

# Report of Ex-post Evaluation

PD 324/04 Rev.3 (F)

## Sustainable Management of Tropical Forest Resources through Stakeholder Agreements in Traditionally Owned Areas of Papua New Guinea

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Particular thanks are due to the many people met during the field visits, particularly members of Urumarav village who enthusiastically discussed their experiences and visions for the future.

Don Gilmour

## List of acronyms

ALLG	Almami Local Level Government
CBO	Community Based Organization
CSO	Civil Society Organization
DEC	Department of Environment and Conservation
DNPM	Department of National Planning and Monitoring
FMA	Forest Management Area/Agreement
GoPNG	Government of Papua New Guinea
ITTA	International Tropical Timber Agreement
ITTO	International Tropical Timber Organization
LLG	Local Level Government
MOU	Memorandum of Understanding
PNGFA	Papua New Guinea Forest Authority
PNG	Papua New Guinea
PSC	Project Steering Committee
REDD	Reduced Emissions Deforestation Degradation
TNC	The Nature Conservancy

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## Executive summary

This ex-post evaluation is one of three being carried out as part of a thematic assessment of ITTO supported projects in Papua New Guinea and Indonesia with various degrees of community participation. The primary purpose of all three evaluations is: “...to provide a concise diagnosis...to point out the successful and unsuccessful outcomes, the reasons for successes and failures, and the contribution of the projects towards the achievement of ITTO’s Objective 2000, and to draw lessons that can be used to improve similar projects in the future.” The in-country component of the evaluation occurred between 14<sup>th</sup> and 22<sup>nd</sup> May 2012, and the basic information about the Project is shown in the following table.

Project name	Sustainable Management of Tropical Forest Resources through Stakeholder Agreements in Traditionally Owned Areas of Papua New Guinea
Project number	PD 324/04 Rev.3 (F)
Executing agency	PNG Forest Authority in collaboration with The Nature Conservancy.
Starting date and duration	November 2006; planned duration 36 months; actual duration 46 months.
Budget (US\$)	Total: USD1,032,734 (ITTO contribution USD452,596; TNC contribution 505,138 GoPNG contribution 75,000)
Country	Papua New Guinea

### *Context and background*

The Project needs to be seen in the context of an overall process of change that has been evolving in the Adelbert Ranges since the mid 1990s, where local landowners have been seeking, with support from TNC since 1997, alternatives to industrial logging for their forests.

The Almami Local Level Government (LLG) passed an Environment and Conservation Law in 2003 that provided an enabling regulatory framework for the development of community-based Land Use Management Plans and the signing of Conservation Agreements to empower local landowners to manage their natural resources for their own benefit. The Project was designed to operationalise this Law and consisted of two outputs: (1) tools and processes to give local landowners the skills to develop Land Use Management Plans and to legitimise these through the signing of Conservation Agreements with the LLG, and (2) the modality of Land Use Management Plans and Conservation Agreements extended to other parts of PNG.

### *Major achievements*

The Project has been highly successful in achieving its planned Outputs and its Specific Objective and in contributing to its Development Objective (its impact). Among the reasons for this high level of achievement are:

- The Project addressed a real need in PNG.
- There was good support at all levels of government and among the targeted rural populations.
- The Project design was appropriate to the political, economic and social situation in the country.
- The implementation of the Project was efficient and effective.

The results have greatly exceeded expectations. Of particular note was that: nine of the 22 villages in the Almami LLG have completed Land Use Management Plans and signed Conservation Agreements covering 18,000 ha, including 4,360 ha of core conservation area, although three of the Agreements were signed before the commencement of ITTO funding. In addition, the approach trialled by the Project in the Almami LLG has been replicated in both West New Britain and Manus Provinces. It was concluded that the Specific Objective was largely achieved and substantial progress was made in contributing to the Development Objectives (although it had to be re-framed to make it possible to report progress and to distinguish it from the Specific Objective).

### *Lessons learned*

A number of lessons have emerged from the Project’s implementation, and these include:

- Community empowerment is a social process that needs careful nurturing and support.
- Considerable time is needed to build capacity of key stakeholders to use participatory approaches to land use planning.

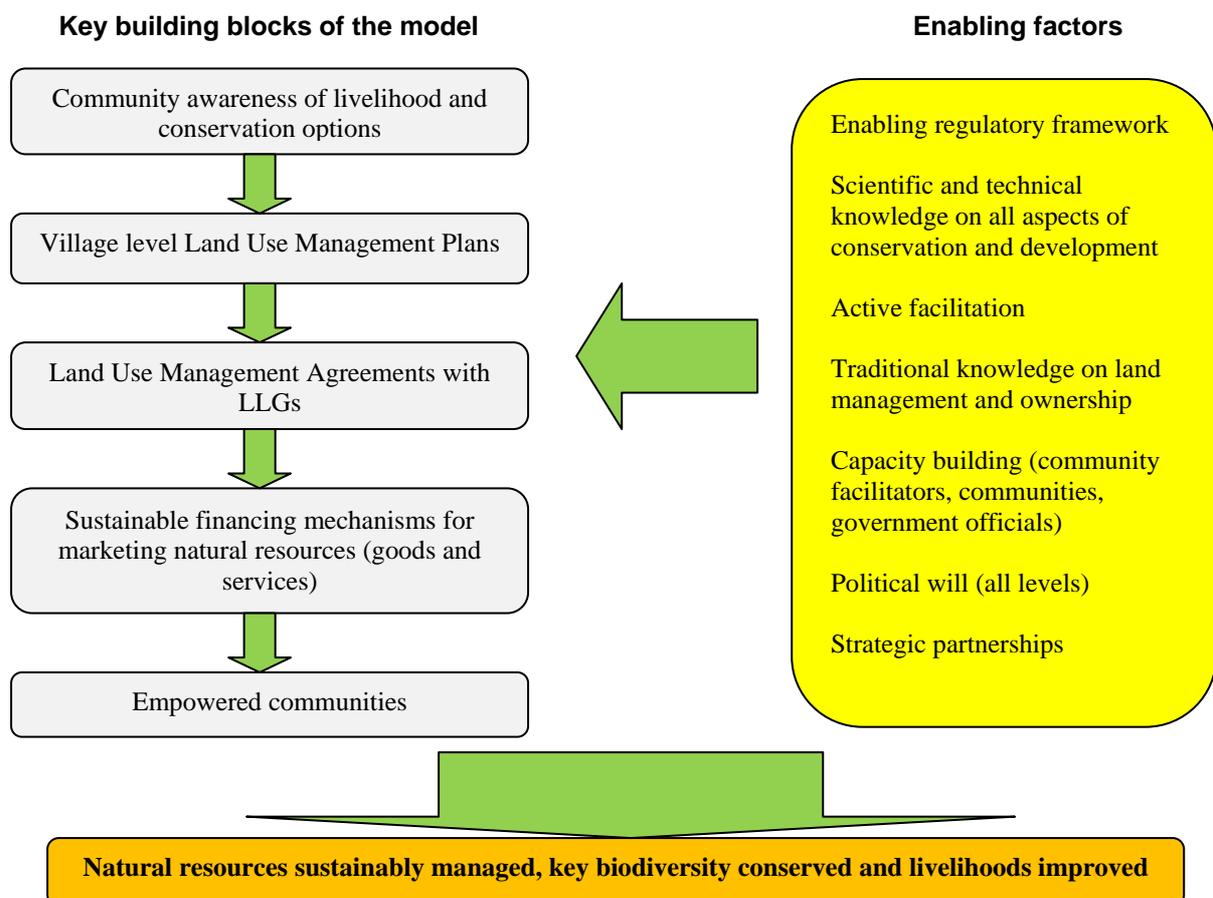
- A three year project cannot be expected to empower local communities to the stage where they can produce substantial livelihood benefits.
- Strategic partnerships have been critical in connecting the Project team and communities with political, government, industry, education and CBO groups to leverage additional capacity and resources to increase the reach and impact of the Project's outputs, particularly after Project funding ceased.

