

# Darwin Initiative Annual Report

## Darwin Project Information

Project Ref Number	13-012
Project Title	Integrated River Basin Management in the Sepik River
Country(ies)	Papua New Guinea
UK Contract Holder Institution	WWF-UK
UK Partner Institution(s)	-
Host country Partner Institution(s)	WWF Papua New Guinea + PNG Department of Environment and Conservation (DEC), Ambunti Local Level Government, HELP Resources Inc, Bauabaua Theatre Group, East Sepik Provincial Government, Sepik Wetlands Management Initiative (SWMI) and project area communities
Darwin Grant Value	£120,000
Start/End dates of Project	1 <sup>st</sup> April 2004 to 31 March 2008
Reporting period (1 Apr 200x to 31 Mar 200y) and annual report number (1,2,3..)	1 <sup>st</sup> April 2006 to 31 March 2007 (annual report number 3)
Project Leader Name	Dr David Tickner, WWF-UK
Project website	<a href="http://www.panda.org/about_wwf/where_we_work/project/projects/index.cfm?uProjectID=PG0036">http://www.panda.org/about_wwf/where_we_work/project/projects/index.cfm?uProjectID=PG0036</a>
Author(s), date	Dr David Tickner and David Peter, WWF PNG; June 2007

## 1. Project Background

The Sepik River Basin covers about 72, 700 square kilometres briefly entering the Indonesian province of Papua, but mostly in the North/ West of Papua New Guinea (PNG) and includes three highlands provinces and two coastal provinces. The Sepik River Basin has a population of about 430,000 people and is located in one of the least developed regions in a very poor country. Communities in the area rely almost entirely on the environment for subsistence resources.

The Sepik is one of the most ecologically valuable rivers in the Asia Pacific region and one the biggest rivers systems in the world with no industrial development. The river basin includes one of the seven highest priority wetlands (Chambri Lakes) identified under the PNG Conservation Needs Assessment 1993; the most important and commercially significant crocodile population in New Guinea, the largest lowland rainforest protected area in PNG; and important habitats for nationally listed threatened species such as the Victoria crowned pigeon, the Harpy eagle and the Cassowary.

Specific environmental threats include, increased sedimentation; invasive species including paku (*Piaractus briachypumus*), salvinia (*Salvinia molesta*) and water hyacinth (*Eichhornia crassipes*); grassland/wetland fires; clearing of riparian vegetation for gardening and building houses, over-harvesting of crocodiles and eaglewood. In addition, future threats may arise from mining, oil and gas explorations, logging, hydropower development, social infrastructure developments and oil palm plantations.

The project objective (in the original log frame) is to assist government and local stakeholders to design an Integrated River Basin Management (IRBM) framework for the Sepik River that will promote the conservation of biodiversity and the sustainable use of natural resources.

## 2. Project Partnerships

The partnership between WWF-UK (Dave Tickner) and WWF PNG (David Peter) continues to work well despite the distance and time difference involved. In addition, as previously reported, the project has benefited from additional expertise in the shape of Peter Ramshaw, ex-WWF Global Freshwater Programme (supported by WWF-UK) and now with WWF Australia. Telephone conferences are held at least quarterly between Dave, David and Peter and e-mail interaction is frequent. Peter has been able to visit PNG several times in the past year to offer technical and project management support. CVs of Dave, David and Peter are in Annex 3.

Within WWF-UK, wider support is provided to conservation efforts in New Guinea through our Forests of New Guinea programme (FoNG). In the last year this has been boosted by the return from maternity leave of Susanne Schmitt. Susanne has taken up a Programme Management role in WWF-UK which, while not directly contributing to the Darwin Sepik project, has helped to further strengthen links between the two WWF offices. This will be especially useful as the work in the Sepik extends beyond the life of the Darwin project, thanks to a successful application to the European Commission for almost €1m in funding. A summary of this project is at Annex 4.

Within PNG, there is strong co-operation with the national CBD focal point, the Department for Environment and Conservation (DEC), especially around IRBM planning in the Sepik River Basin, the implementation of the Total Catchment Environmental Management (TCEM) policy and the ratification of the UN Convention on transboundary watercourse management. In addition, the establishment of a multi-partner Sepik River Network, facilitated by WWF PNG, has brought together stakeholder organisations into a coherent and effective structure with a common workplan. One example of this is the successful lobbying against the PNG government's plans to issue a license to the proposed Freda mine in the Sepik headwaters until thorough environmental plans are developed. Recently, Oxfam Australia has provided further support to some of this work through funding two of the partner organisations.

## 3. Project progress

### 3.1 Progress in carrying out project activities

#### *i) Confirm partnership agreements*

The Sepik River Network Action Plan was reviewed by stakeholders in June 2006. It was agreed during this review that a formal multilateral partnership agreement between stakeholders was not necessary. Partners will continue to rely on informal co-operation. The next annual review is due to take place in August 2007.

The existing agreement WWF has with HELP Resources Inc was reviewed in May 2006. Actions were agreed by both organisations to improve the relationship and WWF will make a small amount of project funding available as grants to HELP Resources Inc during the remainder of the project period. These grants will be for community liaison and outreach.

#### *ii) Complete Background Review of the site / Monitoring database and baseline established / Monitor changes to baseline environmental conditions and achievement of planned activities*

Activities during previous reporting periods included substantial stakeholder dialogue to establish needs and expectations, a survey of institutional capacity and some monitoring of baseline environmental conditions, including crocodile and eaglewood populations. However, one of the lessons from this project (highlighted by the reviewer of the last project report) is that greater attention might have been paid to developing a more structured approach to baseline monitoring at the outset and to documenting the findings of baseline surveys more rigorously. WWF PNG is now addressing this across all of its activities using funding from sources other than the Darwin Initiative. In particular, WWF PNG is collating comprehensive environmental information for the Sepik River Basin (a "State of the Sepik" report) to underpin its future work and that of partners and stakeholders. Work is also ongoing to assess the socio-economic impacts of sustainable eaglewood harvesting in the Sepik Basin.

