

---

# Policy learning in action: developing markets for watershed protection services and improved livelihoods

Report of an evaluation



Jeffrey Sayer  
January 2007



International  
Institute for  
Environment and  
Development

**DFID** Department for  
International  
Development

---

The views represented in this document do not necessarily represent those of the institutions involved, nor do they necessarily represent official UK Government and/or DFID policies.

**Contacts:**

Professor Jeffrey Sayer • WWF, Avenue du Mont Blanc, 1196, Gland, Switzerland. • Email: jsayer@wwfint.org

Forestry and Land Use, Natural Resources Group, International Institute for Environment and Development, 3 Endsleigh Street, London WC1H 0DD, UK • Tel: +44 (0)20 7388 2117 • Fax: +44 (0)20 7388 2826 • Email: ivan.bond@iied.org

**Citation:**

Sayer, J. (2007) *Policy learning in action: developing markets for watershed protection services and improved livelihoods. Report of an evaluation.* International Institute for Environment and Development, London, UK.

**Developing markets for watershed protection services and improved livelihoods**

Based on evidence from a range of field sites the IIED project, 'Developing markets for watershed services and improved livelihoods' is generating debate on the potential role of markets for watershed services. Under this subset of markets for environmental services, downstream users of water compensate upstream land managers for activities that influence the quantity and quality of downstream water. The project purpose is to increase understanding of the potential role of market mechanisms in promoting the provision of watershed services for improving livelihoods in developing countries.

The project is funded by the UK Department for International Development (DFID).

## Table of contents

Acronyms and abbreviations .....	4
Executive summary .....	5
1. Introduction.....	10
1.1 Overview of project implementation.....	11
2. Schedule and methods for the evaluation .....	12
3. The evaluation .....	14
3.1 Cross-cutting issues .....	14
3.1.1 The concept, design and execution of the project .....	14
3.1.2 Communication and dissemination of results .....	19
3.2 Results of the questionnaire survey.....	22
4. Overall conclusions and recommendations.....	31
Appendix 1: Terms of reference .....	33
Appendix 2: Questionnaire survey pro forma .....	37
Appendix 3: Partial list of persons interviewed. ....	39
Appendix 4: Key materials consulted.....	41

## Acronyms and abbreviations

CANARI	Caribbean Institute of Natural Resources
CIFOR	Center for International Forestry Research
COHD	College of Humanities and Development of the China Agricultural University
COPS	Conference of the Parties
CSIR	Council for Scientific and Industrial Research: Environmentek (RSA)
CSR	Corporate social responsibility
DANIDA	Danish International Development Assistance Agency
DFID	Department for International Development (UK)
DGIS	Dutch Development Cooperation Agency
ECCM	Edinburgh Centre for Carbon Management (UK)
ETFRN	European Tropical Forest Research Network
ICDPs	Integrated conservation and development projects
ICRAF	The World Agroforestry Center
IDB	Inter-American Development Bank
IFAD	International Fund for Agricultural Development
IIED	International Institute for Environment and Development (UK)
IUCN	International Union for the Conservation of Nature and Natural Resources
LP3ES	Institute for Social and Economic Research, Education and Information (Indonesia)
MEAs	Multilateral environmental agreements
PES	Payments for environmental services
PWS	Payments for watershed services
RUPES	Rewarding the Upland Poor for Environmental Services (Indonesia)
SEPA	State Environment Protection Agency (China)
TVE	Television Trust for the Environment
UNEP	United Nations Environment Programme
WII	Winrock International (India)

