permit holders can easily collect rattan from anywhere in the forest. Whilst the legal permit areas is given in the production areas, but in reality most of rattan collectors collect rattan from Lambusango Wildlife Reserves. The problem is getting severe where there are improper surveillance from BDFO and BKSDA. Considering the above problems, it is clear that unsustainable rattan extraction problems could not be improved without strong ‘political will and commitments’ from Buton District Forestry Office and BKSDA themselves.

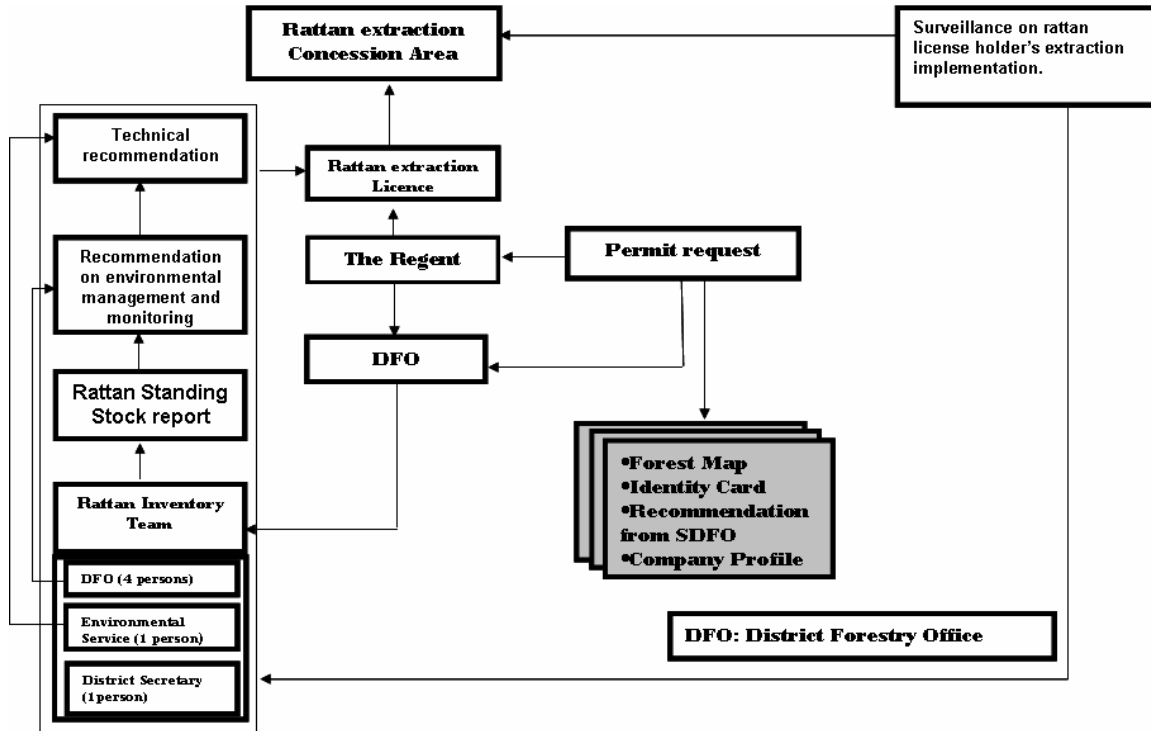


Figure9. Procedure for rattan extraction licence scheme

After field visit to Rattan European Project (*SHK Kaltim*) in *Jengan Danum* Village, Melak Sub-District, Kutai Barat District, East Kalimantan (7- 10 October 2006). LFCP will facilitate the involvement of BKSDA on the issuance procedure of rattan concession rights to facilitate BKSDA to conduct regular surveillance on the implementation of rattan extraction activities of the rattan concession holders. The plan can not be materialized as the presences of BKSDA staff (rangers) in the field have been very poor. They mostly open the field office in Labundo-Bundo during Opwall season. This condition also dictated why LFCP is closer with BDFO rather than BKSDA. Another lesson learned taken from *Jengan Danum*, is how to change from 'rattan collector' to 'rattan farmer'. For this context, we facilitated the development of rattan nursery and support rattan farmer in Kakenauwe (*Pak La Tarahu*) as rattan farmer model in Lambusango.

A4. Preservation of the forest boundaries at the point at which the project proposals were announced

Actions to preserve forest boundary would be done by planting *Pinang* along the boundary of Lambusango Wildlife Reserve, this will be conducted in cooperation with BKSDA (see meeting note in *Annex C*). BKSDA would procure Pinang seedlings funded by GERHAN project, while LFCP will support the planting of Pinang. However, until the end of 2007, the seedlings did not arrive in Lambusango. Preservation of the forest boundaries against encroachment are conducted under **B1**.

B1. Strengthen forest crime law enforcement

Similar with Forum, the formation of Forest Crime Unit Lambusango (FCUL) is part of an exit strategy of the LFCP in collaborative forest protection and law enforcement. Collaboration in forest protection is a must, considering the complexity of the problem, no single institution now able to protect forest resource.

FCUL is led by Buton District Forestry Office (BDFO) and supported with BKSDA to monitor, patrol and facilitate law enforcement against illegal logging and hunting of protected wildlife. FCUL is currently composed of three main components: (a) *Informants Team* who work undercover to investigate target persons and sites. This division is led by Forum and supported forum partners; (b) *Response Unit Team* who composed of PPNS (civil government crime investigator) and Forest Rangers (*Polhut, Jagawana*); (c) *Journalists Team*: media coverage for public awareness enhancement. FCUL was established on November 2005, BKSDA did not involve as FCUL members until October 5, 2006.

The development of FCUL was preceded with survey on the nature and intensity of forest crimes on villages surrounding Lambusango Forest. After type of forest crimes, forest crime actors, intensity, magnitude of deterrent actions conducted by government were sufficiently known; LFCP facilitated BKSDA and BDFO on the formation of collaborative protection management.

Awareness phase: From November 2005 - June 2006, FCUL has conducted joint patrol with the main objective to give awareness. Confiscation of illegal timbers was mainly aimed as 'shock therapy' to make local community aware on the existing government rule. **Law enforcement phase:** From July 2006 – May 2008, joint patrol are conducted for law enforcement. During the period, FCUL team work closely with GIS/RS team to monitor hotspots (active forest encroachment, illegal logging etc.), then will conduct regular groundtruthing on the suspected areas. The status of forest crimes will be continuously informed to BKSDA and BDFO, while the protection strategy on every hotspot areas will be defined and implemented together with both agencies. FCUL have supported BDFO to take due legal process on forest crimes and ensure that the trial will be conducted properly from start to the final punishment.

Since October 5, 2006, BKSDA forest rangers (*L.M. Said, SP, La Kapo, La Hya, La Fare*) and one junior technical staff (*La Ode Kaida*) have been part of FCUL. Those persons have started to work together with FCUL members from Buton District Forestry Office (*Syafrin, SE, La Jaki, Azimin and Ramli*). The main problem working with BKSDA is lack of personnel; the total staffs of four resorts (*Kakenauwe-Labundo, Winning, Tirta Rimba and Bau-Bau*) are only 5 people.

Box-8: Forest Crimes Unit Lambusango (FCUL)

Main priorities of FCUL activities; (1) *Preventive patrol*. This activity is aimed at preventing illegal handling of timber and non-timber forest products. This patrol can be combined with awareness rising, Arrests and confiscations can also be conducted when violation and their holdings are clearly identified. Supported Personnel: 1 PPNS and 5 Rangers. Supported Facility: 1 truck, 1 pick up, 3 guns. (2) *Repressive patrol*. Once target persons and their holdings are clearly identified by forest guardians, response unit team are called in. Arrests and confiscation are then carried out in a complete and timely manner. Supported Personnel: 1 PPNS and 9 Rangers. Supported Facility: 1 truck, 1 pick up, 3 guns; (3) *Control forest encroachment*. This activity is aimed at: (a) identifying the encroacher; (b) position and the size of encroached area; (c) seeking the best solution to safe the state forests.

Role and responsibility of DFO: (a) To assign one PPNS and one Forest Ranger as member of FCU; (b) To provide equipment and apparatus (truck, patrol cars, motor bike) for investigation and patrols; (c) To improve key procedures on the issuance of forest extractions permits, monitoring, and evaluation of its implementation; (d) Share funding in FCU operational cost.

Role and responsibility of LFCP: (a) To share funding in FCU operational cost; (b) To provide transportation and accommodation allowance for DFO and BKSDA staff (PPNS, Forest Rangers) involved in FCU operation; (c) To provide additional fund (transportation and accommodation) to intensify patrol and investigation at UPTDs level (DFO) and Kakenauwe Office (BKSDA).