*Conclusions*

The industrial paradigm of forest management that has characterised forestry in PNG for the past 30 years is rapidly coming to an end, and a new modality is urgently required that addresses the deficiencies of past approaches. The approach developed and refined by the Project during the past few years could provide such a modality, as well as being a relevant model in its own right. This vision for the future is one where local communities are empowered to develop their own land use plans and manage their own natural resources, including forests, for their own benefit with support and facilitation by government and other organisations.

The approach trialled by the Project placed a high prominence on conservation objectives and was referred to as a "conservation-development" model. In practice, it considers the sustainable management of all natural resources, but with a conservation underpinning. For the approach to have wide acceptance and application it would be useful to give it a more generic name such as a "Community Based Natural Resource Management (CBNRM)" model. The key building blocks for such a generic model were articulated during a facilitated brainstorming exercise with the Project team during this evaluation and are shown in the following Figure.

**Figure 2. A generic model of Community Based Natural Resource Management (CBNRM) for use by communities in PNG (developed during a project team brainstorming session on 16-5-12)**



The experiences of the Almami communities since 1996 and the outcomes from the focused support of the ITTO Project between 2006 and 2010 could represent the first chapter in a book to be written on a new paradigm for managing natural resources in PNG by empowering local communities. However, there are several major challenges to be faced in mainstreaming such a paradigm. The two outstanding ones are:

- Identifying and building the capacity of people to carry out the community facilitation that is essential to empower communities to carry out participatory land use planning and negotiate Land Use Management Agreements with LLGs.
- Ensuring that communities can obtain sufficient financial benefit from the sustainable use of their natural resources (goods and services) to make their involvement in the process worthwhile.

While future prospects for adopting and mainstreaming a new approach to the management of natural resources are encouraging, there is a danger of stagnation and even reversal unless pressure is maintained by the government and others to continue the evolution of the whole process. In this regard, political will and the role of champions who have emerged during the last few years will be critical in maintaining the momentum for change.

The Project has made a significant contribution to the achievement of ITTO's strategic objectives.

#### **Recommendations for Executing Agency (PNGFA)**

1. Use the report to initiate a dialogue with key development partners and relevant government line agencies to promote the adoption of the Community Based Natural Resource Management (CBNRM) model as the corner stone of a new paradigm for sustainable forest management in PNG. (Consider conducting a workshop to debate the implications of the model for future forest management policy and practice, particularly in view of the rapid decline in industrial scale logging).
2. Support the wider testing of the participatory Community Based Natural Resource Management (CBNRM) model developed by the Project.
3. Consider adopting the participatory Community Based Natural Resource Management (CBNRM) model as an approach to achieve sustainable land use (including forest) management across the country by linking it to the national Vision 2050 and have it reflected in relevant policies.
4. Use the lessons learned from the Project's experience in the Adelbert Ranges to inform other ITTO and related projects in PNG.

#### **Recommendations for TNC**

1. Continue to test and refine the Community Based Natural Resource Management (CBNRM) model for natural resource management so that it can be adopted more widely to encompass multiple land use management objectives.
2. Create a "narrative" about the changing paradigm of forest management in PNG and the relevance of the Community Based Natural Resource Management (CBNRM) model for natural resource management as the corner stone of a new paradigm, so that it can be described succinctly to policy makers and others.
3. Revise the manual on "Community based conservation tools and processes" to make it more concise and suitable for wider application to encompass multiple land use management objectives.

#### **Recommendations for ITTO**

1. Consider supporting a follow-on project in PNG focused on developing market linkages for forest goods and services from forests sustainably managed by local landowners.
2. Improve assessment of logical frameworks during project design so that outputs, specific objectives and development objectives are clearly defined and conform to good practice criteria.

# 1. Introduction

The ITTO Manual for project monitoring, review, reporting and evaluation (ITTO 2009) notes that: *“The purpose of an evaluation is to guide or advice (sic) on the further implementation of the evaluated Project and/or on the formulation and implementation of future Projects”* and that: *“evaluation looks beyond the constituent elements of the Project, to the validity of its design and to its impact.”* (p. 44.)

This evaluation is an ex-post evaluation and is one of three being carried out as part of a thematic assessment of ITTO supported projects in Papua New Guinea and Indonesia with various degrees of community participation. The primary purpose of all three evaluations, as stated in the ToR (see Annex 1) is *“...to provide a concise diagnosis of two projects related to Forest Rehabilitation [PD 271/04 Rev.3 (F) and PD 394/06 Rev.1 (F)] and one project related to Community Participation in SFM [PD 324/04 Rev.3 (F)] so as to point out the successful and unsuccessful outcomes, the reasons for successes and failures, and the contribution of the projects towards the achievement of ITTO’s Objective 2000, and to draw lessons that can be used to improve similar projects in the future.”*

The following table shows the basic statistics on the Project being evaluated.

**Table 1. Basic information about the Project**

Project name	Sustainable Management of Tropical Forest Resources through Stakeholder Agreements in Traditionally Owned Areas of Papua New Guinea
Project number	PD 324/04 Rev.3 (F)
Executing agency	PNG Forest Authority in collaboration with The Nature Conservancy.
Starting date and duration	January 2007; planned duration 36 months; actual duration 46 months, to September 2010.
Budget (US\$)	Total: 1,032,734 (ITTO contribution USE452,596; TNC contribution USD505,138 GoPNG contribution USD75,000)
Country	Papua New Guinea
Location	Adelbert Mountain Range (north coast of PNG), Almami Local Level Government, Bogia District, Madang Province.

The Project Document describes how the Project fits into ITTO’s strategic context in several ways. It complies with the ITTA 1994 objectives by: contributing to sustainable development; promoting research and development leading to improved forest management and encouraging members to develop national forest policies aimed at sustainable utilisation and conservation of timber producing forests. It is also consistent with the ITTO Yokohama Action Plan in the field of reforestation and forest management by: encouraging the involvement of non-government stakeholders in activities; promoting the conservation, rehabilitation and sustainable management of threatened forest ecosystems; promoting development of non timber forest products and forest services; securing the forest resource base through the implementation of forest policy, legislation and associated strategies; establishing and managing forests for multiple uses in close cooperation with local forest owners and communities living in forest areas and establishing areas dedicated to biodiversity conservation in accordance with ITTO guidelines.