## Executive summary

- A. The IIED project on 'Developing Markets for Watershed Protection Services and Improved Livelihoods: An IIED collaborative action-learning project' – hereinafter referred to as the IIED PWS project – was initiated on October 1<sup>st</sup> 2003 and was intended to terminate on 30<sup>th</sup> September 2006. A no cost extension to the project was subsequently negotiated between IIED and DFID, and at the time of writing the project is scheduled to conclude at the end of March 2007.
- B. The DFID support to IIED was a contribution to an ongoing programme of work on PWS by IIED that also received support from the Shell Foundation, DANIDA, and the Swiss Development Corporation. DFID had funded an earlier diagnostic study on PWS by IIED and the work that is the subject of this evaluation effectively grew out of that diagnostic phase. In parallel with this, IIED produced a major study entitled *Silver Bullet or Fools' Gold? A global review of markets for forest environmental services and their impact on the poor* (Landell-Mills and Porras 2002). This book emerged from work funded by the European Commission and DGIS on private sector forestry. It is a standard international reference on the subject of PES and contributed to the intellectual underpinning of the present project.
- C. IIED established agreements with partners in India, South Africa, Indonesia and the Caribbean to develop action learning programmes on PWS. It also collaborated with partners in China and Bolivia on diagnostic work on PWS. The partners, and the sites selected for the action learning and diagnostic studies, emerged from an earlier phase of IIED PWS diagnostic studies.
- D. Overall the project has been an excellent contribution to the ongoing international debate about the use of market mechanisms to achieve environmental conservation goals. It has been the leading international research and development effort in this dynamic area. It was conducted in ways that made major contributions to policy development in the 5 partner countries and an additional 5 in the Caribbean, and it made significant contributions to building capacity in those countries. It has provided the main source of new evidence and information to the various national and international fora where PES and PWS are being promoted. The leadership provided by IIED has been exemplary.
- E. Field work has been successfully conducted in all of the countries and a number of interim reports have been published. Action learning groups have been formed in each country, and a number of meetings and study tours have brought representatives of the national partners together with IIED staff and external specialists working on the project. At the time of this review, the final reports from the partner countries are just becoming available in draft form. An overview publication thoroughly revising and updating the PWS components of *Silver Bullet or Fools' Gold?* is nearing completion and will be a major synthesis report of the project. IIED is on track to complete all of its contractual obligations under the project.
- F. This project was initiated at a time when there was a wave of interest in PES/PWS amongst international environmental organisations, governments and intergovernmental processes. PES was, and in some quarters still is, being promoted as a major response to dealing with the linked problems of alleviating rural poverty and conserving global environmental values. There was a need to acquire evidence on the real potential of the approach to be effective on the ground. The DFID/IIED project responded to this need and has been the major international initiative to move beyond advocacy and speculation. The project was timely, took an appropriate approach, and was well implemented.

- G. Action learning projects with local partners have the potential to become a valuable complement to some of the new ways in which development assistance is being provided. Direct budget and sector support have emerged as major vehicles for development assistance and as the traditional project approach is abandoned there will be an increasing need for ways of gathering information and understanding of how poverty alleviation and environmental conditions are changing on the ground. These approaches will provide the learning that previously came from field projects and will also serve to strengthen civil society organisations in client countries. It is partly in the spirit of learning lessons about how such action learning projects may be better conducted that the detailed comments in this evaluation are presented.
- H. No serious deficiencies in concept, design, execution or communication have been identified. The budget for the project appeared to me at first sight high but a close examination of the work shows that the costs of operating projects of this sort are inevitably high and I consider that the budget was justified and well-spent.
- I. Some of the verifiable results in the original project log frame were not achieved and some of the assumptions proved incorrect. Specific issues are presented in the main report. In most cases these departures from the original log frame are legitimate given the exploratory and learning nature of the project.
- J. Overall the project was well-conceived, well-designed, and well-executed.
- K. The ToR for the evaluation and subsequent discussions with DFID and IIED staff identified a number of specific issues for evaluation. Some additional issues arose in the course of the evaluation. A review of these issues constitutes the main body of this report. The following table attempts a summary of these comments. I have awarded ratings to performance under each of the issues – a low rating indicates less good performance and a high score represents better performance.

**Table 1: The concept, design and execution of the project**

Project concept and quality at entry	9	The basic ideas underlying the project and its approach were excellent.
The design of the project	7	Action learning through mentoring of local partners was the best approach – the project was over-ambitious in terms of what could be achieved in 3 years.
The concept and practice of action research	8	Testing ideas in real-life field situations was essential. More structured scientific methods might have been used.
IIED's approach and comparative advantage	9	IIED performed well in guiding the field work without imposing external assumptions or prejudices.
Choice of partner countries and IIED's history of involvement	8	The countries chosen covered an interesting range of situations and included some where IIED had considerable experience and two new ones.
Action research design	7	There was not enough investment in developing typologies, clarifying concepts and terms, and giving structure to data collection.
Technical backstopping by IIED	7	Administrative and process backstopping were of a high quality – there was not enough specialist technical support provided to some countries.
Scientific methods – tools	5	Some potential for learning was lost through the absence of a more rigorous conceptual and methodological framework.
PWS models considered	7	The range of approaches to PWS considered appears with hindsight to have been too limited – but the project was too short to make changes.
Site selection within countries	7	Sites selected were not always optimal; more investment in establishing criteria at project inception might have yielded better choices.
Links with the diagnostic phase	8	The project activities flowed nicely from the diagnostic phase that had preceded them.
The need for rigorous outcomes measures	5	A more rigorous system for assessing outcomes in terms of poverty alleviation and watershed performance at learning sites would have been desirable but probably not feasible with the budget and duration available for the project.
Confirmation bias	8	The project was commendable in being rigorous and honest in the interpretation of its results.
The risks of downplaying the need for zoning and regulation	6	The PWS debate risks diverting attention from more classic regulatory approaches to watershed protection. Bolivia, Indonesia and the Caribbean may have given insufficient attention to these conventional approaches.
Project leadership	9	The quality of leadership provided by IIED was high.
Continuity of staffing	8	Again, the ability of IIED staff to manage changes in field partners' staffing was commendable.