B.1.1. Forest Guardians Recruitment

The main criteria for forest guardians³⁶ are intellectual capacity, trustworthiness, and availability to work on the targeted areas. The main tasks are forest crimes monitoring, which consists of; (1) villages investigation (2) roads monitoring; and (3) hotspots investigation. *Village investigation* is aimed to monitor logging, rattan extraction and wildlife hunting at village level. To do that, each forest guardian conduct monitoring at least 8 villages per months, the monitoring is carried out by interviewing at least two key villagers on each village. When illegal activities are found, a groundtruthing shall be conducted. Forest Guardian shall inform the findings to the response unit team within 24 hours. Data collected during ground-check: (1) Description on the activities; (2) Aim of

³⁶ Four forest guardians and the associated working areas are as follows: (1) *Pak Abhar*, Kecamatan Kapontori (11 villages); (2) *Pak Adnan*, Kecamatan Lasalimu (10 villages); (3) *Pak Arifin*, Kecamatan Pasarwajo (8 villages); (4) *Pak Muliadin*, Kecamatan Wolowa and Siontapina (12 villages).

extraction: for subsistence or commercial use; (3) Investigate the field actors and financiers; (4) Dates or when the activities happen; (4) How many people involved; (5) the origin of field actors (within or outside village under investigation); (6) the exact hotspot site; (7) Types of equipments (e.g. chainsaw) and its quantity; (8) the vehicles (if any). The data will be used as legal crime evidence during legal due process.

Road investigation is aimed at monitoring, (1) the magnitude of forest products transportation which will be used as a basis of logging or rattan (m³/tones) extraction rate prediction; (2) to understand actors or vehicles involved on the illegal activities (driver, vehicle identity, financiers, destination). To do that, each forest guardian shall conduct monitoring at least 10 days per month; each day is at least four hours. *Hotspots investigation* is aimed at groundtruthing of areas allegedly under active destruction. Due to unsatisfying performance, the forest guardian was only employed for 11 months (May 26, 2006 – March 31, 2007),

B.1.2. Regular Patrols and Road Investigation

From November 2005 – December 2006, serial Forest Crime Unit (FCU) patrols were conducted. It is intended as a public awareness therapy to show that firm forest protection is seriously enforced. About four patrols a month were organized involving *PPNS* (civil government crime investigator), *Polhut* (forest ranger), and journalists. Average confiscated timbers were 35m³/month.

Patrols have been effective to raise community awareness on the existence of law and regulations which govern both forest extraction and its associated transportation of the forest products and was effective to reduce illegal logging. The problems, patrols are only effective to deter poor logger rather than their financiers, as the confiscated illegal timbers on the collection site near the road are still belong to the loggers. The financiers usually will not pay until the illegal timbers loaded on the vehicle or transported out of the forests areas. Efforts are needed to seize the financiers rather than the loggers. In fact, local community will not log forest, unless they receive orders (and certain advance payment) from the financiers. In order to make deterrence effects to financiers, apart from regular onsite patrols, other efforts are needed to strengthen the road investigation posts which are located in Barangka, Wakoko and Kaongkaongkea.

Since August 2006, LFCP has involved on the investigation of forest products transport on three investigation posts, i.e. *Barangka, Wakoko and Kaongkaongkea*. The main objective of this activity is to raise courage of forest guards to take deterrent actions. Three days a week LFCP has manned each of those posts and checked forest product document (SKSHH) according to the Ministerial Decree No. 126/Kpts-II/2003 and Government Regulation No. 34/2002. Many irregularities found such as under-declaration of transported timbers/rattan and using SKSHH more than one time a day.

B.1.3. Inclusion of GIS/RS Analysis to support Groundtruthing

Since June 2006, FCUL has worked closely with LFCP's GIS/RS team to monitor hotspots (active forest encroachment, illegal logging etc.), followed with regular groundtruthing on the suspected areas. The status of forest crimes have been continuously informed to BDFO and BKSDA, while the protection strategy on every hotspot areas will be defined and implemented together with both agencies. Monitoring and investigation of forest destruction surveys were conducted in Winning, Matanauwe, Lapuli, and Wabou. The findings have been exposed in various forums and media for the attention of government. Soft approaches have been conducted to facilitate government to solve the cases together.

Survey Destructive Logging in Winning: From 12-16 August 2006, sustainable rattan extraction team together with FCUL investigated destructive logging, mining and land tenure problems (overlapping land uses) in Winning Village, Pasarwajo Sub-District. The investigation was done through groundtruthing and interviewed of key persons. Efforts were made to map the mining concession areas which fall into the state forest area (production forest, limited production forest and Lambusango wildlife nature reserve areas) and village land. Restore tenure rights of local communities over adequate extent of land through clear policy pronouncements seem to be the only solution to stop rampant illegal logging in this area. This issue was expressed by the Head of Winning Village during three months regular meeting between LFCP with Buton District Government (August 22, 2006). No clear responses were obtained from the government. The written report was also submitted to relevant stakeholders (including BKSDA).

Survey Destructive logging in Lawele Village: From 20–25 August 2006, sustainable rattan extraction team together with FCUL surveyed destructive logging (clear cutting of 50 ha of conservation forest) in *Lapuli* Hamlet, Lawele Village, Kecamatan Lasalimu. The existence of *Wabou* Hamlet in the same village has provided significant precedence for the *Lapuli* case. They follow a principle, '*If Wabou is possible (no law enforcement), then Lapuli will also be possible*'.

Survey Forest Encroachment in Matanauwe: From 20–23 September 2006, FCUL investigated forest encroachment in Matanauwe Village, Siontapina Sub-District. Efforts were made to map illegal rainfed agriculture land (about 250 ha), which have been developed at the expense of production forest. Interestingly, 54 out of 110 squatters are composed of land hungrys from Pasarwajo Sub-District (such as, *Wabula*, *Holimombo*, *Kondowa*, *Dongkala* and *Wagola* villages). It is about 30 - 50 km apart from Matanauwe. The encroachment has been stimulated by local land seeking society, who cut state forest, then sell to land hungrys. If this phenomenon continues without law enforcement, Lambusango Forest will become seriously open access. Considering the complexity of the problem, no institution can solve the problem alone. As such, LFCP has been trying to expose those cases in various forums and media for the attention of government

Checking forest boundary surrounding Kakenauwe Nature Reserve: From 12-15 February 2007, LFCP together with *La Fare* (forest ranger) and *La Ode Kaida* (technical field staff of BKSDA) checked boundary markings of Kakenauwe Nature Reserve (KNR) against legal forestry map issued by the Ministry of Forestry (attachment of *Ministerial of Forestry decree No.454/Kpts-II/1999*). This activity was conducted in response to Forum report of the Kecamatan Lasalimu. It was reported that two newly establish encroachment areas has recently established near the boundary markings numbers 76 – 81 and 89 – 95. Based on GPS checked on both areas, it was found: (1) 0.7 ha new agriculture land, based on legal forestry map was developed within KNR, but based on boundary marking in the field, it is occurred outside KNR; (2) 1.5 ha new agriculture land, based on legal forestry map was developed outside KNR, but based on boundary marking in the field, it is occurred within KNR. Boundary marking reconstruction is highly required to avoid unclear and uncertainty state forest boundary in the field.

B.1.4. Involved Local NGO

From October 1, 2006, *Lakapela*, a Bau-Bau based NGO working on forest crime issues, has become the member of FCUL team. *Lakapela* takes role on illegal logging investigation. As local NGO, *Lakapela* have a strong pressure group to law apparatus to take serious actions on politician sponsored forest crime. LFCP has supported *Lakapela* to publish irregularities discovered by FCUL. By handing-over ‘the sensitive’ part of law enforcement to *Lakapela*, apart from strengthening local NGO (which is important as part of exit strategy), LFCP is still able to maintain good relation with law apparatus and politicians.

B.1.5. Some Important Achievements

B.1.5.1. Seized inter-island illegal rattan extraction and trade: On July 9, 2006, FCUL seized inter-island illegal rattan extraction and trade from Buton to Muna Island which has occurred for 2 years (2004). The illegal extraction sites took place in the production forest near Todanga village (Kecamatan Kapontori) in which the forest areas shares boundary with Kakenauwe Nature Reserve. The financiers in Muna had a deal with rattan collectors from Todanga, they weighted the collected rattan and transported the illegal rattan to Muna island, the payment would be only conducted after the illegal rattan have been safely arrived in Muna (Pola village, Kecamatan Pasir Putih, Muna District). FCU confiscated the vehicle and several bunch of illegal rattan as crime evidence and brought them to Police office in Kecamatan Kapontori. Unfortunately, the Buton District Forestry Office (BDFO) finally decided not to take due legal process of the case; they only took the retribution fees of the extracted rattan during the last two years. However, BDFO has applied administrative sanction to the head of Kapontori Sub-District Forestry Office; his position was downgraded.