## 2. Evaluation scope, focus and approach

The purpose of the evaluation was outlined in the previous section, and its focus was guided by the evaluative framework described in ITTO (2009) and the detailed “Scope of Work” contained in the ToR (Annex 1).

No mid-term evaluation was carried out on the Project during its implementation, although regular progress reports were produced. This ex-post evaluation was carried out by Dr Don Gilmour, an Australian forester. The approach taken in conducting the evaluation included: desk review of documents prior to the mission; meetings and interviews with key groups and individuals in Port Moresby, Madang, and in the field during a mission to PNG between 14<sup>th</sup> and 22<sup>nd</sup> May, 2012; review

of key Project products (including seven progress reports, minutes of four PSC meetings, training materials and manuals) and interrogation of Project databases. Discussion also took place with relevant Provincial officials during the field visits. However, as the writs for the coming elections were issued on 18<sup>th</sup> May it was not possible to meet with some of the relevant District and LLG officials due to their involvement in the election process. Annex 2 shows the schedule followed and people met during the evaluation.

At the end of the field mission a de-briefing presentation was made in Port Moresby to representatives of the PNG Forest Authority to present the key finding of the evaluation and to obtain feedback. The powerpoint presentation used at the de-briefing is included as Annex 3.

### 3. Project facts

The Project needs to be seen in the context of the changing dynamics of forest management in PNG. For the past 30 years forest management in the country has been dominated by an industrial model in which the key characteristics are:

- A Forest Management Agreement (FMA) is negotiated between the State, land owners and industry. This provides a mechanism whereby landowners transfer forest management rights to the State which is supposed to manage forests sustainably on behalf of the landowners.
- Landowners receive a guaranteed portion of royalty payments.

Over the years widespread dissatisfaction with this model has emerged centred on (a) unacceptable levels of destruction and degradation of large areas of forests that landowners value for a wide range of goods and services, and (b) inequitable sharing of benefits.

Industrial forestry has come to an end in several provinces, and is declining rapidly in most others. By and large, the easily accessible forests have been harvested. Data from the PNG Forest Authority indicates that 75% of the concessions have concluded operations. Clearly an alternative model for forest management is urgently needed to address the deficiencies of past approaches and to commence planning for the future.

The rationale for the intervention, as noted in the Project Completion Report, was that: *"...the clans and communities were not conserving and managing their forests sustainably for the future generations to be able to enjoy the products and services it provides"* (p. 6). The Project Document noted that The Nature Conservancy had been working with local government and communities in the Madang area since 1997 to find ways to protect the region's biodiversity, and that coming out of this collaboration: *"The Almami Local Level Government (ALLG) in Madang Province enacted the **Almami LLG Environment and Conservation Law**, a first of its kind in PNG, in 2003. It creates a mechanism that allows clans to gazette some or all of their land as protected area and then to develop their own integrated management plans, which govern the use of these protected areas. Ownership and responsibility for management of the land remains with the traditional resource owners. The conservation law links with existing local government development planning structures, thereby creating a connection between conservation and the institutional framework for delivery of social service benefits and local land use planning. Under the law, landowning clans are responsible for nominating their land for conservation and developing management plans. Clans retain ownership of their land and the process does not involve or encourage either land registration or clan incorporation, which many clans fear, as these can be a precursor to losing control of their land"* (p. 3).

The Project Document detailed a thorough analysis of the situation surrounding the unsustainable management of the area's forests, including a threat analysis and the construction of a problem tree that identified the underlying, or root, causes of the degradation. It was concluded that, in order to address these root causes in a systematic and sustainable manner, significant attention needed to be paid to: *"...strengthening and informing the decision-making of local communities with regard to the use of their forest and land resources and building a supportive relationship and capacity for land use planning assistance with local government"* (p. 6). This became the basis of the Project design. It was also perceived that: *"(a)effective response to this situation requires an investment in more than the traditional approach to community-based forestry that has in the past included problems such as limited local institutional capacity, a lack of effective local leadership, profits being captured by local elites, and inconsistent laws and regulations. In addition to specific measures and partnerships to help*

*clans meet their basic needs, a robust legal framework and compatible economic opportunities will be required'* (p. 6).

Essentially, the Project was designed to operationalise the 2003 *Almami LLG Environment and Conservation Law*. However, there was a broader consideration, as it was considered that the situation described above applied not just to the proposed Project site in the Adelbert Ranges on the north coast of PNG, but that it was central to the governance and management of natural resources throughout PNG. Hence, the Project was perceived to have national application: *"...to create a conservation and development model that can be applied widely throughout the country* (p. 2).

Following the analysis outlined above, a Development Objective for the Project was formulated as:

**Local forest owners in the Adelbert Range conserve and sustainably manage their forests to meet livelihood needs of current and future generations.**

A Specific Objective was formulated as:

**Local forest owners in the Adelbert Ranges are effectively using conservation agreements and management plans to conserve and sustainably manage their forests and meet their livelihood needs.**

It was proposed that these objectives be achieved through two outputs. The first output focused on the development of tools and processes for communities to develop land use management plans incorporating conservation priorities with support from the Almami local level government. The second output mainstreamed these tools and processes and lessons learned to partners to implement conservation and sustainable forest management. A logical framework was constructed with activities identified under each of the outputs and this provided the basis of the Project's implementation and reporting.

The Project was executed by the PNG Forest Authority and implemented by The Nature Conservancy in collaboration with the Government of Madang Province, the Almami Local Level Government and the local Almami communities. TNC operated a Project office in Madang. The Project was initially planned to run for 36 months (from January 2007 to December 2009) but was granted two no-cost extensions and continued for 46 months, until September 2010.

## **4. Findings, lessons learned**

### **4.1 Findings**

#### **4.1.1 Project achievements**

##### Project context

Before discussing the achievements of the Project it is important to locate the ITTO Project in the context of the overall process of change that has been evolving in the Adelbert Ranges since the mid 1990s. The major events in this evolution are shown in the following Table.