- L. Websites, publications, electronic newsletters, project meetings and study tours, presentations at national and international meetings, and television documentaries were all used effectively to communicate within the project and with participants in the broader policy discourse. Overall the communication effort was good but some potential external audiences may not have been reached. The targeting of more synthesised messages has not been adequate – yet.

**Table 2: Communication and dissemination of results**

Communications amongst partners and cross-site visits	8	Partners communicated well – an opportunity was lost in not having more meetings on-site in partner countries.
Action learning groups and national learning	8	A strong part of the project – this worked well.
Reporting of results	7	Too many general and descriptive reports and not – yet – enough synthetic and targeted ones.
'FLOWS'	8	A valuable web-based newsletter.
Websites	7	Some excellent, others more difficult to access for comprehensive information.
Peer-reviewed journal articles	5	Still time to rectify this but it would be good to put the key findings in the refereed literature.
IIED's profile in the international policy dialogue	8	IIED is amongst the international leaders in PES/PWS innovations – it may not have the international recognition that its PWS work would merit.
'Shedloads'	8	A valuable film that got television coverage for the project but potential not fully exploited, although this and 'Lake Matters' had good impacts in India.
Comparison with other PWS initiatives	8	The most credible international initiative in this field.
Impact on global policy discourse	8	Significant impact – but in a low profile way. Participation of national partners in international events was a major potential source of impact.
Impact in participating countries	9	In every country the IIED activities have been highly influential in the national policy discourse.
Follow-up – the Bellagio meeting	9	An initiative by IIED and its partners to hold an international meeting at Bellagio will provide opportunities for dissemination and critical evaluation of the results of the project. Project Asian partners are organising an Asian PES meeting in 2007. Both of these initiatives may trigger follow-up activities.
Exit strategies and continued support to national partners	7	The project did not have an explicit exit strategy; there was an assumption that support to national partners would continue. National partners have the potential to deliver significant impact, and the learning network created by this project needs to be maintained.

M. There is a need for a highly synthetic and well-targeted final report or a set of policy briefs – these appear to be under preparation and should address some of the shortcomings noted above.

N. The project began at a time when there were high expectations for PWS (and PES in general) amongst policymakers. The IIED project has made a major contribution to instilling a sense of reality into the debate. There is now a significant body of opinion that holds that PES will not be a major force for addressing poverty alleviation or environmental conservation. What the IIED study shows is that it will indeed not be a silver bullet, but also that it is not fools' gold. Poverty will be alleviated mainly through national economic growth, improvements in governance, market integration, and extensions of infrastructure and strengthening of local land and resource access rights. As these developments unfold, PWS will become possible and will be important in helping to meet the needs of those who live in areas with high environmental values and who might otherwise be bypassed by mainstream development efforts. PES/PWS will be important in certain conditions as part of the portfolio of measures needed to address the linked problems of poverty alleviation and environmental conservation.



- O. The DFID/IIED project has begun a continuing process of learning about the situations under which PES/PWS will be important, and the external conditions under which such mechanisms will work. It has already made valuable contributions to the evolutions of thinking on this; this learning process needs to be sustained.
  
- P. A lot of feedback was received during this evaluation that suggests that continuing action learning of the type supported by this project would be very valuable in helping to define where and when PES/PWS are appropriate, and helping to establish the underlying conditions for these mechanisms to realise their potential impact. A “community of practice” has been built and a number of the local partners have embarked upon valuable watershed conservation programmes. The potential for future impact is great. However the project lacked a clear exit strategy or a vision of how future work by these partners might be supported.

## 1. Introduction

The IIED project on ‘Developing Markets for Watershed Protection Services and Improved Livelihoods: An IIED collaborative action-learning project’ – hereinafter referred to as the IIED PWS project – was initiated on October 1<sup>st</sup> 2003 and was intended to terminate on 30<sup>th</sup> September 2006. A no cost extension to the project was subsequently negotiated between IIED and DFID and at the time of writing the project is scheduled to conclude on March 31<sup>st</sup> 2007.

The DFID support to IIED was a contribution to an ongoing programme of work on PES by IIED that also received support from the Shell Foundation, DANIDA, and the Swiss Development Corporation. DFID had funded an earlier diagnostic study on PWS by IIED and the work that is the subject of this evaluation effectively grew out of that diagnostic phase. In the lead up to this project, IIED also produced a study entitled *Silver Bullet or Fools’ Gold? A global review of markets for forest environmental services and their impact on the poor* (Landell-Mills and Porras 2002). This book, which emerged from work on private sector forestry funded by the EC and DGIS, is a standard international reference on PES and contributed to the intellectual underpinning of the present project.