B.1.5.2. Seized truck transported illegal logs: On 17 September 2006. FCUL confiscated a truck at Kaongkaongkea investigation post which brought 8.8 m³ mixed forest timber. The timber, which was transported without SKSHH, was allegedly owned by Senior Policeman in Pasarwajo. On 18 September 2005, LFCP staff sent the crime evidence (truck together with illegal timbers) to BDFO in Pasarwajo. On 19 September

2006, FCUL also published this irregularity in local newspaper (*Kendari Express*). Unfortunately, on 30 September 2006, as previously worried, BDFO decided not to take the case to the court, as a week after; there was a clarification from BDFO that the legal document of the confiscated timber had been completed. By the law, completion of forest products document after become crime evidence is impossible. This is of course a kind of collusion among law apparatus.

B.1.5.3. Confiscated and prosecuted illegal loggers in Wagari Village: Wagari Village is located near Kakenauwe/Labundo-Bundo Village (field based of Operation Wallacea Ltd). In response to Forum report, on the allegedly illegal logging activities in this village, on March 16, 2007, LFCP together with *La Fare*, *La Ode Kaida* (BKSDA rangers) and *Elvis* (village police) conducted patrol on the Lambusango Wildlife Reserve which shares boundaries with the village. The team successfully caught five illegal loggers on-site and confiscated one chainsaw. The team reported immediately the actors and confiscated crime evidences to *Pak Laude Said* (BKSDA crime investigator/PPNS) and they finally put in jail for 6 months. On December 27, 2007, FCUL found new encroachment involving 17 people; however during patrol FCUL only able to catch four farmers and one chainsaw. The case is now under investigation of Polres Buton.

B.1.5.4. Exposed illegal mining issues in press: During February and March 2007, Lakapela supported by Bau-Bau based Law Assistance NGO have exposed mining issues in the Lambusango Forest.). As a result, legal process of the company (*PT. Yuman Jaya*) has currently been undertaken and their field operation has been halted.

Box 9: Mining concession entered Lambusango Wildlife Sanctuary Area (Bau-Bau, Kendari Pos, February 22, 2007).

The Director of Bau-Bau based non-government organization (NGO) working on law assistance (*LBH*), *La Ode Endang* on the press conference at Rajawali Hotel, on February 21, 2007, expressed his objection on the issuance of asphalt mining concession to *PT Yuman Jaya Tama* (PT YJT) and asked Bupati to revoke the permit. Endang also raised issue that PT YJT has allegedly started its mining activities far before receiving legal concession from the Regent, '*Mining activities started about mid 2005, while the legal permit was issued on December 12, 2005*'.

According to Endang, the concession issued by Bupati Buton violated Forestry Law No. 41/1999 as it is located on state forest (Lambusango Forest). The current mining concession under PT YJT falls under production forest (98 Ha) and conservation forest/Lambusango Wildlife Reserve (5 ha), it is located in the Wabalamba forest, Winning Village, Pasarwajo Sub-District, at the upstream area of *Tondo* watershed. '*It is clearly stipulated on article 38, verses 3, that the use of forest estate land for mining activities should be done under consent of the Ministry of Forestry. The leasing permit is issued by the Minister taking consideration on the area extent, concession time and environmental sustainability*' said Endang.

Lakapela, a Bau-Bau based NGO working on environmental watch, emphasized that the access road built by the concession holders has driven rampant illegal logging activities in the area.

Box 10: The Buton Regent Pro PT Yuman Jaya Tama (Pasarwajo, Kendari Pos, February 25, 2007)

Controversy on the issuance of asphalt mining activities raised by *La Ode Endang* (Director LBH Bau-Bau) and *Lakapela* which were recently published on several newspapers has stimulated Bupati Buton to conduct a counter press conference. It was occurred at the Information and Communication Office in Pasarwajo, and attended by the head of the Buton mining and forestry agencies.

Bupati Buton (Ir. *LM. Syafei Kahar*) stated that the issuance of asphalt mining license to PT YJT has been undertaken through proper procedure, no problems, and no need to revoke. It has complied with *the Minister of Mining, Energy and Mineral Resource No. 1453.K/29/MEM/2000 on the technical guidance on general mining management*. He emphasized that the Regent has authority to issue asphalt mining license. Proper steps have been followed by PT YJT, if the proposed concession areas fall under forest estate areas, then it should be under consent of the Minister of Forestry, unless it falls to Bupati authority and it is not relevant with *Article 38, verses 3 of Forestry Law No. 41/1999*.

Related to issues that PT YJT conducted exploitation activities prior receiving concession license, this has been under investigation by the Buton District Police Office. Head of Mining Agency (Ir. *Guntur Dahlan*) added those activities could be an exploratory phase, while the access road was built to transport bitumen out of the areas.

Head of the Buton District Forestry Office (*Drs. Abidin Baso*) stated that based on field investigation, the roads and the mining areas do not fall under forest estate areas, while PT YJT did not conduct illegal logging during the construction of the roads. The investor has ever sent request to the Minister of Forestry to enlarge the concession to forest estate areas, but refused by the minister.

B.1.5.5. Installed information boards: On September 2007, LFCP installed information boards which cited the *Forestry Law No 41, 1999*, on prohibition and its associated sanctions for illegal logging and encroachment in forest estate land. The boards were installed in 4 villages: (1) Wambulu; (2) Kamaru; (3) Matanauwe (4) Kancinaa. Considering that the information boards have been very effective to deter community to cut forest then on February 2008, LFCP installed 5 similar boards in five villages: (1) Watumotobe; (2) Lawele; (3) Ambuau; (4) Summersari; (5) Sukamaju.

B.1.5.6. Patrol in Summersari: Summersari is known as Javanese transmigration settlement developed during 1990s. Since 2002, illegal logging and forest encroachment have occurred which mostly been conducted by Labuandiri Villagers. Since 2005, some of Summersari Villagers had jointed to cultivate agriculture land in the encroached area. Based on satellite imagery interpretation and supported by ground check, the encroached areas are 380 ha. In 2006, BDFO rehabilitated 50 ha of degraded forest using Gerhan project, the results are not satisfying. From 12 – 13 December 2007, FCUL conducted patrols in the encroached areas; the encroached area has been abandoned by the settler.

B.1.5.7. Patrol in Wakangka and detention of 13 accused encroachers

Wakangka is located in Kecamatan Kapontori and share boundary with Lambusango Forest. The upstream area of the village is composed of hilly terrain and composed of headwater catchment of several spring waters (*Lamatano, Laboka-boka and Lakumala*)

fed some creeks flow downstream and become a source of irrigation water of sawah land developed by Balinese transmigration settlements since mid of 1980s.

During forest crimes patrol on 26 -27 December 2007, the following problems were found: (1) Forest encroachment has been happened surrounding Lamatano spring water; the encroachment started in 2006, the underlined reason was lack of awareness on forest boundary; (2) Lost of three forest boundary markings which finally found in one of the garden house of settler; (3) The encroachment involved 15 farmers and 2 forestry officials. In response to BDFO crime evidence report dated December 28, 2007, on February 26, 2008, Kapontori Police conducted detail investigation in Wakangka Village and found 11 out of 15 farmers and 2 forestry officials were considered as violators. Now, the accused violators have been detained by police and put in Bau-Bau detention house and waiting for prosecution (See *Box 11*).

Box 11: 13 Lambusango encroachers put in jail (Pasarwajo, 28 February 2008, Kendari Pos)

13 Lambusango encroachers, Kecamatan Kapontori, Buton who cut forest for rainfed land end in jail. They violated section 50, verses 1 and 3 point a, b and d, and also section 78 verses 1 and 3 of Forestry Law No 49/1999. *'They also charged to violate section 55 and 56 KUHP with threatened 5 years in jail'* said the Head of Criminal Unit, Polres Buton AKP *Yani Permana*. The name of accused violators are: *Kemang Budi Ase (31), La Baharu (64), Asrudin Sihidi (35), La Ode Padangka (39), Farman Alias Ansori Muda (36), Salmón Udia (27), Herdin Hidi (35), Wayan Sana (60), La Kapo Naine (46), Afiluddin Sahid (36), Ansar Laane (33), Zulimu Domami (40), La Mpidi Aulia.*

The accused violators were confiscated by Polsek Kapontori, *'now they are in Bau-Bau jail, the case has been transferred to prosecutor.'* He added.

B.1.5.8. Patrol in Wabou: On December 26, FCUL found new encroachment in Wabou (about 20 ha). The encroachment has started since July 2007. FCUL had developed crime evidence report and sent to Polres Buton on December 28, 2007.

B.1.2. Discussion: Lessons learned and Outlook

Apart from logging to extract commercial timbers, there are other reasons why local community log forest and encroach forest boundary; (1) land hunger (lack of arable land) due to high population pressure such as in Kecamatan Kapontori, Lasalimu Selatan and Wolowa; (2) 'passion' to continuously cut forest land to mark land ownership such as in

Kecamatan Pasarwajo; (3) slash and burn agriculture, (4) there is perception among villagers that Lambusango Forest is their ancestor land³⁷.