During this reporting period, the Sepik Wetlands Management Initiative has conducted night counts of crocodiles in areas which were the subject of awareness-raising activities earlier in the project. SWMI has reported that the number of bushfires in the Sepik River Basin has dropped dramatically after awareness-raising activities about crocodile egg and habitat protection. Consequently, the crocodile population has increased in these areas. Hard copies of the survey results can be sent from WWF PNG on request.

*iv) Formulate education strategy and produce awareness materials / Communications materials on values of the Sepik River / Continue awareness campaign*

An inaugural Sepik River Crocodile Festival was held in March 2007 in Ambunti district. The purpose was to promote the crocodile as an iconic species for conserving the Sepik River because of its scientific and cultural significance. The event was attended by about 3500 people and there were a variety of attractions: traditional dances, singing and drama; competitions for schoolchildren; and sporting competitions such as volleyball, canoe racing and tug-of-war. More seriously, awards were presented to finalists and eventual winners of competitions for best conserved crocodile habitat and most improved crocodile farm after due consideration from a judging panel that included representatives from Mainland Holdings Ltd (a crocodile business that sponsored the prizes), DEC, HELP resources Inc and WWF. During the event, the local MP, the Honourable Tony Aimo, donated approximately USD 15,000 and a 19 foot banana boat for conservation efforts. He also announced the establishment of a microfinance scheme to help local communities develop sustainable businesses. As well as funding from the Darwin project, the Festival was sponsored by a range of businesses, local NGOs, local communities and the government. The event attracted huge media interest in PNG. The local government has now resolved to fund the festival on an annual basis.

The media in PNG and overseas has shown considerable interest in the Sepik River Basin and in the Darwin project. Three television stories have been shown, as well as coverage in national newspapers and on the radio (eg. see [www.radioaustralia.net.au/pacbeat/mp3onth.htmemat](http://www.radioaustralia.net.au/pacbeat/mp3onth.htmemat)).

Three thousand copies of the Sepik Nature and Tourism brochure were printed and published firstly during an event in Port Moresby in November 2006 and then during Sepik River Crocodile Festival. The leaflet has been distributed to local communities and guesthouses in the project area. A copy of the leaflet is at Annex 5.

Through funding from WWF's Forests of New Guinea programme, the Bauabau Theatre Group was engaged to conduct a month of awareness-raising activities on the management of Eaglewood in the Sepik region. Community theatre of this nature is an important means of raising awareness in rural areas of PNG.

*v) Training in IRBM*

Three Environmental Science students from the University of Papua New Guinea were engaged by the Sepik IRBM project for six months to give them work experience on IRBM issues. The students helped with the collection of data for the "State of the Sepik" report, developing a submission to the PNG government making the case for ratification of the UN Convention on transboundary watercourses, and making preparations for the Sepik Crocodile Festival. The students were also asked to make presentations to stakeholders on their work during meetings.

*vi) Design for implementing integrated river basin management policy in the Sepik basin / Define mechanism for operationalising Total Catchment Environment Management Policy / Assist DEC in the preparation of draft catchment management plan / Form catchment management institutions*

A Sepik Stakeholder Working Group was formed during the stakeholders' planning meeting in June 2006. The Working Group consists of representatives of organisations which are responsible for actions in the Sepik River Network Action Plan (see i) above). The Working

Group will be supported by the Ambunti Field Coordinator who will act as a secretariat. In addition, plans were made for a sub-catchment management committee to be established for the Niksek sub-catchment area. This committee will be responsible for management of the natural resources and protected areas in the sub-catchment.

A report was produced by a volunteer on obstacles to full implementation of the TCEM policy and a separate consultant was hired to investigate the compatibility of the TCEM policy with the UN Convention on transboundary watercourses and to consider legal implications of ratifying the Convention. On the basis of these internal reports, discussions were continued with DEC on the review of the department's TCEM policy. It is likely that DEC will look to decentralise operations to regional or catchment levels, where capacity is very limited. (Under the TCEM policy the department is required to hire catchment officers for several major river basins in PNG but a lack of financial resources mean that capacity will continue to be a constraint.) A further issue is the recent restructuring of the DEC which means that a new postholder is leading on the TCEM policy.

The Guidance Document on IRBM planning has been revised in the light of the proposal to focus efforts for the remaining project period on working with the DEC to put together a plan for the Niksek sub-catchment (see 3.2) rather than the whole Sepik Basin. The "State of the Sepik" report is intended to underpin this sub-catchment work initially, as well as being of wider use in the Sepik Basin. At the time of writing this report, David Peter had produced a draft template for the sub-catchment management plan and Dave Tickner was reviewing it in the light of similar plans in which WWF has had involvement, including one for Lake Bogoria in Kenya.

*vii) Support LLG legislation and District development plans that reflect integrated river basin management objectives*

Following meetings between WWF PNG and Ambunti LLG in Wewak in June 2006, a working committee was formed to develop a schedule for the development of the Ambunti District five-year development plan. A budget and work plan was submitted to the MP for Ambunti-Drekikir with a view to funding being made available. During a meeting with the MP, WWF were told that resources would be made available and a consultant hired to review the plan. However, national elections in PNG have delayed this process and made subsequent contact with the MP difficult. WWF PNG will follow-up on this in the late summer of 2007 once the elections are over.

*viii) Assist communities to declare new wetlands protected areas and complete management plans / Begin management planning in protected areas / Support community management and enterprise initiatives*

With respect to protected areas, the Sepik IRBM project is now proposing to focus on the Niksek/Freida sub-catchments. The sub-catchment plan will be supported by community protected area management plans. These community protected area management plans should be drafted in the next reporting period and a guideline for the drafting process is in preparation.