The goal and purpose of the project are set out in the summary logical framework in the project document as follows:

**Table 3: Summary of logical framework for project**

Narrative summary	Objectively verifiable indicators	Means of verification	Assumptions
Goal: to promote the maintenance of watershed services that support local livelihoods.	Watershed services improve local livelihoods where market mechanisms are implemented.	Published assessments of changes in livelihoods following introduction of market mechanisms in watersheds.	Continued widespread interest in finding innovative mechanisms for promoting improved livelihoods in watersheds.
Purpose: to increase understanding of the role of market mechanisms in promoting the provision of watershed services to improve livelihoods.	1. Lessons from action learning incorporated in plans of government, civil and private organisations.  2. Plans for shaping markets for watershed services and livelihoods incorporated in policy initiatives and programmes of government, civil and private organisations.  3. Policy initiatives and programmes reflect hydrological findings on effects of land use on watershed services.	Review of the outputs of new analysis and planning of watershed interventions in developing countries.  Review of new policy initiatives and programmes involving market-based solutions to watershed problems.  Implementation of monitoring records of initiatives to shape markets for watershed services and livelihoods in key countries.	Continued interest in developing countries in the role of market-based environmental management.  Hydrological information allows some generally applicable policy-relevant conclusions to be made, and in a form useable by stakeholders.  Policymakers and programme co-ordinators are responsive to recommendations and implement findings.

## 1.1 Overview of project implementation

IIED has enabled country-based partners to pursue programmes at field sites in India, Indonesia, South Africa and the Caribbean (where 5 countries were involved in the project). At these sites, country partners and IIED have taken an 'action learning approach' to develop schemes for payments for watershed services (PWS). These sites are providing IIED and its partners with an important opportunity for real time learning about the process of developing payments for watershed services and their potential impact on the poorer residents of the watersheds. In Bolivia and China, project partners are assessing the potential for PWS through a series of diagnostic studies. Within each country, learning groups have been set up to allow stakeholders to compare and disseminate lessons to policymakers. At an international level, country partners – together with IIED – have compared experiences and extracted lessons at annual project advisory group meetings.

In both the action learning and diagnostic country sites, the approach and specific activities taken up reflect the unique circumstances within that country. In the action learning countries there is a broadly similar approach that involves:

- A. Developing a core research team as a partnership between IIED and a locally-based organisation. In order to establish a field presence within the selected action learning sites, additional partnerships between the core research team and local field-based organisations were developed in each of the countries.
- B. Selecting sites and initiating the facilitation of payments for watershed services. In Indonesia and the Caribbean the watersheds and the location of the sites within the watersheds were identified during the diagnostic studies. In India and South Africa, the teams introduced an additional stage in which preference criteria were drawn up and used to select the case study areas from a larger pool of sites. At some sites (in India, the Caribbean and Indonesia), the core team formed partnerships with ongoing initiatives. At other sites, however, the research teams had to initiate the process of stakeholder engagement largely from scratch.
- C. Supporting payment facilitation with a series of studies on land use (for instance of hydrological relationships and livelihoods at all the project sites). These studies were important in building a comprehensive picture of the key issues at each site. The studies sought different degrees of participation from stakeholders depending on the context, the scale of the issues, and the skills available.
- D. Forming and facilitating 'learning groups' to reflect on the lessons learned from the site-level activities. The learning groups typically comprise a range of stakeholders from government, civil society and – where appropriate – the private sector. Some partners have supplemented the learning groups with a combination of targeted seminars, exchange visits, and other strategies aimed at engaging with particular groups.

Comprehensive accounts of the project activities, work plans, and publications etc. are available at the project website: [www.iied.org/NR/forestry/projects/water.html](http://www.iied.org/NR/forestry/projects/water.html). This central website gives access to the websites set up by each of the national partners where further information on the project activities conducted by these partners is posted.