**Table 2. Timeline of key events in the evolution of land use management in the Adelberts Ranges**

<b>Date</b>	<b>Event</b>
1996	Local landowners in the Adelberts Ranges objected to industrial logging in their territory because of perceived damage to their forests and the general environment - they preferred selection logging options.
1997-2002	TNC became interested in seeking an alternative approach to the prevailing industrial logging model in PNG and began to explore approaches that considered conservation outcomes more explicitly. Various options were pursued in the Adelbert Ranges and TNC finally settled on an approach based on a LLG regulation that would empower local landowners to develop

	Land Use Management Plans to define the various land uses in their territory and formalise these by signing a Conservation Agreement with the LLG President.
2000	Local landowners lodged a case in the National Court objecting to the granting of a FMA in the Adelbert Ranges (the first time such a case had been lodged by local landowners in PNG).
2003	The National Court found in favour of the local landowners.
2003	The Almami LLG passed an Environment and Conservation Law that provided an enabling regulatory framework for community-based Land Use Management Plans and Conservation Agreements to empower local landowners to manage their natural resources for their own benefit.
2003-2004	Participatory tools and processes developed by TNC and applied in several villages in the Almami LLG area.
2004	Three participatory Land Use Management Plans completed with Urumarav, Turutapa and Musiamunat communities (encompassing seven clans).
2004	The first three Conservation Agreements signed between the President of the Almami LLG and Urumarav, Turutapa and Musiamunat communities.
2002-2005	ITTO project designed.
November 2006	ITTO project commenced, focused on operationalising the Almami Environment and Conservation Law.
2007-2009	Participatory tools and processes refined based on field testing.
2004-2006	The Almami LLG Environment and Conservation Law replicated in three LLGs in West New Britain Province (with local amendments to cater for marine issues).
2006	Four communities in the Almami LLG area (Gurube, Avipa, Dumudum and Itatawat, encompassing nine clans) finalised Land Use Management Plans and signed Conservation Agreements.
2007	Two communities in the Almami LLG area (Iwaram and Yawera-encompassing six clans) finalised Land Use Management Plans and signed Conservation Agreements.
2008	Three Co-operative Societies registered as co-operatives in PNG.
2008	First draft of Madang Provincial legislation prepared to scale up the Almami law to provincial scale.
2009	The Almami LLG Environment and Conservation Law replicated in two LLGs in Manus Province.
2010	Adelberts Co-operative Society certified by Fair Trade.
2010	A manual: "Community conservation tools and processes: A training manual for clan based conservation practitioners" published and distributed.
2009-2010	Civil Society Organisations in Madang Province took part in capacity building training to help scale up the model, initially focusing on Bogia District.
September 2010	ITTO project concluded.
2010-2012	Co-operatives linked to the market through Monpi Cocoa Exports.
2010-2011	Fair Trade conducted two annual audits of Adelberts Co-operative Society to ensure compliance with Fair Trade criteria.
2010-2012	Scaling up the conservation-development model to Bogia District, Madang Province and Nali Sapat LLG in Manus Province.
May 2012	Ex-post evaluation of ITTO project carried out.

The shaded section of the table above covers the key events that took place during the period when the ITTO Project was operational. It is evident that the activities carried out with financial support from the Project were part of a continuum in a process that pre-dated the Project and has continued since its cessation. Clearly, the Project was well embedded in the development agenda of the country in general and the Almami LLG in particular. It served the interests of local government and the local landowners, which bodes well for sustainability of the outputs achieved with Project support and for their long term impact.

### Outputs

Activities for each Output were identified in the logframe in the Project Document and these formed the basis of developing annual workplans and budgets. While activities are important in their own right, they are particularly important in contributing to the higher level Project Outputs and, if the internal logic of the logframe is sound, to the Specific and Development Objectives. The following Box summarises progress in producing the two Outputs as judged against the success indicators in the logframe.

**Box 1. Summary of achievements in producing Outputs**

**Output 1: Six Almami clans are prepared to manage their forest resources in the Adelbert Range according to agreed management plans, incorporating conservation priorities, with support from the Almami local level government.**

**Success indicators (from logframe in Project Document):**

- Three to five conservation agreements and management plans in place;
- Almami LLG active support through ward development and environmental advisory committees, budget allocations.

**Achievement:**

- A manual was developed to guide facilitation of community-based land use planning, associated legal matters, partnerships and sustainable financing.
- Community-based approaches were used to engage communities in land use planning in 22 villages in the Almami LLG area. The process adequately incorporates agriculture, sustainable forestry, biodiversity conservation and cultural objectives.
- Nine Land Use Management Plans were finalised covering the territory of nine villages and 22 clans.
- Nine Conservation Agreements were endorsed by Almami LLG. All 22 clans signed these agreements.
- Communities are implementing land use practices according to their Land Use Management Plans and show a strong sense of ownership of the process and the final products (the Land Use Management Plans and Conservation Agreements).
- There is a tangible sense of empowerment among the communities which have completed the process.

**Output 2: Lessons learned and mainstreaming activities designed to assist local resource owners and partners implement the demonstrated conservation and sustainable forest management approach.**

**Success indicators (from logframe in Project Document):**

- Strong partnerships developed at provincial and national levels to promote and implement effective stakeholder agreements.
- At least three districts with similar legislation and developing conservation agreements with clan forest owners.

**Achievement:**

- Strategic partnerships were developed with a range of partners covering political, government, community, industry, education and scientific interests to ensure widespread support and buy-in of the project's approaches to land use planning and sustainable management.
- The Almami LLG Environment and Conservation Law was replicated (with local modifications) in West New Britain in a Marine project, and also in the Manus marine conservation area.
- A MOU has been signed by TNC with two LLGs in Manus province, through which the experiences, tools and processes developed by the Adelbert's project are being applied to landscape planning to incorporate the "reefs to ridges" concept.

The results have greatly exceeded expectations, with nine Conservation Agreements (covering the territory of nine villages) being signed by the 22 clans in the villages and the Almami LLG President, although three of these were signed before the commencement of ITTO funding.

Outcomes

Project outcomes generally refer to the extent to which the Specific Objectives are achieved and include an assessment of related aspects such as sustainability and capacity development. The Specific Objective defined in the Project Document is:

**Local forest owners in the Adelbert Ranges are effectively using conservation agreements and management plans to conserve and sustainably manage their forests and meet their livelihood needs.**

The success indicators against which to judge achievement (as listed in the logframe in the Project Document) are:

- At least 200,000 hectares of key biodiversity value in the Adelbert Range put into conservation agreements and managed sustainably by Almami local landowners with support from local government.
- At least three additional priority forest sites in PNG have established similar legislation and conservation agreements.
- LLGs with new legislation incorporate conservation area agreements into own land-use decisions on forest resources and biodiversity.

The achievement of the Project in attaining its Specific Objective can be summarised in the following points:

- The Almami LLG Environment and Conservation Law is in force throughout the Almami LLG area (200,000 ha) and this provides an enabling regulatory environment for local clans to manage their land for conservation and livelihood benefits.
- Nine of the 22 villages in the Almami LLG have completed Land Use Management Plans and signed Conservation Agreements covering 18,000 ha (including 4,360 ha of core conservation area);
- The Conservation Agreement for Urumarav village runs for 50 years with a review every five years. To date, the community has been in compliance with the Conservation Agreement. As stipulated in the Agreement, the LLG should provide continuous advice and guidance, but this support has not been consistent due to lack of LLG funding. To overcome funding constraints, Urumarav village joined with other villages and formed a co-operative society to market cocoa as a product from villages that have signed Conservation Agreements and have Land Use Management Plans being implemented.
- Three Conservation Co-operatives have been registered, one of which is certified with the International Fair Trade Organisation for the sale of cocoa beans into the international market at a guaranteed floor price. The Project has facilitated their registration and their connection with Monpi Cocoa Exports. Internal institutional difficulties are currently impeding the efficient functioning of these co-operatives. [The Board and management](#) of the co-operative has had internal differences, due to non-reporting of proper financial statements to its financial members. As a result, members have not been supplying dry cocoa beans to the co-operative for sale, instead selling direct to buyers in Madang. To date, the container with the first shipment of Fair Trade certified cocoa has not reached its full capacity so shipping to overseas fair-trade buyers has been delayed.
- The Board decided that 3% of the gross revenue received would be set aside in a Conservation Fund to support conservation activities by the villagers. This fund has yet to be utilised.
- The improvement in livelihoods of those communities that have signed conservation agreements is difficult to assess, partly because insufficient time has elapsed for them to use their agreements to generate income from the sustainable harvesting of their natural resources. However, four of the key asset classes that contribute to livelihoods (DFID 1999) have been enhanced by the Project's activities. (i) **Human assets** have been improved by building the capacity of communities to develop and implement Land Use Management Plans and Conservation Agreements. (ii) **Natural assets** have improved by the increased protection afforded to forests in the conservation zones. (iii) **Social assets** have improved by empowering communities to operate as strong institutions with enhanced collective decision making ability and ability to negotiate effectively with local government officials and outsiders who want to access resources from their territory. (iv) **Financial assets** have not yet increased, although the development of the Adelberts Co-operative Society to market fair trade cocoa shows promise once the current institutional problems are overcome. (v) **Physical assets** (tools, equipment, etc.) have shown

some improvement through the provision of rain water tanks via EU support facilitated by the project.

A major constraint that currently limits the options for communities in the Adelbert Ranges from accessing markets for the sale of their natural resources is the lack of road access to transport their products to market. Cocoa beans are currently carried to market on people's backs, which necessitates a long and arduous journey and reduces their financial returns. Timber milled by mobile sawmills is a possibility for the future, but marketing such a heavy product would pose a major challenge without improved road access.

A second constraint relates to management, particularly financial management, and overall accountability and governance. These need to be strengthened. There is an opportunity for the cooperative to partner with the exporter based in Madang to take the land use planning and management model to other farmers in the Province. However, a prerequisite is to further strengthen the Board and the Management structures so that they are accountable to their financial members. Once this is addressed this model could lead to a viable and sustainable enterprise.

A scrutiny of the information in the previous paragraphs, leads to the situation where it can be stated with some confidence that **the Project has achieved most aspects of its Specific Objective.**

#### *Capacity development*

Substantial effort was put into developing the capacity of key stakeholders to work together to achieve the results described above. These included TNC staff, local communities in Almami LLG, CBOs and government staff. The manual "*Community conservation tools and processes: A training manual for clan based conservation practitioners*" (TNC 2010) summarises many of the tools, techniques and processes which were applied.

#### *Strategic partnerships*

The development of strategic partnerships was a key component of the Project's implementation strategy. The Project entered into numerous partnerships with many government and non government agencies that encompassed political, government, community, industry, education and scientific interests to ensure widespread support and buy-in of the project's approaches to land use planning and sustainable management. Two of these partnerships (with the Madang Provincial Administration and the Almami LLG) were formalised through the negotiation of a MoU.

At the time of the evaluation (almost two years after the cessation of ITTO Project funding) many initiatives commenced by the Project are still continuing through the activities of TNC and other strategic partners. This has greatly enhanced the sustainability of the Project's outputs and impact.

#### *Sustainability*

The approaches to land use management planning by local landowners and the use of Conservation Agreements trialled by the Project are now well embedded in the development agenda of the Almami LLG as well as the conservation-development approach being trialled in West New Britain and Manus. The approach clearly serves the interests of local government and the local landowners, and this bodes well for sustainability of the outputs achieved and their long term impact. However, in a wider context, long term sustainability will depend on the government, with support from others, providing the financial and human resources needed to:

1. Continue the evolution of the concept of using participatory Land Use Management Planning and Conservation Agreements (or a more generic agreement) by encouraging on-going dialogue between all implementing partners and other stakeholders;
2. Support field implementation by increasing the number and capacity of trained field officers, and
3. Continue to evolve the regulatory framework at all levels, using feedback from the field to make it more enabling for communities to take control of the sustainable management of their natural resources.

#### *Impact (Development Objective)*

The impact of projects relates to the extent to which they progress towards achieving their development objective. The Development Objective, as stated in the Project Document is:

**Local forest owners in the Adelbert Range conserve and sustainably manage their forests to meet livelihood needs of current and future generations.**

However, this formulation is very similar to that of the Specific Objective and focuses specifically on conditions in the Adelbert Ranges. It makes no mention of extension of the approaches trialled by the Project outside the Almami LLG, although this aspect is explicitly mentioned in the Project Document. In addition, the second of the three success indicators for the Specific Objective and the second of the success indicators for the Development Objective do specify expansion of the modality to other priority areas. Because of this problem with the internal logic of the logframe and the associated difficulty in evaluating the Project's progress in contributing to the achievement of its Development Objective, it was decided, in consultation with the Project staff, to re-formulate the Development Objective as:

**Landowners in PNG managing their natural resources sustainably for long term economic, cultural and biodiversity values.**

Problems also occurred with using the success indicators in the Project logframe to judge performance, so new indicators were formulated as shown in the following box.

**Box 2. Original and re-formulated success indicators for Development Objective**

**Success indicators (from logframe in Project Document):**

- Increasing area of forests managed for conservation/ limited use – these forests show improved health, no decline.
- Trends in large-scale development of land uses across the Adelbert Range and PNG.
- Equitable distribution of benefits from sustainable management of forests.

**Success indicator (re-formulated during evaluation):**

- Regulatory framework in place at LLG and provincial levels, in at least three areas outside the Almami LLG, to enable local landowners to manage their natural resources sustainably with the use of participatory Land Use Management Agreements and legally recognised Conservation Agreements.

**Achievement:**

- A draft Madang Provincial Government Forest Protection Law, which provides an enabling framework for the more operationally focused Almami LLG Environment and Conservation Law, was formulated in 2007, and is still under consideration.
- The Almami LLG Environment and Conservation Law was replicated (with local modifications) in West New Britain in a Marine project, and also in the Manus marine conservation area.
- A MOU has been signed by TNC with two LLGs in Manus province, through which the experiences, tools and processes developed by the Adelbert's Project are being applied to landscape planning to incorporate the "reefs to ridges" concept.
- The participatory land use planning approach developed by the Project has been adopted by the Department of Environment and Conservation to advance the program of work on protected areas.
- Tools and processes developed by the Project will also be used with partners in areas identified as biodiversity hot spots through the National Biodiversity GAP analysis.

Box 3 gives an example of how an appropriate regulatory framework accompanied by local capacity can lead to empowerment of local landowners to take effective control of their territory.

**Box 3. Example of empowerment of landowners**

In 2005 a mining exploration company approached landowners in the Erewanam community in the Adelbert Ranges for permission to explore for minerals in their forested areas. The landowners had

been involved with TNC and were aware of the passing of the 2003 Almami LLG Environment and Conservation Law. They felt sufficiently empowered to chase the exploring team out of their forests and by referring to the LLG law in the village court were successful in striking out the complaint by the exploration company. Strictly speaking, the LLG law only applies to communities with signed Conservation Agreement, but the villagers argued successfully that, because they were living in the Almami LLG area, the law applied.