Until September 2007, the existence of FCUL has raised community awareness on the existing forest law and regulations. FCUL has fairly success to: (1) raising awareness of rural community on the existing forestry law and regulation; (2) reduce illegal logging activities at grass root level; (3) control illegal forest products transportation as far as the irregularities are purely conducted by businessmen. However, FCUL has not capacity to control law apparatus irregularities (especially forestry officials) and still have a 'distance' with police. FCUL was also unable to facilitate due legal process of some confiscated crime evidence due to the strong and the 'untouchable' of forest crime mafia involving some law apparatus. After September 2007, the situation has been much improved; FCUL has become powerful body which can eradicate irregularity without fear and favour. The underlined reasons: (1) OWT has developed become a respected NGO, where local community and especially law apparatus (government officials and police) start to put trust to this organization; (2) Characters of most BDFO officials have changed significantly toward forest protection. At the beginning, their supports to FCUL (especially LFCP) were half-hearted, but the situation has gradually changed due to consistency and endless efforts of the project; (3) the presence of good behave forestry officials at the higher level (especially *Pak Sunarto Lanae*) whom he successfully drive the spirit of his subordinate.

The main problem working with BKSDA on community enforcement is lack of personnel; the total staffs of four resorts (*Kakenauwe-Labundo*, *Winning*, *Tirta Rimba* and *Bau-Bau*) are only 5 people. Its human resources (forest rangers and civil police investigators) are posted in Kendari, and they will be ready to come in short period when needed. Considering the large covering area of BKSDA in SE Sulawesi while the pressure of other area are more severe than Lambusango, thereby BKSDA has hardly never send their 'troop' to Lambusango. BKSDA has two Regional Conservation Sections, i.e. (1) Kolaka and Konawe and (2) Muna-Buton. The office of the first section is in Kendari, while the second was in Raha (the capital of Muna District) and only during the last 6 months moved to Bau-Bau. Despite most of conservation areas [Lambusango Wildlife Reserve (28.000 ha), Kakenauwe Nature Reserve (800 ha), Buton Utara Nature Reserve (80.000 ha), and Tirta Rimba Tourism Area (1.000 ha)] are located in Buton; the Regional Conservation Section Office is in Raha, which only has one small conservation area (Napabalano Nature Reserve/9.2 ha). This has made forest protection and law enforcement was slowly moving, due to far from direct command and day-to-day supervision. To improve law enforcement apart from moving the section office in Bau-

³⁷ Prior to the demarcation as state forest, some part of Lambusango Forest had been inhabited. This could be proven from old cemetery, remnant of old agriculture land and settlement. During the Buton Sultanate, there were four hamlets living in the forest interior, this called in the Butonese (*Wolio*) language as *Pata Limbona*, 'Pata' means four while 'Limbona' means hamlets, those are: (1) *Watoduku (Mandaule)*; (2) *Wamoana*; (3) *Tumembona*; and (4) *Katapi*. Since 1952, government moved Watoduku and Wamoana hamlets downstream to the areas currently known as *Wowoncusu* village. Similarly, *Tumembona* was also moved to the areas currently known as *Watambo* village, while *Katapi* has been located at the current position which known as *Pobaa* village. Before, *Katapi* is part of *Watambo* hamlet, but since 1999 the area became *Pobaa* village.

Bau, BKSDA should put most of their personnel in resort area, especially those which consider having high forest crime cases, such as in Wining and other area near the outlet of the rivers.

Working with BDFO is much easier as all personnel have been on-site. The problem many of their personnel have long been involved on activities to ease illegal activities. In the beginning, efforts were made to eradicate the practices by brainwashing, but this approach had been unsuccessful. It took considerable time to make FCUL effective as in the beginning, the unit contained insider anomalies. This led many patrols designed by FCUL failed to collect sufficient crime evidences as a basis to develop legal evidences report (*LK*). Only after the enforcement section of BDFO was headed by *Pak Sunarto Lanae* (mid 2007 till beginning 2008) and the mapping section are handled by *La Ode Rahmad Salim* (2007 to date) the situation has become difference. Patrolling is not merely compile illegal timbers as before, but it become part of a complete process involving arrests and prosecutions of illegal actors. The head of mapping section has played important role on legal brief preparation and submission, expert testimonies and case proceedings, as he should provide legal testimonies that the crime sites are located in state forest land.

BDFO should place their personnel in strategic sites. Forest rangers' investigation posts are not sufficient to be placed in three sites (Wakoko, Barangka and Matanauwe) as the current condition; however, it should also be placed at the outlets of big rivers, such as Maloge, Tondo and Winto and also harbors such as Nambo and Tira-Tira and monitoring active encroachment sites such as Matanauwe, Lapuli and Wabou. Efforts will also need to conduct marine/sea patrols as many illegal timbers are transported using sea transportation.

Based on Wabou, Summersari and Wakangka cases, *Gerhan* (reforestation) sites should not be designed in the active encroached area; law enforcement should be done and the root of the problems should be solved before any rehabilitation is made. Reforestation in the active encroached areas will waste precious resource and provided unfairness case. This will become bad precedence that to receive government fund assistances ones should first log forest, 'the cure is worst than the disease'.

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

C.1.1. Development and Distribution of Personal Organizers

Personal organizer is an agenda book, which is designed to contain many pictures concerning the biodiversity richness of Lambusango Forests, its associated threats and pressures, and efforts currently done by LFCP. The PM has designed the book and written the awareness text, while *Matoa* has completed the graphical design and printing. The agenda book are printed for 1000 exemplar and distributed to village leaders, government officials/parliaments in Buton District, Bau-Bau town and South-east Sulawesi Province, private sectors and NGO leaders in Buton, Bau-Bau, Kendari and Jakarta/Bogor.

C.1.2. Development and Distribution of three posters

The first poster entitled '*Lambusango Forests; Lung of the World at the Heart of Buton Island*'. The main purpose of the poster is to make people aware on what is meant by the Lambusango Forest and where is the geographic position. The poster presents the hand drawing of Buton Island and the sketch of Lambusango Forests at the heart of the island with several key village names surrounding it. First was printed for 1000 copies and then reprint for another 1000 copies. The second poster entitled '*Land resource surrounding Lambusango forests: a Neglected Potential Resources*'. The main purpose of the poster is to make people aware that forests resource is not the only source of livelihoods, but there is still plenty of land resource surrounding Lambusango Forests waiting for serious cultivation. The third poster entitled '*Lambusango, home of millions life*', printed for 1,000 copies. So far, 600 posters have been put on wooden frame and installed at public (strategic) area, such as schools, mosques, restaurants, village halls, sub-districts offices, police offices, hospitals, hotels, Banks etc. in Kendari, Bau-Bau, Pasarwajo Towns and villages surrounding Lambusango Forest.

C.1.3. Development and Distribution of 'Lambusango Lestari' Newsletter

Since September 2005 until February 2007 (thirteen editions), Lambusango Forest Conservation Project/LFCP (*Program Konservasi Hutan Lambusango/PKHL*) has published monthly '*Lambusango Lestari*' Indonesian Newsletter/*Bulletin Lambusango Lestari (BLL)*. A thousand copies are distributed to the Lambusango Forest stakeholders in Buton District, Bau-Bau Town, Kendari, Bogor, Jakarta, and Lampung. The aim of the publication is to develop critical mass of the local Lambusango forest stakeholders and as a promotion of LFCP activities to the Indonesia conservation society.

C.1.4. Publication of two serial Children's Short Story Books

Two series of children's short story book '*The adventure of La Madi and Bingo*'. Both series were printed for 1000 copies. The story is written by *Ridwan Ade* and illustrator

made by *Pak Trudi Jafar* (Amartya Society). In his introduction of the book, the PM stated, “*We need a good environmental education in elementary school, as good environment attitude should be grown since young age. The message could be delivered through a book like this. ‘The adventure of La Madi and Bingo’ written by young writer ‘Ridwan Ade’ is very interesting. The story is specifically tailored for the Butonese situation, which students will not feel strange in reading the book. Hopefully, sense of love and belonging to their nature and environment will grow after reading the book. The book will be of relevant as a reading material to support local content curriculum, especially environmental education*” The books are printed in A4 art paper 150 gram, full colour, while the cover is ivory 210 gram full colour, printed by *Debut Press*, Yogyakarta.

C.1.5. Developed and Installed Wall Magazine in 53 Secondary Schools

One of the important reader destinations of the Lambusango Lestari Newsletter is secondary school students. As the newsletter contains various conservation messages which are of relevant with science curriculum (biology) in the secondary school. As school library normally not so attractive for ordinary students, as such most of secondary students are not familiar nor have access to the newsletter. In response to this, since June 2006, efforts were made to expose the newsletter in the form of ‘wall magazine’. It is composed of two wooden board of 1.2 x 1.2 m² which installed in the wall (mostly near school library). About 60 % space of the wall magazine is allocated for Lambusango Lestari Newsletter materials, while the remaining space could be used for school wall magazine. A total of 53 secondary schools, either in Bau-Bau Town and Buton District have installed the magazine. LFCP has been regularly updated the content of the wall magazine.