WWF is working with DEC to finalise the gazettal of three protected areas in the Sepik, following a previous government declaration on this. The process is time-consuming and involves cross-referencing the areas for gazettal against existing logging and mineral concessions. WWF PNG will continue to engage with the process.

### **3.2 Progress towards Project Outputs**

The original project log frame set out three outputs:

- A comprehensive integrated river basin management (IRBM) plan is agreed for the Sepik River
- Strong stakeholder awareness of, and commitment to, effective river basin management is built
- Mechanisms exist to ensure stronger protection for areas of ecological importance

Overall, the project is on track to achieve these outputs in large part. The project has been particularly strong on building awareness amongst stakeholders and the Crocodile Festival, together with consequent media coverage of the Sepik, has resulted in a step change in commitment from several key stakeholders, including the local MP, a range of businesses, local NGOs, local communities and the government. The anticipated gazettal of three new protected areas and the development of management plans with local communities will also ensure ecological protection. WWF's successful application to the European Commission for funding to extend and increase its activities in the Sepik region, including action on IRBM planning, will further enhance this work and will enable WWF to consolidate the outcomes of the Darwin project. Measurement of output indicators for the second and third outputs should pose relatively few problems, and we are confident that the assumptions still hold true.

Due to WWF PNG's efforts in the last two years, the broad IRBM concept has gained support from a range of stakeholders. However, as the reviewer of the most recent project half-year report (HYR3) noted, producing a fully developed IRBM plan for the entire Sepik within the three year time scale of the project would be over-ambitious. On reflection, we are therefore proposing to the Darwin Secretariat that we focus on putting in place an IRBM framework and process for one sub-catchment, the Niksek/Freida. The proposed changes are in shown in Annex 2.

### 3.3 Standard Output Measures

**Table 1 Project Standard Output Measures**

Code No.	Description	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Expected	TOTAL
3	1 Person attained Certificate on IRBM from UNESCO-IHE		1			1
4A	A total of 3 students from University of PNG were for a total of 11 months			3		3
7	2 power point presentations on catchment management, 1 video on IRBM and about 10 short videos obtained from UNESCO-IHE on catchment management		10	2		13
8	Time spent in PNG by Dr David Tickner (WWF UK) and Peter Ramshaw (WWF International, supported by WWF UK) conducting training on IRBM and programme management		2	2	2	6
9	1 Sepik River Network Action Plan produced by stakeholders + 1 sub-catchment management plan for the Niksek/Freida catchment + 3 management plans for Wildlife Management Areas			1	4	4
14A	5 workshops organised by WWF (2 workshops to develop/review Sepik partners plan + 2 workshops for catchment management training + 1 workshop to wrap-up project and ensure smooth exit to EC Sepik project)		3	1	1	5
14B	Presentation of the Darwin Sepik project at the international River Symposium			2		2

	in Brisbane and at workshop on climate change in London organised by Darwin Secretariat					
15 A	6 news paper stories produced			6	6	12
18A	6 national TV stories being produced. Two stories were run for 15 minutes each while others were for 1-2 minutes (news stories)			6		6
19A	2 national radio interviews for total of 60 minutes another one for total of 10 minutes (news replayed three times)			2		2
23	CHF 4,000 for Sepik Crocodile Festival, and USD 15,000 from UN Water Convention from other sources within WWF. In-kind contribution from partners is about USD 20,000			\$38K		\$38K
New - Project specific measures	One Crocodile Festival successfully held			1		1
	One stakeholder working group established for the Sepik	1				1
	Three new Wildlife Management Areas gazetted (Meha, Uma and Andep)			1	1	1
	One guidance document on IRBM drafted				1	1

**Table 2 Publications**

Type * (eg journals, manual, CDs)	Detail (title, author, year)	Publishers (name, city)	Available from (eg contact address, website)	Cost £
CDs*	TokPiksa, Kaprangi, 2007	EMTV, Port Moresby	WWF PNG	NIL
Brochure *	Sepik River Nature and Community Tourism, WWF/Divine University 2007	WWF and Divine Word University, Madang	WWF PNG	540

### 3.4 Progress towards the project purpose and outcomes

As discussed in 3.3 above, in the light of the reviewer's comments on our previous half year report we propose to amend the project log frame so that, as well as putting in place biodiversity protection measures and building stakeholder support for better natural resource management across the Sepik (as per the original log frame), it focuses on development of an IRBM framework for a sub-catchment of the Sepik, the Niksek/Freida. To this extent, the assumption in the original log frame that DEC and Provincial government can allocate funds to maintain catchment management systems across the entire Sepik catchment was optimistic.

In the long run the intention remains to scale the Niksek/Freida work up to the whole catchment as resources become available. Furthermore, alongside a separate WWF project in the Kikori river basin, the Sepik work could be used as a model that could be adapted or replicated elsewhere in PNG. This amendment notwithstanding, we believe that the original assumptions and indicators in the log frame still hold true.

### **3.5 Progress towards impact on biodiversity, sustainable use or equitable sharing of biodiversity benefits**

Although the impacts of the project on biodiversity will mostly be seen in the coming years, some evidence of positive results has been found already, linked to better management of crocodile populations. Partnership with the Sepik Wetlands Management Initiative (SWMI) and local organisations to help generate sustainable income opportunities, partly through a grants programme, has raised awareness of many people about managing these natural resources. Local communities use the money generated from the sale of eaglewood and crocodile skins to pay school fees and bride prizes and to purchase food and household items. During the prize giving for crocodile habitat management and farming during the Crocodile Festival it was noted that bushfires and clearance of crocodile habitat has been significantly reduced and a survey conducted by SWMI and the DEC has shown an increase in crocodile populations.