Based on information supplied by Francis Hurahura

It is evident that participatory Land Use Management Planning and Conservation Agreements are becoming accepted as major building blocks for a new modality for forest (and potentially marine) management in parts of PNG outside the Adelbert Ranges. Overall, **the Project has made a significant contribution to achieving its long term Development Objective.** In addition, there are positive signs that the hope expressed in the Project Document “...to create a conservation and development model that can be applied widely throughout the country (p. 2) can be achieved. For a model to be adopted more widely it needs to be clearly articulated so that its essential elements can be readily understood by a wide range of interest groups. By their very nature, Conservation Agreements have a strong focus on conservation outcomes. For the approach to have a wider application it would be desirable for the concept to be re-framed slightly so that it can be adapted to all natural resources and with a focus on multiple objectives rather than primarily conservation.

In summary, the Project has been highly successful in achieving its planned Outputs and its Specific Objective and in contributing to its Development Objective (its impact). Among the reasons for this high level of achievement are:

- The Project addressed a real need in PNG.
- There was good support at all levels of government and among the targeted rural populations.
- The Project design was appropriate to the political, economic and social situation in the country.
- The implementation of the Project was efficient and effective.

#### 4.1.2 Project formulation and implementation

##### *Project formulation and design*

The Project was designed over several years and took good account of the interests of a wide range of stakeholders, particularly the landowning clans in the Adelbert Ranges. The activities shown in the original logframe proved to be relevant; they provided the basis for annual workplans and budgets and needed relatively little modification during Project implementation.

The logframe in the Project Document has generally stood the test of time, particularly the formulation of the Outputs and Activities. The major problem with the logic of the logframe relates to the formulation of the Development Objective, which is almost identical to that of the Specific Objective. This made it very difficult to distinguish between the two when evaluating the Project's achievements. For this reason, in consultation with the Project team, the Development Objective and the success indicators were re-formulated during the evaluation.

##### *Implementation arrangements*

Managerial and work efficiency was good as reported by the Project team (good team work, good management, good directions provided to facilitators) as well as judging from the level of achievement in such a relatively short time frame and the satisfaction of government, national and international partners. The ability of the Project to adapt to new situations and make the most of emerging opportunities is also an expression of the quality of management.

Implementation of field activities and follow-up was done through trained facilitators who regularly visited the villages in the Adelbert Ranges. The Project Manager and other members of the project team also visited field sites on a regular basis. These arrangements all contributed to efficient functioning.

##### *Project duration*

The Project duration was originally planned for 36 months, but was extended with two no-cost extensions to 46 months. This proved to be very useful as it allowed many of the social processes to be bedded down more firmly and for the Project to begin the formal connections between the communities and the external market (by establishing three Co-operative Societies) for the marketing of their products.

#### *Workplans*

Annual Workplans were the major vehicles for planning, monitoring progress and reporting. They were constructed in conformity with the logframe in the Project Document, and proved effective in planning activities and tracking performance.

#### *Reporting*

Seven Progress Reports were prepared during the life of the Project and submitted to ITTO and the PNGFA. These used the logframe as the structure against which progress was reported. They also included a summary of the budget situation, the current annual workplan and comments on problems encountered.

#### *Project steering and technical advice*

A Project Steering Committee (PSC) was established with a mandate to have a general overview, supervisory, monitoring and support role for the Project. Four PSC meetings were held and minutes prepared that recorded the result of deliberations. A technical advisory committee was formed in 2006 to provide technical advice and guidance to the Project, and it met twice annually during the life of the Project. Both these institutional arrangements worked well and were perceived by Project staff and others to have been very helpful.

#### *Budget issues*

The following table shows the original budget and the expenditure for each of the source of funds by the end of the Project.

**Table 3. Original budget and expenditure for each of the major funding sources**

Source of funds	Original budget	Expenditure (confirmed by final audit)
ITTO	452,196	452,196
TNC	505,138	505,138
GoPNG	75,000	75,000
<b>TOTAL</b>	<b>1,032,334</b>	<b>1,032,334</b>

The Project's annual accounts were subjected to formal audits, all of which were satisfactory.