C.1.6. Publication of Biodiversity and Conservation Handbook

So far, the rich biodiversity of Lambusango forests have not been well recognized by most of community living surrounding the forests. Not surprisingly when most of the people in Bau-Bau or surrounding Lambusango forests are unfamiliar with ‘Lambusango Forests’, ‘Kakenauwe Nature Reserve’, ‘Lambusango Wildlife Reserve’. Indeed, a forceful awareness materials need to be developed and distributed to the targeted people. The awareness materials are not only targeted for village leaders or government officials, but more importantly also to the young educated generation in the secondary school. This type of awareness material should be scientifically strong, but kept simple, attractive and written in popular language. Since mid November 2005, *Henry A. Singer* together with the PM has started writing the conservation biology handbook (in Indonesian language) entitled ‘*The Mystery of Biological Richness of Lambusango Forests*’. The writing of the book is very necessary, considering a lot of research works have been done by Operation Wallacea Ltd in the Lambusango Forest, while so far no single biological and conservation publication in Indonesian language ever have been made for Lambusango forests constituents and stakeholders. The book is designed as supporting material for biological and environmental related subjects for the secondary school. However, the handbook is also relevant as a reading material for undergraduate students, teachers, village leaders, government officials and non-government organizations. As the book will

be translated into English, then the book is also useful as introduction materials for foreign tourist, especially for Operation Wallacea volunteers. The book has been printed for 1,000 copies and distributed to relevant parties, including all secondary school libraries in Bau-Bau Town and Buton District. To attract students to read the book, efforts were made to conduct ‘door-to-door’ socialization. The socialization were made in the form of general lecture, in which about 50 – 120 students were gathered in the school auditorium.

C.1.7. Monthly Talk shows in Radio Lawero

The *Talk show* is designed as a forum to create a discourse concerning Lambusango forests conservation issues involving top decision makers in the District Buton and Bau-Bau town. The forum is an effective media to raise certain conservation issues to the Bau-Bau public where most of key decision makers of the Buton Regency live. The interactive dialog has covered the following topics: (a) Understanding Lambusango Forest; (b) The need of inclusive and integrated spatial planning between Buton District and Bau-Bau Town; (c) Utilization of Lambusango Forest Products; (d) Collaborative management on Lambusango Forest conservation; (e) Ecotourism development in Buton Island; (f) Collaborative protection on Lambusango Forest conservation; (g) Developing village business models surrounding Lambusango Forest; (h) Mainstreaming environmental conservation in Bau-Bau and Buton.

C.1.8. Conservation Essay Competition for Senior High School

The main enabling condition in conserving Lambusango Forests is that the community living surrounding the forest has put great appreciation to the forests. The appreciation can only be made when they have been familiar with Lambusango Forests, ‘*there is no love without knowledge*’. There are two ways to make them well informed, LFCP can supply a flood of information (posters, newsletters, personal organizers, leaflet etc.) or LFCP stimulate them to dig-up information themselves. The latter could be properly facilitated through a writing essay competition on Lambusango Forests. The competition will be open to senior high school students in Bau-Bau town and Buton District. The announcement has been distributed through leaflets and *Lambusango Lestari* Newsletter since the end of December 2005. The following essay topics are offered to participants, i.e. (1) Plant and animal wildlife in the Lambusango Forests; (2) Legend of Lambusango Forests; (3) Experience in visiting Lambusango Forests; (4) How to conserve Lambusango Forests; (5) Community living surrounding Lambusango Forests; (5) Other topics related with Lambusango Forests.

The writing competition was followed by 21 participants. The selection process was conducted for two steps. The first step is focused on the writing quality of the participants; this is composed of 60 percent of the total score, while the remaining 40 percent is taken from the presentation/public defense performance.

C.1.9. Installed conservation campaign boards surrounding Lambusango area

Conservation message written in the wooden boards have been installed on 13 sites surrounding Lambusango Forests. The message is expected as environmental education for young generation, whilst also act as ‘psychological deterrent’ for illegal loggers. This activity will be continued during the coming quarter.

C.1.10. Developed and installed wildlife conservation campaign boards

To raise community awareness on the conservation values of Lambusango flagship species among rural community surrounding Lambusango Forest. A set of conservation messages was written to conserve Macaque (*Macaca ochreata brunnescens*), ‘Let’s make friendship with Macaque’; Hornbil (*Aceros cassidix*), *Hornbill as an agent of seed dispersal*; Tarsius sp., *Tarsier: world’s smallest monkey*; Anoa sp, *Anoa an endangered charismatic wildlife animal*. Those messages were written in the metal planks and have been installed in four sites (Watumotobe, Kakenauwe, Wakoko and Ambuau).

C.1.11. Developed education materials to support local content curriculum

Teaching Material Development Specialist (Henry A. Singer) has completed draft of local content curriculum and syllabus for pre-school (nursery school), elementary school, junior and senior secondary school. The document is expected to form as a foundation on the implementation of local content environmental education from pre-school until secondary school. Interested parties can use the curriculum and syllabus as a reference to understand the overall design of local content environmental education. The document provides user-friendly guideline upon teaching materials/subjects/activities suitable to be delivered on various education levels.

Basically, the curriculum and syllabus is composed of six components. Every education level (except for nursery school) is designed to have six components with different level of detail. The six components are derived from the major activities of the LFCP; by introducing those components to formal education, the spirit of the project approaches will be sustained far after its completion. The six components are as follow: (1) Forest ecosystem and its roles to those living within and surrounding the forests; (2) Threats and pressures of the Lambusango Forests; (3) Socio-economic conditions of local community living surrounding the forests; (4) Institutional framework of the Lambusango Forest; (5) Relevant conservation actions or what students can contribute to safe Lambusango Forest; (6) Policy analysis relevant to forest conservation or how to influence government policy in forest conservation.

Two conservation education books to support local content curriculum for elementary school have been published in December 2007. The first book (*‘Adventure to Lambusango Forest’*) is designed for grade one till three, while the second (*‘Conserving Lambusango Forest’*) is for grade four to six. The books have been distributed to Buton and Bau-Bau elementary schools and socialization on the use of the book have been conducted both in Buton and Bau-Bau.

C.1.12. Publication of Green Nationalism Book

To promote the work of *LFCP, Operation Wallacea Trust and Operation Wallacea Ltd* to Indonesian conservation society, the program manager (*Edi Purwanto*) has written a 182 pages book in Indonesian entitled 'Green Nationalism: conservation message from Lambusango' (*Nasionalisme Lingkungan: Pesan Konservasi dari Lambusango*). *Dr. Antony Whitten* (TTL) wrote the 'Foreword' of the book (see *Box 5*). The book was printed by *CV Debut Wahana Sinergi* (Yogyakarta) for 1500 copies, and published in January 2007. The book is composed of 4 chapters and 19 sections (see *Box 6*).

C.1.13. Discussion: Achievements

Before the start of the project, 'Lambusango' word is known by most of Butonese as only name of a village in Kapontori Sub-District. Butonese have not given a specific name to the 65,000 ha³⁸ natural lowland rainforest located in the central Buton. That is true that the word 'Lambusango' has become the name of Lambusango Wildlife Reserve (*Suaka Margasatwa Lambusango*) established by the Ministry of Forestry since 1986. However, 'Lambusango' as a name of wildlife reserve and even the existence of the wildlife reserve itself was mostly unknown by Butonese, except villagers living near *Kakenauwe* (*Labundo Bundo*) village or government officials working in BKSDA and Dinas Kehutanan Kabupaten Buton. Many people who recognized Lambusango as the name of wildlife reserve was not aware the exact covering area of the reserve, mostly thought that the area extent is only surrounding Kakenauwe village, while actually cover about 30,000 ha, and stretched from Kapontori until Pasarwajo sub-districts.

At the beginning when we started introducing the word 'Lambusango Forest', most of Butonese thought that it is the state forest land surrounding Lambusango village. Indeed, during the first until the second year of the project, we spent considerable time to introduce the concept of 'Lambusango Forest' as a name for all natural lowland rain forest located in the centre of Buton which is administratively fall into six sub-districts, i.e. Kapontori, Lasalimu, Lasalimu Selatan, Siontapina, Wolowa and Pasarwajo.