## **4. Monitoring, evaluation and lessons**

Indicators of project progress are set out in the project log frame. Monitoring and evaluation is largely a collaborative process involving stakeholders: indicators are monitored mostly through the Sepik River Network Action Plan. The Sepik River Network checks progress against this plan annually and, depending on the results, WWF PNG refines its strategy appropriately. This ensures that the project is responsive to changing priorities. The Sepik River Network Action Plan is due next to be reviewed during the summer of 2007.

An independent end of project evaluation is being considered to consolidate lessons learned as the Darwin project segues into the EC funded project for the Sepik.

Lessons learned from the project in the last reporting period include the following:

- Institutions in PNG struggle with resources and to recruit high quality professionals. In future, recruitment efforts may need to be innovative (eg. collaborative recruiting for joint posts) and salary levels may need to be more competitive in order to attract suitably qualified people. This has implications for project funding – a higher proportion of funds may need to be allocated to staff salaries.
- Limited institutional infrastructure, fragmented governance and the remoteness of the project area have meant that, as noted above, the objective of completing an IRBM plan for the entire Sepik basin has proved to be over-ambitious. WWF proposes amended the log frame to focus on one specific sub-catchment as a model. Future project plans should be thoroughly reality-checked so that they are deliverable within the time frame and budget.
- In PNG, it is often more effective to work with local level government than to encourage change at higher levels of government. In future, more emphasis should be placed on working with the local and provincial administrations during the planning and implementation of projects. The national government should still be consulted where policy issues are involved.
- An understanding of local culture helps when it comes to understanding hidden concerns of stakeholders. The real concerns are often left unsaid – a “yes” does not necessarily mean that a stakeholder fully buys into an idea; rather, it may simply mean that they understand the idea. Obtaining full partnership from stakeholders takes time. Patience is a key asset.

## **5. Actions taken in response to previous reviews (if applicable)**

A helpful and thorough review was received in response to the most recent half-year report from the project (HYR3). Among many other points, the reviewer suggested a review of the project log frame, especially in the light of the apparent over-ambition of the IRBM objective. As noted above, WWF UK and WWF PNG have taken this on board and will propose to the Darwin Secretariat an amendment to the project log frame so that efforts can focus on the Niksek/Freida sub-catchment rather than the entire Sepik.

Many of the reviewers other comments and questions are addressed elsewhere in this report. For ease of reference though, a summary is attached in Annex 6.

## 6. Other comments on progress not covered elsewhere

None

## 7. Sustainability

A fundamental element of the project (encapsulated in the second project output) has been the building of stakeholder awareness and commitment to better natural resource management, protection of biodiversity and development of an IRBM process. During this reporting period this began to bear fruit, especially as a result of the Crocodile Festival and the associated national media coverage. This enhanced stakeholder buy-in will be fundamental to the sustainability of the project outcomes.

There are strong indications that the efforts to better manage natural resources and biodiversity will continue once the Darwin funding runs out:

- Support by the Ambunti Joint District Budgets Planning and Priority Committee to support the Crocodile Festival through its annual budget; and provision by the local MP of cash and in-kind contributions to conservation efforts.
- Considerable support from stakeholders to the Festival and to the Sepik River Network Action Plan.
- Increasing capacity from other NGOs in terms of staffing and funds, including from HELP Resources Inc, Oxfam, the Centre for Environment Research and Development
- There is a good chance that IRBM processes will be embedded into the Ambunti District five year development plan
- A Sepik Tourism Development Committee has been established that will encourage eco-tourism initiatives.

In addition, the EC Sepik Livelihoods project, jointly managed by WWF UK and WWF PNG, will build on the Darwin project by developing resource management plans by providing training to stakeholders on natural resource planning and by helping to increase income generating activities for local communities. Funding from the EC will support a team of six staff within which David Peter will play an integral role.

## 8. Dissemination

The WWF PNG Communications Officer and her counterparts in HELP Resources Inc have worked hard with the local media to raise the profile of the work in the Sepik. Most of the dissemination has been in the form of media coverage, especially of the Crocodile Festival. A summary of this media coverage is in the table below.

Date	Source	Objective of the Press	Others
6/03/2007	The National Newspaper	Celebrating World Wetland day to about catchment management work in PNG including Sepik	Story with Pictures of WWF. It was broadcasted on two local radio stations and telecasted on the National Television News
02/03/2007	FM Sepik Central	Panel interview between local MP, David Peter and CEO of HELP Resources	30 minutes interview
26/02/2007	EMTV-Tokpiksa show	Interview of the David Peter on the catchment	The recording was played for about 10 minutes on

		management work on the Sepik and the Crocodile Festival	the national television
05-08/03/2007	EMTV-News and Sports	The Crocodile festival, sports competitions and conservation efforts in the Sepik were telecasted on the TV for almost a week.	A segment of the recordings were played for each of the days.
27/03/2007	Radio Australia (ABC)	Interview with radio Australia on the catchment management work in the Sepik	The interview lasted about 30 minutes and broadcasted twice on ABC

Community theatre, led by the Bauabaua Theatre Group, has also been important and other materials have been developed by the Darwin project and disseminated through partners such as the SWMI and the Sepik Tourism Development Committee to hotels and guest houses. The MP for Ambunti/Drekkir has promised WWF to make available a section of the website he is currently developing for his constituents. WWF PNG will follow this up during the summer of 2007.

## 9. Project Expenditure

**Table 1 Project expenditure during the reporting period (Defra Financial Year 01 April to 31 March)**

<i>Item</i>	<i>Budget (as per 2007 claim to Darwin)</i>	<i>Expenditure</i>	<i>Balance</i>

## 10. OPTIONAL: Outstanding achievements of your project during the reporting period (300-400 words maximum). This section may be used for publicity purposes

[I agree for ECTF and the Darwin Secretariat to publish the content of this section](#)

Two aspects of the project stand out this year:

- The inaugural Crocodile Festival was a huge success and represented a step change in the profile of biodiversity issues within the Sepik region, and of the Sepik region within PNG.
- There are early signs that the project is already having a positive effect on biodiversity with decreases in crocodile habitat destruction observed and increases in populations of crocodiles and of eaglewood reported.