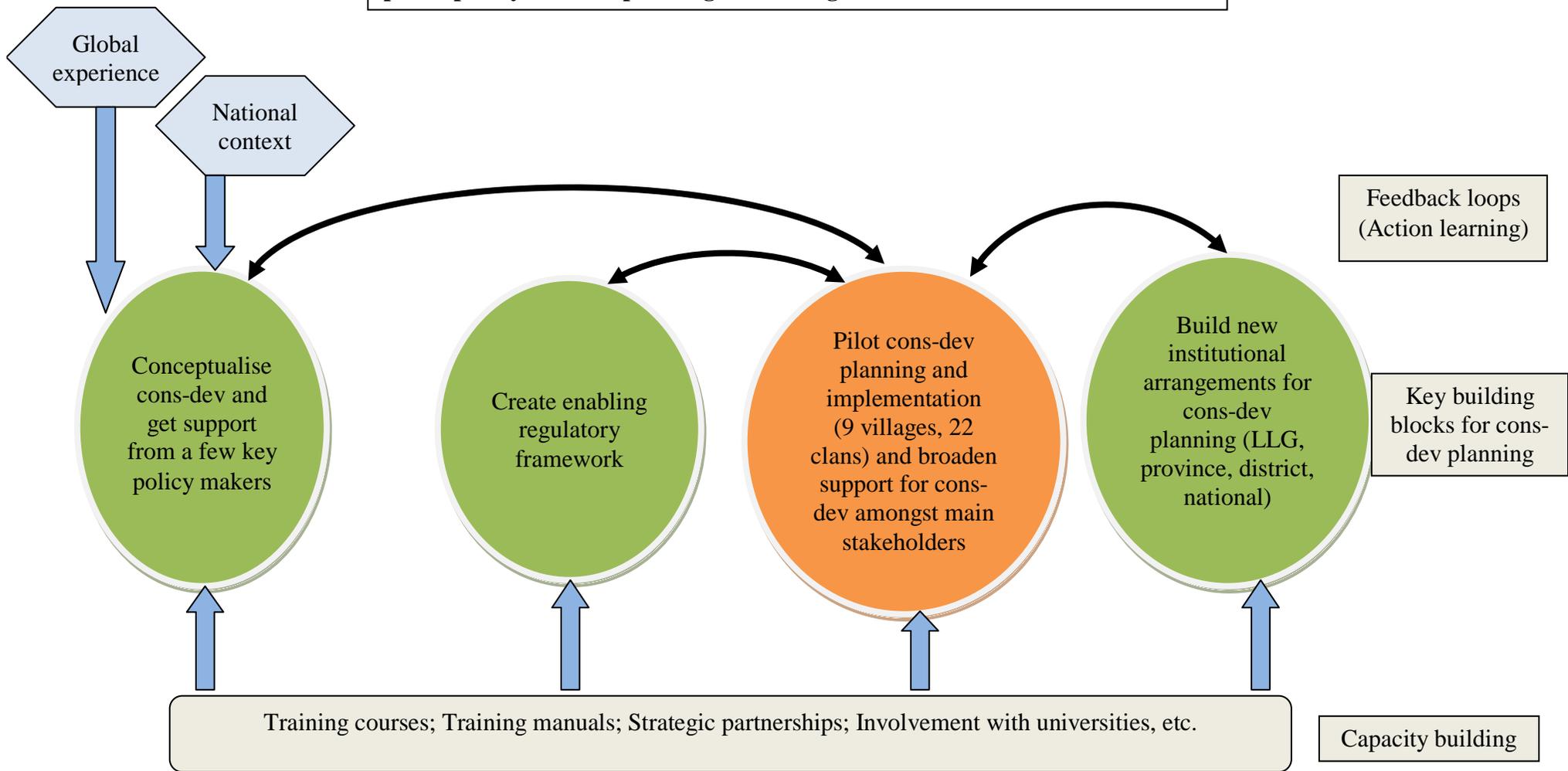
## **4.2 Lessons learned**

The Project is widely recognised in PNG and beyond as having achieved considerable success and the previous sections in this report document some of the main achievements. A number of lessons have emerged from the Project's implementation, and these include:

- Community empowerment is a social process that needs careful nurturing and support.
- Considerable time is needed build capacity of key stakeholders to use participatory approaches to land use planning.
- A three year project cannot be expected to empower local communities to the stage where they can produce substantial livelihood benefits.
- Strategic partnerships have been critical in connecting both the Project team and communities with political, government, industry, education and CBO groups to leverage additional capacity and resources to increase the reach and impact of the Project's activities, particularly after Project funding ceased.

While the specific lessons listed above go some way to explaining the successful results of the Project's activities it is useful to reflect on the approach that was taken by the Project in carrying out its mandate. Figure 1 captures some of the key ingredients of the approach.

**Figure 1. Conceptual outline of the Project’s approach emphasising the use of action learning as a fundamental aspect of refining the key building blocks of a participatory land use planning and management model in PNG**



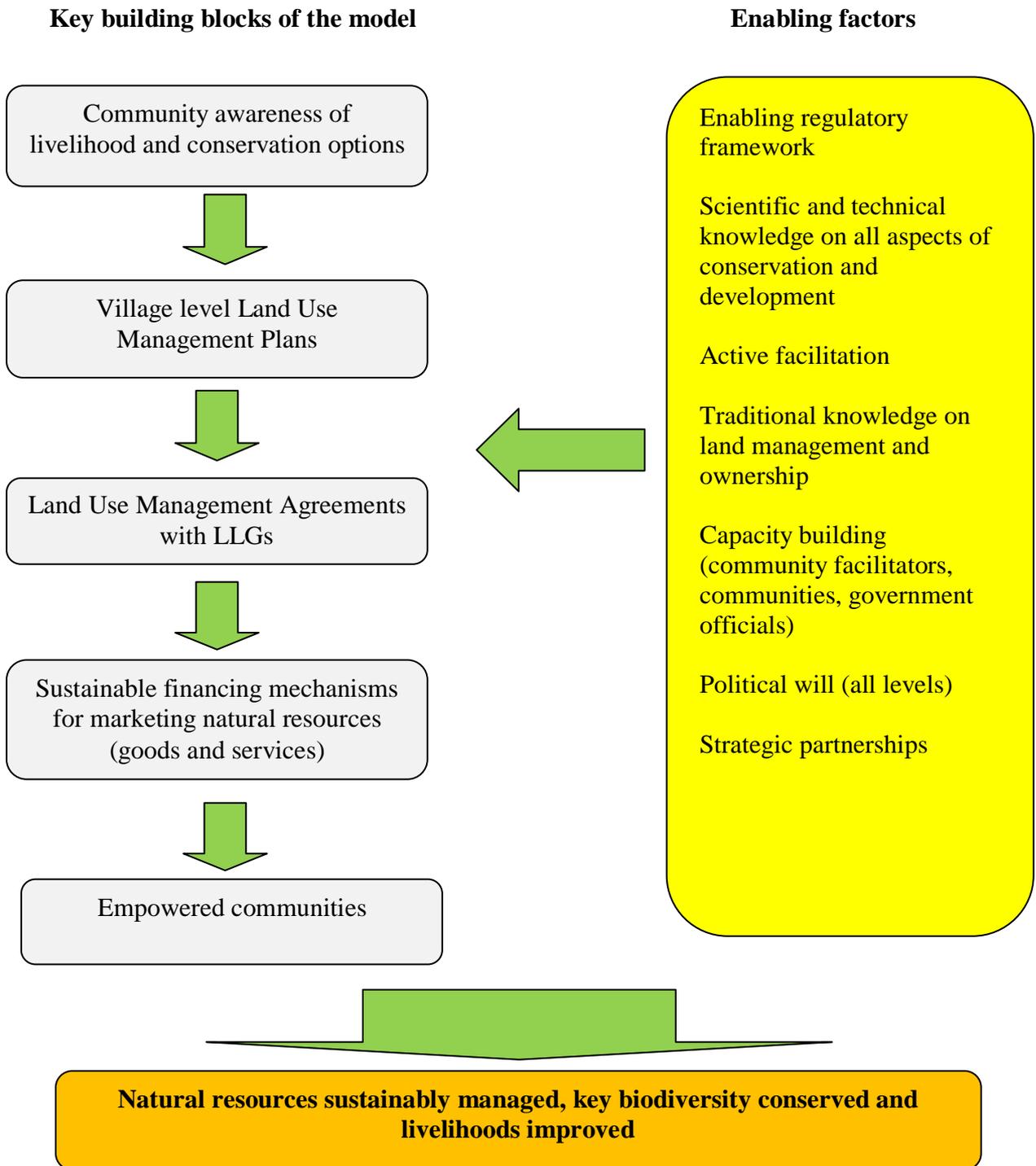
## **5. Conclusions and recommendations**

### **5.1 Conclusions**

The industrial paradigm of forest management that has characterised forestry in PNG for the past 30 years is rapidly coming to an end, and a new modality is urgently required that addresses the deficiencies of past approaches. The approach developed and refined by the Project during the past few years could provide such a modality. In addition to being an alternative for industrial logging, it is a relevant modality in its own right. This vision for the future is one where local communities are empowered to develop their own land use plans and manage their own natural resources, including forests, for their own benefit with support and facilitation by government and other organisations.

The approach trialled by the Project placed a high prominence on conservation objectives and was referred to as a “conservation-development” model. In practice, it considers the sustainable management of all natural resources, but with a conservation underpinning. For the approach to have wide acceptance and application it would be useful to give it a more generic name such as a “Community Based Natural Resource Management (CBNRM)” model. Specific details of the approach can be readily re-formulated to encompass diverse objectives likely to be encountered in natural resource management in PNG, such as sustainable forest management, sustainable fisheries management, etc. The conservation underpinning of the approach can be readily integrated into the detail of its application. The key building blocks for such a generic model were articulated during a facilitated brainstorming exercise with the Project team during this evaluation and are shown in Figure 2.