Butonese started to be aware on the name and area extent of Lambusango Forest after we installed hundreds of wooden frame posters in many public area (harbours, super markets, restaurants, banks, hotels, schools, hospitals, government offices etc) showing the map of Lambusango Forest within the Buton Island which entitled '*Lambusango the lung of the world in the hard of Buton Island*' (*Hutan Lambusango Paru-Paru Dunia di Jantung Pulau Buton*). In fact, the posters have become very popular, and many people are proud to have the poster. After the first poster aiming at introducing Lambusango Forest, we then introduced the second poster '*Lambusango is home of million life*' (*Lambusango Rumah Sejuta Kehidupan*). This poster also has become very popular, and people started to understand the value of Lambusango Forest.

³⁸ The proposal of the project defined '*Lambusango Forest Conservation Area*' as lowland natural tropical rainforest in the central of Buton Island which include, not only Lambusango Wildlife Reserve, but also Kakenauwe Nature Reserve, protection forest, limited production and production forest (65,000 ha). The concept needs to be introduced to Lambusango constituents and stakeholders.

With flood of awareness and education materials produced by LFCP during the last three years, at present, most of Butonese have recognized the word Lambusango, many has been proud that they have Lambusango Forest which is lung of the world and home of millions life, many government officials expressed the need to use 'Lambusango Forest' as an icon of the Kabupaten Buton. We considered this as an important achievement of the project as we have made people aware on the area they have to conserve and the value of the conservation area. Without recognizing the area and its value, conservation movement will never start.

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

During measuring campaign 2005, all 12 undergraduate grants were granted to students from outside Buton whom all are dissertation students. In 2006, LFCP decided to allocate four (out of twelve) of undergraduate grants to Bau-Bau based universities. Considering that local undergraduate students will not conduct scientific data collection (as other students from outside Buton who are biologist or foresters), instead of 8 weeks, they only need two weeks to joint Opwall expedition, i.e. one week to follow jungle training, and another week to join biodiversity monitoring. As such, four local undergraduate students could be involved on Opwall expedition every two weeks, that is to say that sixteen local undergraduate students can be involved without extra additional cost.

Considering the above, there are 24 undergraduate students receiving grants, with the following classification; (1) 4 dissertation students, they collected scientific data together with PhD students for 8 weeks; (2) 4 general volunteers from outside Buton. They were rotated between projects to experience a wide range of projects for 8 weeks; (3) 16 general volunteers from Buton. They followed jungle training (1 week) and one biodiversity monitoring experience (1 week). Four criteria have been used to select dissertation students, i.e. (1) Academic performance; (2) English proficiency; (3) Field experience; (4) Research proposal. Unsuccessful dissertation student's applicants were involved for the selection process of general volunteer's students. For wider recognition of the project, apart from the applicant's performance, consideration was also taken to participants from Universities, which had not been involved during 2005 season.

During measuring campaign 2007, the participants are local undergraduate and secondary school students. Thirty four students have been selected, composed of 25 senior high schools (17 students from Bau-Bau Town, 6 students from Buton District and 2 students from Kendari) and 9 undergraduate students [2 students from the *High School of Islamic Study* (STAI) and 6 from faculty of Education *University of Dayanu Ihsanuddin* (Unidayan), Bau-Bau, one from Faculty of Biology, *University Haluoleo* (Unhalu), Kendari]. All those students, except one undergraduate student from Unhalu who jointed the program for 8 weeks, have completed their fieldwork. See *Annex E*.

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

The opportunity of the three PhD studentships for Indonesian Masters level students with a good level of English has been advertised widely throughout the top of Indonesian universities and for Indonesian Masters students from UK and US universities from 1 January – 22 April 2005. The three studentships were: (1) The assessment of forest change using satellite imagery and observational data on selective logging and rattan collection; (2) The use of bird and butterfly communities as indicators of forest change; (3) Estimation of the Anoa and macaque populations using genetic markers.

LFCP selected three applicants of each candidate, which then submitted to the Northumbria University (forest structure change), Manchester University (Bird and Butterfly) and Hull University (Anoa and Macaque). The final successful PhD candidate was determined by respective university (see *Table 7*).

Table 7 PhD students, universities, promoters and associated cost

| Name | University | Promotor | Cost (USD) |
|-----------------|-------------------------|--------------------|----------------------|
| Atiek Widayati | Northumbria | Dr. Bruce Carlisle | 58,100 |
| Nurul Winarni | Manchester Metropolitan | Dr. Martin Jones | 59,228 ³⁹ |
| Asri Dwiyahreni | Hull | Dr. Philip Wheeler | 62,630 ⁴⁰ |
| Total | | | 169,950 |

LFCP has successfully facilitated the fieldwork of three PhD students in the Lambusango Forest. All PhD students are expected to complete their study in December 2008.

³⁹ Including additional cost of USD 5,000

⁴⁰ Including additional cost of USD 5,000

D3. Improve capacity building of forest rangers and PPNS through on the job trainings which are tailored to site-specific circumstances.

See GIS and GPS training courses organized by the program.

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

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

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

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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.

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F1. 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.

LFCP Organized journalist trip in Lambusango Forest from 14 - 15 April 2007, twenty journalists from SE Sulawesi visited project site, this was continued with media gathering on April 16, 2007. The results of journalist trip were published on two pages 'Wonua' (news supplement/newspaper inserts (*sisipan*) in *Kendari Pos*), *Kendari Express* and *Media Sultra*. As a follow-up of Journalist Trip, the PM was interviewed in *Suara Alam Radio* (April 26, 2007), *Anoa Radio*, (April 27, 2007), *Kendari TV* (April 30, 2007) and 'M' Radio (May 1, 2007). Campaign (adverts, 'jingle') of Lambusango Forest Conservation was aired by *Kendari TV*, *Suara Alam*, *Anoa* and 'M' Radio during April and May 2007.

During May till August, 2007, LFCP in collaboration with *Lawero* and *Kraton Radio* in Bau-Bau, aired 1 minute Lambusango Forest Conservation campaign ('jingles'), the 'jingle' is daily aired at 00.15 am, 6.30 am, 8.05 am, 1.15 pm, 2.55 pm, 3.35 pm, 8.35 pm, 9.55 pm. Special jingle has recently made during August 2007 for celebrating Indonesia Independence Day.

Since May, 2007, regular interactive dialogs (resource persons: LFCP staff and government officials) to mainstreaming Lambusango Forest conservation has been conducted on *Radio Lawero* every two weeks. The interactive dialog has covered the following issues: (a) Understanding Lambusango Forest, LFCP and Operation Wallacea Trust; (b) The need of inclusive and integrated spatial planning between Buton District and Bau-Bau Town; (c) Utilization of Lambusango Forest Products; (d) Collaborative management of Lambusango Forest; (e) Ecotourism in Buton Island; (f) Collaborative protection of Lambusango Forest; (g) Developing village business model in Lambusango Forest; (h) Mainstreaming environmental conservation.

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 activities related with ths outputs.

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Annex A: Revised Project Description

- A1. Formation of a Community Forest Management Forum (CFMP) as a mature organization able to conduct independent conservation movements.
- A2. Development of sustainable livelihoods models on several villages surrounding Lambusango Forest through village conservation contract facilitation schemes.
- A3. Provision of enabling conditions for better forest management and sustainable rattan extraction.
- A4. Preservation of the forest boundaries at the point at which the project proposals were announced.
- B1. Strengthen forest crime law enforcement.
- 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
- 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 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.
- 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 is 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.
- F1. 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.
- 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.

Annex B: Revised Outputs

The original project concepts and its implementation conducted during the half of project life (June 1, 2005 – December 31, 2006) and revised concept (specific objectives) and activities during the second half of project period (January 1, 2007 – December 31, 2008).

| | From | To |
|-------------|---|--|
| | Component A: Forest Management and Village Contract Implementation | |
| A.1. | Community Forestry Management Forum | |
| | Specific Objective: To develop <i>Community Forestry Management Forum</i> (CFMP) as a mature organization and enable to conduct independent conservation movements | |
| | Forum envisaged as a multi-stakeholder forest management body would serve to unite management of all forests (both district and provincially managed) into one effective, district –level system. | Forum envisages as a multi-stakeholder forest management body would serve to: A.1.1. Improve forest governance policy. A.1.2. Change community attitude toward sustainable forest resource management. A.1.3. Strengthen community based forest protection. |
| A.2. | Village Business Development | |
| | Specific Objective: To develop sustainable livelihoods models on several villages surrounding Lambusango Forest through village conservation contract facilitation schemes | |
| | One of the central concepts of the project as planned in the Project Brief was the introduction of management agreement 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. This activity was not under implementation by the project, due to some technical difficulties (implementation of the recent law which gives provision for this activity is unclear) and uncertainty as to whether this approach is suitable for the Buton context. During the last 18 months, village business has been initiated in 17 villages. Unfortunately, not all of them are related to village conservation contract/outcomes. | The project will select business developments, which are truly related to conservation outcomes, investment or assistance should take place only after (sub) village-level contract is signed by the Forum, with plans in place for monitoring and sanctions identified in the event that the conditions of the contract are broken. The project will focus on smaller number of villages (only 6 villages) having high social capital as model for sustainable livelihoods development and conservation contract/outcomes. Focus will be given to the following activities. A.2.1. Promote international cashew marketing of Barangka village A.2.2. Fairtrade and organic certification of cashew in Barangka Village A.2.3. Promote ginger trade in Summersari Village A.2.4. Develop orange plantation and vanilla processing (export) in Lasembangi Village A.2.5. Develop sustainable market for oyster farming in Watumotobe and Lambusango Timur Villages |