# Annex 1 Report of progress and achievements against Logical Framework for Financial Year: 2006/07

<i>Project summary</i>	<i>Measurable Indicators</i>	<i>Progress and Achievements April 2006 - March 2007</i>	<i>Actions required/planned for next period</i>
<p><b>Goal:</b> To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but constrained in resources to achieve</p> <ul style="list-style-type: none"> <li>• The conservation of biological diversity,</li> <li>• The sustainable use of its components, and</li> <li>• - The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources</li> </ul>		<ul style="list-style-type: none"> <li>• Greater awareness of the value of sustainable management of crocodiles for their skins; reduced threats to crocodile habitat in the Sepik River Basin; surveys indicate a higher crocodile population</li> </ul>	
<p><b>Purpose:</b> To assist government and local stakeholders to design and integrated river basin management framework for the Sepik River Basin. This framework will protect biological diversity and ecological processes while promoting the sustainable management of natural resources supported by properly implemented catchment management policy.</p>	<ul style="list-style-type: none"> <li>• Existence and use of a management framework in the form of databases, procedures and materials guiding catchment management in DEC and Department of East Sepik</li> <li>• Stronger policies for catchment protection</li> <li>• Increases in the levels of protection to areas of biological and ecological significance</li> </ul>	<ul style="list-style-type: none"> <li>• Sepik River Action Network established and joint workplan agreed.</li> <li>• Total Catchment Environment Management (TCEM) policy already in place in PNG. Guidance on IRBM being prepared.</li> <li>• Indications from Ambunti local level government (LLG) that it will incorporate catchment management into its five year development plan.</li> <li>• Three Wildlife Management Areas designated in Sepik River Basin (although delays experienced in formal gazettal)</li> </ul>	<ul style="list-style-type: none"> <li>• Finalise report on the comparative analysis of TCEM and IRBM concepts, support finalisation of IRBM guidance and Ambunti LLG five-year development plan</li> <li>• Develop sub-catchment IRBM framework, including a communications strategy, and processes for Niksek/Freida catchment</li> <li>• Encourage DEC to finalise gazettal of WMAs and complete WMA community management plans, natural resource management plans (for eaglewood and crocodiles) and ecotourism plans</li> <li>• Allocate grants to SWMI for awareness raising activities</li> </ul>

			<p>on crocodile habitat management, and to HELP Resources Inc for the Ambunti district co-ordinator</p> <ul style="list-style-type: none"> <li>• Support National Executive Council submission for endorsement of the Sepik River Crocodile Festival as one of the major events in PNG</li> </ul>
<b>Output 1:</b> A comprehensive integrated river basin management plan	<ul style="list-style-type: none"> <li>• An agreed catchment management plan for the Sepik basin</li> </ul>	<ul style="list-style-type: none"> <li>• Subject to Darwin Secretariat agreement, the project focus will be changed from the entire Sepik River Basin to Niksek/Freida sub-catchment</li> <li>• Guideline for IRBM plan being drafted</li> <li>• Draft report on comparative analysis of TCEM policy and IRBM concept being prepared</li> </ul>	
Activity 1.1: Complete background reviews of project site		<ul style="list-style-type: none"> <li>• Partly documented within previous reports. Two lengthy field trips undertaken by project manager and others during this reporting period. Training needs of all stakeholders and local communities being documented with regard to community protected area management.</li> </ul>	
Activity 1.2: Monitoring databases established		<ul style="list-style-type: none"> <li>• Some data collected by a consultant and trainees/students across the Sepik River Basin. These data have to be tailored to the sub-catchment level so that there is a good baseline for the Niksek/Freida IRBM plan.</li> </ul>	
Activity 1.3: Assist DEC in the preparation of a draft catchment management plan		<ul style="list-style-type: none"> <li>• A focus for the remainder of the project. The Niksek/Freida plan will be prepared through a participatory process involving stakeholders.</li> </ul>	
Activity 1.4: Finalise catchment management plan		<ul style="list-style-type: none"> <li>• A focus for the remainder of the project.</li> </ul>	
<b>Output 2:</b> Strong stakeholder awareness of and commitment to effective river basin management	<ul style="list-style-type: none"> <li>• Number of partnership agreements</li> <li>• Number of successful community initiatives</li> </ul>	<ul style="list-style-type: none"> <li>• Agreements in place with Ambunti LLG for free use of offices and staff house</li> <li>• Sepik River Action Network in place with joint workplan and commitment by partners; inaugural Sepik River Crocodile Festival</li> </ul>	