## 2. Schedule and methods for the evaluation

This evaluation was conducted between July and November 2006. The full terms of reference for the evaluation are given in Appendix 1. The programme for the evaluation was as follows:

1. June and July 2006. Discussions with staff of IIED and DFID in London, and preliminary review of project documents and reports.
2. Early August 2006. Meetings with staff of the Indonesia national partner – LP3ES – in Jakarta and field visit to the Brantas action learning site in East Java. Meetings with project stakeholders and concerned government officials in Jakarta and East Java.
3. September 2006. Further review of documents on the subject of PWS, attendance at a UNEP workshop on PES in Geneva, and meetings with people attending that workshop concerned with the IIED project.
4. September 2006. Preparation and dissemination of a questionnaire on the project to solicit feedback from stakeholders (Appendix 2).
5. October 2006. A visit to project regional partners CANARI in Trinidad. Many of the people concerned with the project's activities in the Caribbean were present in Port of Spain for a meeting on environmental economics at the University of the West Indies. My visit was timed to coincide with this event and to enable me to interview project stakeholders from the wider Caribbean.
6. October 2006. Visit to project national partners Fundación Natura in Santa Cruz, Bolivia. Meetings were held with regional stakeholders in Santa Cruz and field visits were undertaken to the principal project site – the village of Santa Rosa in the municipalidad of Pampa Grande. Visits were also made to other sites being considered for PWS schemes and useful meetings were held with local government representatives.
7. November 2006. Final review of documents and websites. Telephone interviews with project partners in South Africa, China and India and further telephone interviews with persons concerned with the project, or with an interest in the subject of PWS. A partial list of persons interviewed is given in Appendix 4.

This report is therefore based upon the following inputs:

- Interviews with IIED staff who have been involved with the project over the last three years.
- A review of the numerous reports that have been produced by IIED and the national partners in the project, and of the websites of IIED and these partners.
- Extensive interviews with project participants either in person or by telephone.
- Field visits to project sites in Indonesia, the Caribbean and Bolivia.
- Interviews with persons in a number of international and national organisations who are working on PES and who might be expected to be interested in the results of the IIED project.
- Responses to a questionnaire survey that was mailed to persons who, in various ways, have been involved with the project or who might be expected to have views upon its effectiveness. A copy of the questionnaire survey is given in Appendix 2. A compendium of quotes from the questionnaires and a summary of the scoring are given in section 3.2 of the main report.

The time and budget available for this review did not allow for visits to the other countries engaged in the project. More detail is provided on the activities in the countries that were visited than on those where information could only be derived from telephone calls, written reports and websites.

This evaluation does not attempt to synthesise the technical lessons learned from the project. This task will be achieved through the final reports from each of the country studies, together with the final synthesis report from IIED. The objective of this evaluation is to look at the validity of the approach, the robustness of the concept underlying the project, the performance of IIED in executing the project, and the extent to which the project contributed to the ongoing global debate about payments for watershed services.

### **3. The evaluation**

#### **3.1 Cross-cutting issues**

Overall, the IIED project ‘Developing Markets for Watershed Protection Services and Improved Livelihoods: An IIED collaborative action learning project’ has been an excellent contribution to the ongoing international debate about the use of market mechanisms to achieve environmental conservation goals. It has been the leading international research and development effort in this dynamic area. It was conducted in ways that made major contributions to policy development in the 5 partner countries, plus 5 in the Caribbean, and it made significant contributions to building capacity in those countries. It has provided the main source of new evidence and information to the various national and international fora where PES and PWS are being promoted. The leadership provided by IIED has been exemplary.

The report attempts to distil out the lessons that can be learned from the experiences of the project. It is structured around a first section (3.1) that addresses the general cross-cutting issues that provided the focus of the evaluation. A second section (3.2) summarises the results of the questionnaire survey and lists the comments of a general nature that were made by questionnaire respondents.

The issues addressed are those that were included in the ToR or were identified in the preliminary discussions with DFID and project staff – both in IIED and in national partner organisations in the ten countries where the project was operational. A number of other issues were then included which emerged from discussions with specialists in the subject of PWS in other organisations working on PWS. Thanks go particularly to staff of CIFOR, WWF and IUCN for providing insightful comments.

For each of these issues I have given a score out of 10 for project performance. 10 represents the highest score and zero indicates the lowest possible score. The scores are based on the feedback from the questionnaire, interviews, and the evaluator’s personal assessment of the performance of the project. The questionnaire allowed respondents to make general observations about the performance, relevance and impact of the project. Many of these comments relate to issues covered under the following issues. However, a number of the points raised were of sufficient general interest to merit inclusion in this report and they are therefore summarised in section 3.2. For ease of presentation I have separated my comments on the concept, design and execution of the project from comments on communications and dissemination. This is an artificial division as most project learning and communication was always intended to be “experiential” – part of the process of project implementation. The following issues were identified:

##### **3.1.1 The concept, design and execution of the project**

- A. The project concept, and quality at entry. The project was initiated at a time when there was considerable international interest in the possibility of achieving environmental conservation goals through systems of payments for environmental services. There was a great deal of theorising and hypothesising about the potential benefits from PES. There was a tendency for the international policy discourse to portray PES as a silver bullet that was going to solve environmental problems that had not been amenable to traditional solutions. However, a number of reviews had shown that there were very few payments systems for environmental services that were operating satisfactorily in tropical developing countries, and that many attempts to establish such systems had met major practical difficulties. A report by Wunder et al. (in press) from CIFOR argues that the time has come to cease hypothesising and to obtain more practical experience of payment

systems. Wunder advocates pilot payment schemes with built-in monitoring and learning. The IIED diagnostic study of PWS mechanisms had also concluded that practical action research on the subject was the best way forward. This diagnostic phase of IIED's work on PWS had enabled IIED staff to develop valuable knowledge of the subject area and to build a network of international contacts amongst people dealing with potential PWS systems. The report *Silver Bullet or Fools' Gold?* (Landell-Mills and Porras 2002) provided an influential synthesis of the state of knowledge and has had a major impact on thinking on PES issues. The overall assessment is therefore that the project was highly timely, and that the concept of dealing with this issue through a series of action research activities in partner countries was highly appropriate. *Rating 9.*

- B. The design of the project: in most respects, the project was well-designed. The underlying approaches were sound, and the log frame was credible. However, the nature of the tasks to be accomplished and the inevitable transaction costs and delays in working with the widely dispersed network of partners meant that the duration of three years was clearly inadequate (the project has now been extended to three and a half years). The desirability of a longer timeframe was apparently recognised at the project approval stage but was impossible to address at that time for reasons related to the budget cycles of DFID. Large-scale action research, with diverse and dispersed partners, and on issues that only unfold slowly, requires long timeframes. Against this can be set the fact that the problem was urgent and one had to start somewhere. The reality is that a great deal has been learned during the three years since the project was initiated. Given the short duration of the project, a better exit strategy or scenario for follow-up support (of national partners at least) might have been expected. *Rating 8.*
- C. The concept and practice of action research. It was implicit in the original project documents that the action learning sites would be ones where PWS were being attempted or where there was a probability of payment schemes being tested. The action research would then have entailed assessments of the effectiveness and impact of these payment mechanisms, and a process of learning about the difficulties that were encountered in putting such systems in place. The use of such an approach was valid; however it immediately ran into some practical difficulties. Locations where true PWS schemes were already operating proved difficult to find. Some of the national studies were able to assess the impacts of limited transfers of resources to poor people living in upper catchments. But the lack of an adequate policy or institutional context meant that most of the national studies were only able to operate in a diagnostic mode. True action research would have needed to involve a multi-stakeholder process of monitoring, evaluation and learning based on actual payment schemes. It would then have been possible to arrive at some measurement of both livelihood and watershed benefits. Because payments were not being made, none of the partner organisations was operating in a context that enabled them to fulfil all of the original expectations of the project. The principle 'means of verification' in the project log frame required the publication of assessments of changes in livelihoods following introduction of market mechanisms, and the project was never in a position to deliver on this. *Rating 8.*
- D. The IIED's approach and comparative advantage: a number of other international environmental organisations could have taken on the task of running a project such as this. It is interesting to reflect upon the approaches that other organisations might have taken and contrast these with the approach adopted by IIED. International environmental organisations have sometimes been criticised for building up their own in-house staff capacity rather than working through partners and building their capacity. IIED is to be strongly commended for not having done this and for having worked in a genuine partnership mode with its national project executants. Many international research and development organisations are criticised for using their local partners simply to collect data according to a predefined project blueprint. IIED is again to be commended for not

having done this. The national partners in this project were given a great deal of autonomy in determining the most appropriate way of tackling PWS within their local contexts. There was a high level of ownership amongst the national partners – IIED was learning from its national partners, as opposed to teaching or instructing them. This approach resulted in a situation where local capacity building and learning was maximised. The approach did create a problem of lack of direct comparability of results between countries. Notwithstanding this, IIED is to be commended for its lightness of hand in its management of the project. *Rating 9.*