| | | |
|-------------|--|--|
| A.3. | Forest management and sustainable rattan extraction | |
| | Specific Objective: To provide enabling conditions for better forest management and sustainable rattan extraction | |
| B. | Enforcement | |
| | Specific Objective: To strengthen forest crimes law enforcement | |
| | <p>The project has produced some interpretations of forest loss from satellite imagery in 1999 and 2004 which have been disseminated among Buton District agencies.</p> <p>The project has made excellent process in surveying rattan standing stock, understanding the trade chain, examining the current procedures for issuing rattan extraction permits and promoting rattan plantations.</p> <p>The project (or the Forum) cannot develop a new licensing system, as there is a permit system currently established under the District Forestry Office.</p> | <p>LFCP will put emphasis on forest management. For sustainable rattan extraction, efforts will be made to support the involvement of BKSDA on the issuance procedure and surveillance of rattan extraction within Lambusango Forest Nature reserves. The analysis of rattan data to calculate sustainable extraction rates will be handled by PhD student (Atiek Widayati).</p> <p>GIS Forum will be strengthened and become a strategic partner of the project to develop inclusive Management Plan of Lambusango Forest, which incorporate conservation objectives into development program. LFCP will support BKSDA to plant Pinang (<i>Arenga pinata</i>) along the nature reserve boundaries.</p> <p>A.3.1. Facilitate the role of GIS Forum as coordinating body on inter-sector spatial data processing and analyzing</p> <p>A.3.2. Facilitate the development of Management Plan of Lambusango Forest Management Area (LFMA), including strategy and action plans for LFMA that has explicit agreement among major stakeholders as well as a broader constituency.</p> <p>A.3.3. Facilitate community based (including students) forest rehabilitation on critical headwater catchments</p> <p>A.3.4. Strengthen roles of BKSDA on the issuance procedure and surveillance of rattan extraction within Lambusango Forest Nature reserves.</p> <p>A.3.5. Facilitate the development of rattan plantation and maintenance of the existing rattan demonstration plot.</p> <p>A.3.6. Planting <i>Pinang</i> along the nature reserve boundaries</p> |
| | <p>From November 2005 - June 2006, FCUL has conducted joint patrol. About six patrols a month were organized involving <i>PPNS</i> (civil government crime investigator), <i>Polhut</i> (forest ranger), and journalists. The confiscated timbers on average were 35 m³ per month. Later on, this approach was considered ineffective, as it only deterred poor logger,</p> | <p>The project still attempts to push for prosecution of low-level criminals, to keep up the transaction costs of illegal logging and dissuade villagers from taking part.</p> |

| | | |
|------------------|--|---|
| | <p>while their financiers were remain untouched.</p> <p>Since August 2006, LFCP has involved on the investigation of forest products transport on three investigation posts, i.e. <i>Barangka, Wakoko and Kaongkaongkea</i>.</p> <p>Since October 5, 2006, all BKSDA's forest rangers have been part of Forest Crime Unit Lambusango (FCUL). From December 1, 2006, <i>Lakapela</i>, a local NGO, has become a member of FCUL and has taken a role in illegal logging investigation, particularly in the publicizing of the data obtained.</p> | <p>B.1. Data collection on forest crimes and used as a basis on directing enforcement strategy.</p> |
| | | <p>B.2. Facilitate regular patrols and forest crime investigation</p> |
| | | <p>B.3. Facilitate the prosecution of high profile cases</p> |
| <p>C.</p> | <p align="center">Education and Awareness</p> <p align="center">Specific Objective: To promote global significance of Lambusango Forest through local-specific teaching materials development and awareness rising of Lambusango Forest constituents and stakeholders at local and national level</p> | |
| | <p>Activities which have been conducted include production of posters, bulletins or newsletters, story books for children, biodiversity books, essay competition on environment for senior high school, installation of conservation campaign boards surrounding Lambusango Forest.</p> | <p>The past activities will be continued. However, emphasis will be given on the development of local-specific teaching materials to support the implementation on local content curriculum on environmental education.</p> <p>C.1. Facilitate the development of local-specific teaching materials for local content curriculum on environmental education in the primary and secondary schools.</p> <p>C.2. Develop awareness materials, including faith based environmental message</p> <p>C.3. Develop national awareness materials on the global significance of Lambusango Forest</p> |
| <p>D.</p> | <p align="center">Capacity Development</p> <p align="center">Specific Objectives: To provide grants and field assistants to Indonesian PhD and undergraduates students as well as BKSDA staff</p> | |
| | <p>The project has provided grants for undergraduate and three PhD students to conduct biodiversity monitoring together with Operation Wallacea Ltd. During 2006, 24 students were selected to participate in the Opwall surveys and to date, 36 undergraduate students in total have participated. The three PhD students have also joined the 2005 and 2006 Opwall field seasons.</p> | <p>Grants for undergraduate students will also be provided during 2007 Opwall field season. However, it is only limited to Bau-Bau undergraduate students.</p> <p>New attentions will be given on the BKSDA staff capacity building, in the form of refresher courses for forest rangers and forest crimes investigators (PPNS), sponsored BKSDA staff to joint Opwall field seasons.</p> <p>D.1. Provide grants for 3 PhD students</p> <p>D.2. Provide undergraduate grants for 16 Bau-Bau students and 4 BKSDA staffs to join 2007's Opwall measuring campaign</p> <p>D.3. Improve capacity building of forest rangers and PPNS through on the job trainings which are</p> |

| | | |
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| | | tailored to site-specific circumstances |
| E. | Monitoring | |
| | Specific Objectives: To measure site specific indicators demonstrating threat reduction resulted from LFCP interventions | |
| | Substantive biodiversity and socio-economic monitoring has been undertaken by Opwall Ltd and PhD students and most of the research reports have been shared with the project team in Bau-Bau | <u>E.1.</u> Measure site specific indicators demonstrating threat reduction resulted from LFCP interventions |
| F. | Promotion | |
| | Specific Objective: To demonstrate the effectiveness of project approach to persuade other districts to adopt similar management strategies for their locally and nationally controlled forests | |
| | | <u>F1.</u> 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 |
| | | <u>F2.</u> 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. |

Remarks: The underline numbers (for example **D.2**) are newly initiated activities.

Annex C: Summary of Meeting Notes (PM⁴¹ and TTL⁴²) (16 – 19 February 2007)

1. All project components: We need to measure quantitative (SMART) indicators on the conservation impacts (output and outcome) of every project components as evidence that we are buying conservation.
2. Business development: We have to contact *Pak Ilham* on procurement issues, especially related with the business start-up (subsidy) on cashew, ginger, and LED.
3. Village business development contract: Contract will be arranged between conservation group and Forum. The contract will mention how the agreement monitored and sanctions will be imposed by the Forum, if the groups break the agreements.
4. Rattan extraction: We have to contact *Asosiasi Pengrajin dan Pengusaha Rotan Indonesia* (Rattan Business Association) on the unsustainable rattan extraction in Lambusango Forest and all the Opwall studies on rattan supply and dynamics. Sending a letter with cc to the World Bank, and BKSDA. Pushing BKSDA to involve on the issuance procedure of rattan licensing scheme and to use the project (for rational sustainable extraction).
5. Management Plan of Lambusango Forest: Propose options for the redesign of the Lambusango conservation areas considering the asphalt mining and illegal settlement in Wabou and others areas (using all the GIS, the Forum-GIS/F-GIS). Use PHKA template for management plan as a reference. Explicit invitation to F-GIS on every new progress, common usage etc.
6. Skill Development: Allocate USD 10,000 for undergraduate student's biodiversity monitoring during 2007. And for BKSDA staff (see also 9).
7. Monitoring: Instead of 2007, Ruth Malleson was suggested to come in 2008 and write up the final report by June 2008.
8. Forest Management: We have to measure the survival percentage of reforestation activities. Publish land-cover change 1991-2004 to Kendari Post. Open discussions with *PT Sarana Karya* and lead multi-stakeholder discussions to restore conflicts resolution in Winning and Wabou, using series of map etc (simulation models).
9. Skill development for BKSDA Staff: We will organize the intelligence and other training with the Police School in Kendari. Sponsor 3 functional staff of BKSDA to attend Biodiversity monitoring with Opwall as well as S2 fellowship of 2 BKSDA staff.
10. Next edition of Lambusango Newsletter: We will promote the role of BKSDA and Pemda Buton in conserving Lambusango Forest.
11. Comparative study: We will facilitate 2 Forum members, 3 BKSDA staff and 2 Buton government staff to conduct comparative study in Sumba Island or other relevant areas.