	<ul style="list-style-type: none"> <li>• Number of management actions implemented from Sepik catchment and community PA management plans</li> <li>• Number of posters, press releases, media articles and radio stories</li> <li>• Number of LLG annual development plans showing commitment to effective IRBM</li> </ul>	<p>attended by 10,000 people</p> <ul style="list-style-type: none"> <li>• IRBM and community PA management plans not in place yet, but habitat management actions and better crocodile farming already paying dividends with croc populations increasing</li> <li>• Three radio stories, six press articles and four stories on national television about the Sepik</li> <li>• IRBM activities included within the ToR for the Ambunti LLG five-year development plan; and Ambunti Joint District Planning and Budget Priorities Committee resolved to stage the Sepik River Crocodile Festival annually</li> </ul>
Activity 2.1: Support LLG legislation and district development plans that reflect IRBM objectives		<ul style="list-style-type: none"> <li>• WWF developed the ToR for a consultant to review the five-year plan and budget.</li> </ul>
Activity 2.2: Continue awareness campaigns		<ul style="list-style-type: none"> <li>• Stakeholders meetings, press releases and tv/radio interviews have been undertaken. The inaugural Sepik river Crocodile festival was a major activity in FY07</li> </ul>
Activity 2.3: Communications materials on the values of the Sepik River		<ul style="list-style-type: none"> <li>• PowerPoint presentations were prepared, a toolkit for preparing the Sepik River Crocodile Festival was developed, a Sepik Tourism Brochure was launched.</li> </ul>
Activity 2.4: Confirm partnership agreements		<ul style="list-style-type: none"> <li>• The Sepik River Action Network joint workplan forms the basis of the major project partnership</li> </ul>
Activity 2.5: Ensure ongoing funding for catchment management		<ul style="list-style-type: none"> <li>• A proposal for almost €1m in funding from the EU for the Sepik Livelihoods project was submitted and has been approved. In addition, DEC will be providing a catchment officer for the Sepik and local level government have been successfully lobbied to provide supporting funds.</li> </ul>
<b>Output 3:</b> Mechanisms to ensure stronger protection for areas of ecological importance	<ul style="list-style-type: none"> <li>• Management plans for community-managed protected areas</li> <li>• Policies that support the protection of ecologically important areas</li> </ul>	<ul style="list-style-type: none"> <li>• Following extensive meetings with experts and stakeholders, draft community PA management plan guidelines have been issued</li> <li>• Ongoing discussions with PNG government to ensure further PA designations and policies that support better natural resource management</li> <li>• Three Wildlife Management Areas, totalling 60,000 ha, submitted</li> </ul>

	<ul style="list-style-type: none"> <li>Gazettal of protected areas established in priority wetland and forest areas</li> </ul>	for gazettal within the Sepik River Basin
Activity 3.1: Begin management planning in protected areas		<ul style="list-style-type: none"> <li>Draft guidelines and template for community PA management in preparation</li> </ul>
Activity 3.2: Support community management and enterprise initiatives		<ul style="list-style-type: none"> <li>To be integrated within guidance for community PA management. The IRBM plan for the Niksek/Freida sub-catchment will set out plans for encouraging community enterprises</li> </ul>
Activity 3.3: Monitoring changes to baseline conditions and achievement of planned activities		<ul style="list-style-type: none"> <li>Monitoring surveys of crocodile populations and stakeholder capacity and training needs undertaken. Baseline surveys of water quality and eaglewood will be implemented next year, supported by the EC Sepik Livelihoods project.</li> </ul>
Activity 3.4: Assist communities to declare new wetland protected areas and complete management plans		<ul style="list-style-type: none"> <li>Three protected areas, Andep, Me'ha and Uma, awaiting gazettal.</li> </ul>
Activity 3.5: Form catchment management institution		<ul style="list-style-type: none"> <li>To be formed in the Niksek/Freida catchment.</li> </ul>

## Annex 2 Project's full current logframe (NB: Proposed amendments in green)

<i>Project summary</i>	<i>Measurable indicators</i>	<i>Means of verification</i>	<i>Important assumptions</i>
<p><b>Goal:</b></p> <p>To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but poor in resources to achieve</p> <ul style="list-style-type: none"> <li>• the conservation of biological diversity,</li> <li>• the sustainable use of its components, and</li> <li>• the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources</li> </ul>			
<p><b>Purpose:</b></p> <p>To assist government and local stakeholders to design an integrated river basin management framework for the Sepik River Basin. This framework will protect biological diversity and ecological processes while promoting the sustainable management of natural resources supported by properly implemented catchment management policy.</p> <p>Proposed revision: <b>To assist government and local stakeholders to design a sub-catchment management framework that will protect biological and cultural diversity and ecological processes while promoting sustainable and equitable use and management of the natural resources through properly implemented catchment management policy</b></p>	<ul style="list-style-type: none"> <li>• Existence and use of a management framework in the form of databases, procedures and materials guiding catchment management in DEC and Department of East Sepik</li> <li>• Stronger policies for catchment protection</li> <li>• Increases in the levels of protection to areas of biological and ecological significance</li> </ul>	<ul style="list-style-type: none"> <li>• <b>DEC and local government public documents</b></li> <li>• Evaluation reports</li> <li>• National and provincial management plans</li> <li>• Protected area gazettal notices</li> <li>• National and provincial legislation</li> </ul>	<ul style="list-style-type: none"> <li>• DEC and Provincial government can allocate funds to maintain catchment management systems</li> <li>• Changes in government do not undermine current support to TCEM policy and catchment management efforts</li> </ul>
<p><b>Outputs:</b></p>			

<p>1. A comprehensive integrated river basin management plan</p> <p>Proposed amendment: A sub-catchment management framework for the Niksek/Freida catchments.</p>	<ul style="list-style-type: none"> <li>• An agreed catchment management framework for the Niksek/Freida sub-catchments</li> </ul>	<ul style="list-style-type: none"> <li>• Signed document</li> </ul>	<ul style="list-style-type: none"> <li>• Data is made available</li> </ul>
<p>2. Strong stakeholder awareness of and commitment to effective river basin management</p>	<ul style="list-style-type: none"> <li>• Sepik partners work plans signed as per partnership agreement</li> <li>• Resources use management plans and at least two WMA plans in place</li> <li>• Continuing media articles and radio stories about the Sepik</li> <li>• One five year district development plan or LLG plan developed showing commitment to effective IRBM</li> <li>• Sepik Crocodile Festival continues</li> </ul>	<ul style="list-style-type: none"> <li>• Signed agreements</li> <li>• Project reports and files</li> <li>• Local management plans and evaluation reports</li> <li>• Local Level Government development plans</li> <li>• Media reports</li> </ul>	<ul style="list-style-type: none"> <li>• Stakeholders remain committed to catchment protection.</li> </ul>
<p>3. Mechanisms to ensure stronger protection for areas of ecological importance</p>	<ul style="list-style-type: none"> <li>• Management plans drafted for community-managed protected areas</li> <li>• Policies that support the protection of ecologically important areas</li> <li>• Gazettal of at least two protected areas established in priority wetland and forest areas</li> </ul>	<ul style="list-style-type: none"> <li>• Management plans</li> <li>• Provincial and national legislation</li> <li>• Protected area gazettal notices</li> </ul>	<ul style="list-style-type: none"> <li>• Sufficient practical benefits can be generated for village communities to maintain their commitment</li> </ul>