**Figure 2. A generic model of Community Based Natural Resource Management (CBNRM) for use by communities in PNG (developed during a project team brainstorming session on 16-5-12)**



Acceptance of this model as the basis for future natural resource management in the country (particularly forest management) could be enhanced by an explicit campaign to promote the idea to politicians and government officials at all levels, as well as to civil society. This could be helped by

creating a “narrative” or story to explain why such an approach is necessary and how the new approach would work. Some of the elements which could be included in such a narrative are shown in the following box.

**Box 4. Key messages to include in a “narrative” to convey the essential elements of a new model for sustainable forest management in PNG.**

- The past approach to forest management has centred on industrial logging through FMAs.
- There is wide spread dissatisfaction with many aspects of the past approach.
- Industrial logging has come to an end in several provinces and is declining rapidly in others.
- A new paradigm is needed for forest management in the future.
- The participatory approach to land use planning and the legitimisation of the plans through Land Use Management Agreements with LLGs, as trialled by the Project in the Adelbert Ranges, provides a workable model for landowners to manage their natural resources, including forests, sustainably in partnership with the government and others.
- The key building blocks of a Community Based Natural Resource (CBNRM) model can illustrated in a conceptual figure.

If the new model is going to be widely adopted it will need to be embedded in the policies of the PNGFA and other natural resource management agencies. For example, it could be reflected in PNG’s national 2050 Vision and supported by short and long term operational policies and strategies.

The experiences of the Almami communities since 1996 and the outcomes from the focused support of the ITTO Project between 2006 and 2010 could represent the first chapter in a book to be written on a new paradigm for managing natural resources in PNG by empowering local communities. However, there are several major challenges to be faced in mainstreaming such an approach. The two outstanding ones are:

- Identifying and building the capacity of people to carry out the community facilitation that is essential to empower communities to carry out participatory land use planning and negotiate Land Use Management Agreements with LLGs.
- Ensuring that communities can obtain sufficient financial benefit from the sustainable use of their natural resources (goods and services) to make their involvement in the process worthwhile.

While future prospects for adopting and mainstreaming a new approach to the management of natural resources are encouraging, there is a danger of stagnation and even reversal unless pressure is maintained by the government and others to continue the evolution of the whole process. In this regard, political will and the role of champions who have emerged during the last few years will be critical in maintaining the momentum for change.

The Project has made a significant contribution to the achievement of ITTO’s strategic objectives, outlined in the ITTA 1994 Objectives and the Yokohama Action Plan, as shown in the following table.

**Table 4. Contribution of the Project to ITTO’s strategic objectives as outlined in the ITTA 1994 Objectives and the Yokohama Action Plan**

<b>ITTO strategic objectives</b>	<b>Project contributions</b>
Contributing to sustainable development	The Project trialled and refined an approach to apply land use management planning and conservation agreements at the LLG level to ensure the territory of the LLG is sustainably managed
Encouraging members to develop national forest policies aimed at sustainable utilisation and conservation of timber producing forests	The Project has been actively engaging with a wide range of stakeholders on adopting a new approach to sustainable management and conservation of the forest resource in the country.
Encouraging the involvement of non-government stakeholders in activities	The strategic partnerships that are a key component of the Project’s implementation strategy have successfully engaged political, government, community, industry, education and

	scientific stakeholders to ensure widespread support and buy-in of the project's approaches to community based land use planning and sustainable development.
Promoting the conservation, rehabilitation and sustainable management of threatened forest ecosystems	The Land Use Management Plans implemented in the Adelbert Ranges identify high conservation value forests for special management.
Securing the forest resource base through the implementation of forest policy, legislation and associated strategies	An Environment and Conservation Law has been passed by the Almami LLG to secure the forest resource base; Draft legislation is before the Madang Provincial government to provide an enabling regulatory framework at the provincial level; The Almami LLG Environment and Conservation Law was replicated (with local modifications) in West New Britain in a Marine project, and also in the Manus marine conservation area.
Establishing and managing forests for multiple uses in close cooperation with local forest owners and communities living in forest areas	The multiple use Land Use Management Plans and Conservation Agreements that are central to the Project's approach are developed and implemented in a participatory manner with local landowners to empower them to take control of their natural resources.
Establishing areas dedicated to biodiversity conservation	The Land Use Management Plans implemented in the Adelbert Ranges identify high conservation forests for special management.

## 5.2 Recommendations

### Recommendations for Executing Agency (PNGFA)

1. Use the report to initiate a dialogue with key development partners and relevant government line agencies to promote the adoption of the Community Based Natural Resource Management (CBNRM) model as the corner stone of a new paradigm for sustainable forest management in PNG. (Consider conducting a workshop to debate the implications of the model for future forest management policy and practice, particularly in view of the rapid decline in industrial scale logging).
2. Support the wider testing of the participatory Community Based Natural Resource Management (CBNRM) model developed by the Project.
3. Consider adopting the participatory Community Based Natural Resource Management (CBNRM) model as an approach to achieve sustainable land use (including forest) management across the country by linking it to the national Vision 2050 and have it reflected in relevant policies.
4. Use the lessons learned from the Project's experience in the Adelbert Ranges to inform other ITTO and related projects in PNG.

### Recommendations for TNC

1. Continue to test and refine the Community Based Natural Resource Management (CBNRM) model for natural resource management so that it can be adopted more widely to encompass multiple land use management objectives.
2. Create a "narrative" about the changing paradigm of forest management in PNG and the relevance of the Community Based Natural Resource Management (CBNRM) model for natural resource management as the corner stone of a new paradigm, so that it can be described succinctly to policy makers and others.

3. Revise the manual on “Community based conservation tools and processes” to make it more concise and suitable for wider application to encompass multiple land use management objectives.

### **Recommendations for ITTO**

1. Consider supporting a follow-on project in PNG focused on developing market linkages for forest goods and services from forests sustainably managed by local landowners.
2. Improve assessment of logical frameworks during project design so that outputs, specific objectives and development objectives are clearly defined and conform to good practice criteria.

## **6. References**

DFID (1999) Sustainable Livelihood Guidance Sheets. Department for International Development. London.

ITTO (2009) ITTO Manual for project monitoring, review, reporting and evaluation General Information Series #14, ITTO, Yokohama, Japan.

ITTO (2005) Sustainable management of tropical forest resources through stakeholder agreements in traditionally owned areas of Papua New Guinea. Project Document PD 324/04 Rev.3 (F).

ITTO (2010) Sustainable management of tropical forest resources through stakeholder agreements in traditionally owned areas of Papua New Guinea. Project Completion Report.

TNC (2010) Community conservation tools and processes: A training manual for clan based conservation practitioners.

## **7. Annexes**

***Annex 1. Terms of reference for evaluation***

***Annex 2. Schedule of activities and people met during PNG evaluation***

***Annex 3. Powerpoint presentation used for de-brief with PNGFA***

***Annex 4. Executing Agency's Views***