- E. Choice of partner countries and IIED's history of involvement: IIED has a long history of on-the-ground work in some parts of the world – the Sahel, India, southern Africa, the Caribbean etc. In these countries IIED, has existing local partners and a good knowledge of operating conditions. One person interviewed commented that IIED should have focussed more on its countries of comparative advantage in this project. Bolivia, and to a lesser extent Indonesia and China, were relatively new countries for IIED. IIED was successful in developing effective relationships with strong local partners in each of these countries. Given the importance of China and Indonesia in global environmental issues and the excellent opportunity provided by the work in Bolivia, the decision to move into these countries seems justified. *Rating 8.*
- F. Action research design: an alternative approach to a project of this kind would have been to develop a typology of sites for PWS. A set of attributes could have been assessed for each site to enable direct comparisons and possibly the modelling of the conditions under which certain approaches to PWS do and do not work. In the present situation, such an approach would have exposed IIED to the potential criticism that it was using national partners simply to collect data. Such a rigid approach might also have been inappropriate given the extreme diversity of conditions for PWS in the participating countries. However, a facilitated attempt to establish a typology of sites and to characterise them with the full participation of the leaders of the national studies might have resulted in greater analytical rigour in dealing with the wealth of information generated by the project. The overall conclusion is that an excessively rigid approach to this project could have been highly counterproductive, but that a slightly more quantified and typology-based approach might have enabled the project to produce more generalisable outcomes. The objectively verifiable indicator that “Policy initiatives and programmes reflect hydrological findings on effects of land use on watershed services” and the assumption that “Hydrological information allows some generally applicable policy relevant conclusions to be made...” (from the project log frame) imply a more rigorous research methodology and were not satisfied. *Rating 7.*
- G. Technical backstopping by IIED: although IIED is commended for having run this project with a light hand, there were a number of issues where more substantive technical oversight of work in the field would have yielded benefits. IIED was able to mobilise cutting-edge expertise on forest hydrology for its central project meetings and as part of its Project Advisory Group. The latter met three times, in Bangkok, London and South Africa. The PAG may have been under-resourced – it does not appear to have had enough impact on the national partners. It was clear that some national participants would have benefited from better access to current thinking on forest hydrology. They continued to subscribe to some of the persistent myths relating to the role of forests and trees in providing hydrological services. Diagnostic work by competent forest hydrologists, working in the field with the national partners, could have contributed to learning and to clarity of thought about desirable land cover outcomes. Assumptions about simplistic relationships between forest and tree cover and watershed performance continue to inhibit good decision-making, especially at the political level. The project would have made a valuable contribution if it could have encouraged more critical thought about land cover issues in participating countries. *Rating 6.*



- H. Scientific methods, tools etc: the capacity of the national partners to use specialised technical tools to support their analytical work was variable. For instance, none of the projects visited during this review had good GIS data sets for their field sites or digital elevation models (although in other partner countries, for instance St. Lucia in the Caribbean, South Africa and India, GIS data sets were used by the project). IIED could have played a stronger capacity-building role if it had been able to help its partners to develop better scientific skills and equipment. IIED itself is not strong in the use of such technical tools (spatial analysis, modelling, statistical or multi-variate techniques, etc.) and advances in this area would have required alliances with specialised agencies (university departments etc.). The budget for the project was probably inadequate for this. *Rating 5.*
- I. PWS models considered: the nature of the project was such that national partners were obliged to work with whatever PWS initiatives might exist in their country. The only exception was Bolivia, but even here the PWS system employed had been initiated by IIED's local partner in advance of IIED involvement. The learning that took place through the meetings amongst the project partners from the different countries has led to new thinking and innovative approaches and it is likely that these will be further explored by the project's local partners. The project has laid the groundwork for broader interpretations of how incentives and rewards for better watershed management might be provided. Further work to explore these options would be worthwhile but would only be possible under new projects – either of IIED or others. *Rating 7.*
- J. Site selection within countries: several interviewees commented that the sites selected within countries were eventually discovered to be less than ideal for the action research being undertaken. Some partners argued that this “revisiting of site selection” was integral to the approach of the project. As the work emerged, more interesting sites were discovered. Thus in the Caribbean, a watershed above a tourist resort in Tobago where some diagnostic work was conducted relatively late in the project would, with hindsight, have perhaps been a better site to focus on than the sites in Jamaica and St. Lucia that had been selected during the diagnostic phase of the project. An opportunity to exploit synergies by working with the Millennium Ecosystem Assessment at its sub-regional site in the Northern Ranges of Trinidad was also not exploited. In Indonesia, a site in Lombok that was identified in the diagnostic phase of the project was later abandoned even though it now appears that it had greater potential for PWS than the two Javanese sites finally selected. However overall, the selection of sites was satisfactory and the fact that some better choices were later identified in some countries was part of the learning process. *Rating 7.*
- K. Links with the diagnostic phase: the world of PES and PWS has moved on since the diagnostic phase was completed in 2002. A recent IIED draft report suggests that a majority of the sites identified internationally during that phase as having potential for learning on PES/PWS have since been abandoned by their promoters. New sets of sites are emerging and there has been considerable learning, by IIED and others, about the types of situations where PES/PWS might be appropriate. In many ways the action learning phase of the project has been a gradual evolution from the diagnostic phase. (China and Bolivia were always intended to be in the ‘diagnostic’ mode). The fact that the project learned and evolved was positive. If the action learning phase had stuck rigorously to a small set of sites that emerged from the diagnostic phase then several opportunities would have been lost. It was clear that many of the people interviewed did not see a clear distinction between the diagnostic and action learning phases and this is a positive indication. *Rating 8.*