⁴¹ Project Manager (Edi Purwanto)

⁴² Task Team Leader (Dr. Tony Whitten)



12. Village regulation (Perdes): Some contradictory verses in the Perdes (such as 17 and 18 of the Kakenauwe Perdes) have to be revised.
13. Forum Operational Cost: We will submit a proposal on Forum budget to Pemda Buton, with supporting letter from Pak Tony.
14. Asphalt: We have to contact PT. Sarana Karya on the environmental compensation issues. (Look at Google – offsets conservation).
15. Promotion: In the second half 2008, we will promote the step-by-step guideline and socialize the impact and outcome of the project, cost to develop similar initiation in other areas. No need to put so much cost on reports.

Annex D. Meeting Notes Between TTL, Head of BKSDA⁴³ and PM (16 and 19 February 2007)

1. LFCP facilitate the development of 'Management Plan of Lambusango Forests', including proposed future management status of the forests. BKSDA will provide legal template of such document.
2. LFCP will support BKSDA to grow *Pinang* along the conservation boundaries.
3. BKSDA will send its best staff (forest rangers and PPNS) to support law enforcement in Lambusango.
4. LFCP together with BKSDA will produce awareness materials on list of activities which are allowed (and not allowed) to be conducted in conservation, protection and production forests. Provide forms (written permits) at resort (field) level for villagers who wish to collect non-timber forest products.
5. LFCP will assist BKSDA to collect the standing stock of non-timber forest products to define its sustainable level of extraction.
6. LFCP will organize forest rangers and PPNS refreshment course involving Police School in Kendari. Sponsor 3 functional staffs of BKSDA to attend biodiversity monitoring with Opwall as well as S2 fellowship (at local university) of 2 BKSDA staff.
7. LFCP together with BKSDA will develop village business development, especially for sustainable honey collection and development.
8. LFCP will facilitate BKSDA staff to conduct comparative study in Sumba Island or other relevant areas.

⁴³ Ir. Halasan Tulus



Annex E. Undergraduates and secondary schools receiving Grants

Table Annex E.1. Undergraduate students receiving grants during 2005

| No | University/City | Faculty/Major | No | Name | Activity Period |
|----|--------------------------------------|---|----|--------------------|---|
| 1 | Bogor Agriculture University / Bogor | Forestry / Forest Resource Conservation | 1 | Ambang Wijaya | 10 weeks (29 June - 7 September 05) |
| | | | 2 | Nanda Dwanasuci | |
| 2 | Hasanuddin University / Makassar | Agriculture & Forestry | 3 | Jumrin Said | |
| | | | 4 | Dwi Apriani Wahab | |
| | | | 5 | Hadizah Azis | |
| | | | 6 | Wanti Tampubolon | |
| 3 | Gadjah Mada University / Yogyakarta | Forestry / Forest Resource Conservation | 7 | Ira Ratnasari | |
| | | | 8 | Esti Amalia | |
| 4 | Haluoleo University / Kendari | Science / Biology | 9 | Bahari | |
| | | | 10 | Muhammad Wahyuddin | |
| | | | 11 | Adikarya | |
| | | | 12 | Arthur Arfian | |

Notes:

- Number of student 12
- Number of university 4
- Amount of payment \$ 20,000

Table Annex E.2. Undergraduate students receiving grants during 2006

| No | University/City | Faculty/Majors | No | Name | Activity Period |
|----|---|--|----|----------------------|-------------------------------------|
| 1 | Dayanu Ikhsanuddin University / Bau-Bau | Machine Engineering | 1 | Erwin Arif | 2 weeks (29 June - 12 July 06) |
| | | | 3 | Darson | |
| | | Civil Engineering | 2 | Yuli Purnomo Sidi | |
| | | | 4 | Firman Makmur | |
| | | Law | 5 | Yustiawan Endre | |
| | | | 6 | Toni Hardianto | |
| | | | 7 | Izat Asnawi | |
| | | Civil Engineering | 8 | Masry Budiyanto | 2 weeks (27 July - 9 Aug 06) |
| | | | 9 | La Ode Endang | |
| | | | 10 | La Ode Herman | |
| | | | 11 | Arsinah | |
| | | | 13 | Asman Ali | |
| | | Economy Management | 14 | I.G. Umbarajaya S. | |
| | | Law | 12 | Syurti Harani | |
| | | | 15 | LD Hendra Herdiyanto | |
| | | | 16 | LD Nuriadin | |
| 2 | Haluoleo Univ / Kendari | Science / Biology | 17 | Chitra Dewi | 8 weeks (29 June – 21 August 06) |
| 3 | Hasanuddin Univ / Makassar | Agriculture & Forestry / Forest Management | 18 | Irmawaty Latif | |
| 4 | Nasional University / Jakarta | Biology / Biology | 19 | Fikty Aprilinayati | |
| | | | 20 | Dewi Suprobowati | |
| 5 | Gajahmada University / Yogyakarta | Forestry / Forest Resource Conservation | 21 | Wahyuni Mahmud | |
| 6 | Padjajaran University / Bandung | Science / Biology | 22 | Emma Yustikasari | |
| | | | 23 | Felicia Permata S.L. | |
| 7 | University of Indonesia / Jakarta | Science / Biology | 24 | Dwi Susanto | |

Notes:

- Number of students 24
- Number of university 7
- Amount of payment \$ 20,000

Table Annex E.3. Undergraduate students receiving grants during 2007

| No | University/City | Faculty/Majors | No | Name | Activity Period |
|----|--|--------------------|----|--------------------|---|
| 1 | STAI YPIQ / Baubau | PAI | 1 | Herniyati | 2 weeks (26 July – 8 August 07) |
| | | | 2 | LD Aprianto Lukfin | |
| 2 | Dayanu Ikhsanuddin University / Bau-Bau | English Department | 3 | LM Fuad Al Ichwani | |
| | | | 4 | Lusiani | |
| | | | 5 | Rasiah | |
| | | | 6 | Jubairu | |
| | | | 7 | Ayanti | |
| | | | 8 | Haryono La Kepe | |
| 3 | Unhalu University / Kendari | Science / Biology | 9 | Irman Kurniawan | 4 weeks (12 July – 8 August 07) |

Table Annex E.4. Secondary students receiving grants during 2007

| No | School/District | Grade | No | Name | Activity Period |
|----|----------------------|-------------------|----|----------------------|------------------------|
| 1 | SMAN 1 / Baubau | X | 1 | LD Sahli Mahfudz | 1 week |
| | | X | 2 | Yulan Saputra | 1 week |
| | | X | 3 | WD Indah Febriana | 1 week |
| | | XI IA (Science) | 4 | WD Putri Handayani | 1 week |
| | | XI IA (Science) | 5 | Maesharah Rosyadi | 1 week |
| | | XI IA (Science) | 6 | Suriadin Sazli | 1 week |
| | | XI IA (Science) | 7 | Adi Rio Arianto | 1 week |
| | | XI IA (Science) | 8 | Ika Nurmila | 1 week |
| | | XI IA (Science) | 9 | WD Dwi Daningrat | 1 week |
| | | XI IA (Science) | 10 | WD Nasrah Salmiah R. | 1 week |
| | | XI IA (Science) | 11 | Nova Novelia | 1 week |
| 2 | SMAN 2 / Baubau | X | 12 | Anwar Lutfi | @ 1 week |
| 3 | SMAN 4 / Baubau | XI IS (Social) | 13 | Arlin | (5 July – 8 August 07) |
| | | XI IS (Social) | 14 | Astuti | |
| 4 | SMKN 1 / Baubau | II PK (XI Social) | 15 | Saplin | 1 week |
| 5 | SMA Mutiara / Baubau | X | 16 | La Jeti | 1 week |
| | | XII IA (Science) | 17 | WD Lini Saputri S. | 1 week |
| 6 | SMAN 6 / Sorawolio | XI IA (Science) | 18 | Farid Fandi | 1 week |
| | | XI IA (Science) | 19 | Hartati | 1 week |
| | | XI IA (Science) | 20 | Nurmalia | 1 week |
| 7 | SMAN 1 / Pasarwajo | XI IA (Science) | 21 | Indrawati | 1 week |
| | | XI IA (Science) | 22 | Mansur Sididi | 1 week |
| 8 | SMAN 1 / Kapontori | XI IA (Science) | 23 | Erni Rombo | 1 week |
| 9 | SMAN 1 / Kendari | XII IA (Science) | 24 | Ray March Syahadat | 1 week |
| 10 | SMAN 4 / Kendari | X | 25 | Rahmad Manaf | 1 week |

Notes:

- Number of students 37
- Number of university 3
- Number of high school 10
- Amount of payment \$ 10,000