# Annex 3 CVs of key project staff

## Annex 4 Summary of EC Sepik Livelihoods project

Duration of the action	36 months
Objectives of the action	<p><b>Overall objective(s):</b> By 2012, the natural resource base in the Sepik River basin in Papua New Guinea is managed sustainably to improve the livelihoods of remote rural communities</p> <p><b>Specific Objective:</b> By 2010, improved livelihood options and enabling conditions deliver at least a 50% increase in income for target communities (in Ambunti- Dreikkir, Wosera-Gauai and Karawari), leading to better access to social services</p>
Name of applicant(s) <sup>1</sup> and EU Member State of origin	Applicant: WWF-UK EU Member State of Origin: UK
Name of partner(s) from the newly acceded Member State(s), if applicable	N/A
Local partner(s)	<b>WWF South Pacific Programme - PNG Country Office</b> (hereinafter referred to as 'WWF PNG')
Target group(s) <sup>2</sup>	All target groups are based in Ambunti- Dreikkir, Wosera-Gauai Districts and Karawari Rural Local Level Government (LLG). <b>Target groups:</b> 800 village-based people trained in profitable natural resource extraction and ecotourism (500 in Eaglewood and other NTFPs, 200 in crocodile harvesting, and 100 in ecotourism); 100 community rangers trained; 40 staff of local, district, provincial and national government agencies trained; 200 members of women and youth groups trained, local CSOs trained.
Final beneficiaries <sup>3</sup>	<b>Direct beneficiaries:</b> 18,500 resource reliant rural people across the target districts / LLG; CSOs / research institution; <b>Indirect beneficiaries:</b> 430,000 people living in rural communities in the Sepik River Basin.

1 In the case of a consortium, indicate first the lead NGO and then all the other consortium members.

2 "Target groups" are the groups/entities who will be directly positively affected by the project.

3 "Final beneficiaries" are those who will benefit from the project in the long term at the level of the society or sector at large.

Estimated results	<p><b>1)</b> Threefold increase in equitable economic benefits derived by communities through the sustainable harvest of eaglewood and other NTFPs <b>2)</b> Crocodile harvesting enterprises generate a twofold increase in equitable economic benefits for communities <b>3)</b> Sustainable ecotourism enterprises generate a twofold increase in income for priority districts to enhance sustainable livelihoods <b>4)</b> Sustainable Resource Plans are developed and implemented by communities with assistance from local authorities <b>5)</b> Government Development Planning in the Sepik River basin is integrated, participatory and supports the needs of resource reliant rural communities (including marginalised groups) civil society and the private sector through effective natural resource management <b>6)</b> Lesson learning and best practice magnified to all other districts in the Sepik River catchment area in Papua New Guinea</p>
Main activities	<p>1) Multiple community based natural livelihood strategies; 2) Community led natural resource plans; 4) Government policy and funding; 5) Institutional management frameworks; 6) Capacity building 7) Facilitate business support;</p>
If applicable, please specify all activities related to microfinance.	<p>Training for rural communities on accessing existing micro-credit options</p>

## Objectives

### **Overall Objective: By 2012, the natural resource base in the Sepik River basin in Papua New Guinea is managed sustainably to improve the livelihoods of remote rural communities**

Papua New Guinea is a country rich in natural resources, with significant development potential, yet economic deprivation is rapidly increasing, leaving communities in the remotest areas without even the most basic of services. Sustainable livelihoods face significant threats as natural capital, which can be utilised to generate income for communities, is fast being depleted. This is largely due to large scale industrial activities such as logging in forests; mining and oil extraction; species over-extraction and unsustainable agricultural practises.

This action will contribute towards the overall objective by:

1. Significantly increasing the incomes of local communities through the sustainable trade of natural products and ecotourism;
2. Ensuring national and local government plans and budgets reflect community priorities for sustainable enterprise development, resource management and service delivery;
3. Ensuring that natural resources which have income generating potential, and the habitats on which they rely, do not further deteriorate.

By targeting natural resource extraction and land use planning, this Action will establish a methodology for local communities to lift themselves from subsistence level livelihoods. It will assist village entrepreneurs, working with private enterprise to expand their income through the sustainable harvest and use of small number of high value natural resources. Evaluations of similar exercises have shown the value of focusing on more than one livelihood strategies In order to provide greater resilience and to provide alternatives in the case that one livelihood option suffers shocks in pricing, demand or transportation.

### **Specific Objective: By 2010, improved livelihood options and enabling conditions deliver at least a 50% increase in income for target communities (in Ambunti- Dreikkir, Wosera-Gau and Karawari), leading to better access to social services**

The action will achieve the specific objective by:

1. Ensuring at least a twofold increase in the incomes of 10 landholding communities through the sustainable management of 50,000 ha of forests for the production of Eaglewood

2. Ensuring a 50% increase in incomes of 10 landholding communities from the sustainable production of crocodile skins in 100,000 ha of wetlands
3. Facilitating a three fold increase in income of 10 communities from the successful operation of 10 ecotourism products
4. Providing evidence that community driven development plans can influence development plans and service provision by District and provincial governments;
5. Establishing a functional institution to ensure sustainable management of natural resources at a catchment level that coordinates a number of levels of government;
6. Ensuring national government policy and funding supports environmental entrepreneurial schemes at local, district and provincial levels;
7. Ensuring that national and provincial government funds and staff time are allocated to sustainable catchment management,
8. Learning lessons and multiplying the experience gained in the target areas to other parts of PNG

# Annex 5 Sepik Tourism Brochure

Attached as separate file.

# Annex 6 Summary of responses to reviewer

## Annex 7 Draft continuation strategy

### Objective:

To ensure that the catchment management initiatives for the Sepik River are sustainable and supported by stakeholders beyond the life of the existing Darwin Initiative project.

To achieve this objective there are three important areas that need to be considered:

1. Stakeholder involvement and ownership of the conservation initiative and the need to equip partners with appropriate skills and knowledge
2. Embedding the existing conservation initiatives into existing governments and/or stakeholder plans and strategies
3. Ensuring that the conservation initiatives translate into social, economical and environmental benefits for stakeholders

ACTION	TARGET GROUP	ACTIVITY	OUTCOME	ASSUMPTIONS
<b>1. Stakeholder involvement and participation</b>				
1.1 Education	Schools in Upper Sepik region	Talks to schools about the importance of conservation Involve schools in catchment management work through essay competitions and drawings	Children are aware and appreciate the environment and able to influence their parents	
1.2 Training	Partners and local communities	Conduct Training needs assessment survey Provide training on resources planning, use and management	Specific training needs identified and trainings provided	Organisations are willing to send their staff for these trainings
1.3 Awareness	Stakeholders and local communities	Conduct meetings and workshops with stakeholders Prepare and disseminate posters, brochures and media releases Hold Sepik Crocodile Festival	Increased awareness of social and biological significance of Sepik River	Partners such as HELP Resources and SWMI still operate in Ambunti
<b>2. Plans and strategies</b>				
2.1 Understanding of partners roles and	DEC, HELP Resources, SWIM,	Conduct meetings, discussions and workshops to build better understanding of	Clear understanding of roles and responsibilities and	Elections do not cause too much upheaval in terms of

responsibilities	ESPG, ALLG, Bauabaua	roles and responsibilities Build capacity to carry out those roles and responsibilities Understand future plans Establish healthy working relationship	capacity issues in partner organisations	roles and responsibilities in government
2.2 Partnership Agreement	DEC, HELP Resources, SWIM, ESPG, ALLG, Bauabaua	Review the Sepik River Network Action Plan endorsed by partners	Sepik partners work plan forms basis of ongoing partnership	Partners willing to stay committed to the work plan
2.3 Reviews of Ambunti five year plan	Most organizations with the responsibility of implementing the plan	Update the plan by looking at what was implemented, what was not implemented, what lessons were learnt and plan based on lessons learnt, people's needs and the capacity available to implement.	Revised Ambunti district five year plan incorporating IRBM principles and measures	Upcoming election does not adversely affect new five year planning process
2.4 Operationalising TCEM policy	DEC	Continue meetings and discussions with DEC Develop and advocate for recommendations emerging from TCEM policy review	DEC renew their commitment to implement TCEM policy	
2.5 Reviewing of the existing environment legislation	DEC	Develop recommendations for existing environment legislation to give support to the IRBM and TCEM policy	IRBM captured under existing legislation	
<b>3. Encouraging social, economic and environmental benefits</b>				
3.1 EU Sepik Livelihood project	All stakeholders including resources owners	Provide training on natural resources management Develop natural resource management plans which will be embedded into the existing government plans and policies	Stakeholders have more capacity to management resources sustainably Resources use plans (eaglewood, crocodile), management plan (WMA) and tourism plan in place	EU finding will begin to flow soon

3.2 Promote sustainable harvesting of crocodiles	SWMI and Mainland Holdings	Provide more funding to SWMI for crocodile awareness Give awards to crocodile farmers and crocodile habitat owners as recognition of their efforts towards conservation	Increase income for the crocodile habitat owners and farmers and kudos to those who manage habitats well	There are sufficient resources to effectively monitor the sustainable harvesting of crocodiles
<b>4. Other actions</b>				
4.1 Protected Areas work	WWF colleagues, local stakeholders, DEC	Work with stakeholders to identify potential new protected areas Support development of protected areas management plan Ensure gazettal of protected areas	Establishment of protected areas	Continuous funding for the WWF Forest of New Guinea programme
4.2 Annual Sepik River Crocodile Festival	Local communities, tourists, government agencies and interested parties	Involve the local communities and stakeholders in the festival Get government support to fund the festival every year Use media coverage of the festival to remind people of the conservation work in the Sepik	Stakeholder commitment to support the event annually	Government changes do not undermine the festival
Stakeholder Committee	Sepik River Network and other stakeholders	Finalise the Sepik River stakeholder team in July 2007	Stakeholder Committee in place and performing well	Stakeholder and partner organisation have the funds to support their own staff on the committee

## Checklist for submission

	Check
<b>Is the report less than 5MB?</b> If so, please email to <a href="mailto:Darwin-Projects@ectf-ed.org.uk">Darwin-Projects@ectf-ed.org.uk</a> putting the project number in the Subject line.	Yes
<b>Is your report more than 5MB?</b> If so, please advise <a href="mailto:Darwin-Projects@ectf-ed.org.uk">Darwin-Projects@ectf-ed.org.uk</a> that the report will be send by post on CD, putting the project number in the Subject line.	No
<b>Do you have hard copies of material you want to submit with the report?</b> If so, please make this clear in the covering email and ensure all material is marked with the project number.	No
Have you completed the Project Expenditure table?	Yes
Do not include claim forms or communications for Defra with this report.	