- L. The need for outcome measures: an evidence base (see also issues B, C and F above related to the verifiers in the original log frame). Action research must be based on the collection of data and the measurement of the outcomes of interventions. The project was uneven in defining ways of measuring and judging the value of the outcomes of the various approaches to PWS. It appears that background or baseline information was rarely available in useable forms at the scale of watersheds. Baseline hydrological and livelihood surveys were conducted in India but in the countries visited baselines were not adequate to detect changes. *Rating 5.*
- M. Confirmation bias: a major problem with projects of this sort is that project executants are subject to strong incentives to conclude that the approaches being tested are the correct ones. There is still a strong presumption in the international policy dialogue that PES/PWS are going to be major instruments for both conserving environmental values and improving rural livelihoods – and this is in spite of the accumulation of considerable empirical evidence that the approach only works in certain rather special circumstances. There was an assumption implicit in the design of this project that it was going to enable the world to ‘learn how to do PWS’. Instead it has shown that PWS is just one tool in the toolbox, and one with limitations and quite a narrow potential for widespread application in the short term in developing countries. The partner countries differ in the nature of their conclusions. Indonesia and Bolivia are probably too optimistic in their expectation for PWS and need to moderate their positions somewhat. The Caribbean may be too cautious. In India the project had to operate in an environment of considerable scepticism about market mechanisms and it took time to engage partners in the debate. In the closing months of the project there is a need for some serious examination on the overall message. At present the general tone of some communications (‘FLOWS’ for instance) is still insufficiently cautious. The project advisory group included some healthy sceptics and overall this project has been objective. It has served to introduce a strong dose of realism into the international discourse and has avoided the confirmation bias that has coloured the work of some advocacy organisations. *Rating 8.*
- N. Risk of downplaying need for zoning and regulation: the PES/PWS agenda is at least partly driven by the same motives as ICDPs and other approaches to resolve conservation and development trade-offs by non-regulatory means. There is a danger in conveying the message to policymakers that good environmental outcomes can be achieved without taking hard decisions. Zonation and regulation are tried and tested approaches to conserving watersheds. These approaches often do not work very well in situations or countries with weak institutions. These same institutional weaknesses also make PES/PWS schemes difficult to apply. In the sites visited in Indonesia, Bolivia and the Caribbean I felt that the messages emerging from the projects did not give enough emphasis to the need for hard decisions on using regulatory approaches to upland land use. Apparently the work in India, China and South Africa gave greater attention to more conventional regulatory mechanisms for watershed management. *Rating 6.*
- O. Project leadership: one has the impression that at the time that the diagnostic phase of the project was initiated its leaders at IIED were strong advocates of PES/PWS. As the project evolved the leadership changed and was more focussed on process. There was a more neutral position and caution in advocating any particular vision of the role of PWS. Other PES initiatives in other organisations have suffered from excessive advocacy of PES in the face of emerging evidence that argues for caution. My feeling is that on this issue IIED has got it right. Communications from the present lead researcher have reflected the lessons that have emerged from the project. The level of advocacy now needs to be upped to ensure that communications of the project’s final findings to broader audiences are delivered with force. *Rating 9.*

- P. Continuity of staffing: the project has undergone changes in its leadership – both at IIED in London and in some of the partner countries (the Caribbean and South Africa especially). This may have incurred some cost in lost institutional memory but overall the fact that the renewal of personnel has been managed in ways that have not caused disruption is a sign of the strength of the project and the institutions working on it. The renewal of the staff may even have reduced barriers to changing opinions on critical issues. *Rating 8.*

### **3.1.2 Communication and dissemination of results**

- A. Communication amongst project participants and cross-site visits: partners in the project were spread over 4 continents, several time zones, and used a variety of languages. Getting all of the diverse people involved to communicate effectively in a single action research framework was an ambitious undertaking. However the major selling point of this project was that it would get the issue of PWS firmly established in the global policy discourse and would mobilise a multiplicity of views. A lot of communication has occurred amongst all participants but probably not enough. Interviewees varied in their knowledge of the activities, issues and lessons from other sites. In general I felt that project executives had not invested enough time in reading the reports from other partner countries. It was clear that face-to-face communications during the project meetings and study tours had been far more effective in building shared learning. The fact that most of the meetings were held at the central location of IIED UK in order to save on travel costs was understandable but regrettable. The study tours to Costa Rica and the meeting held in South Africa clearly provided much learning, and it is regrettable that it was not possible to get leaders of all the national teams to spend quality time on the ground with the other national partners at their field sites. This would have probably added about 10% - 15% to the overall cost of the project but this would have been money well spent. *Rating 8.*
- B. Action learning groups and national learning: national partners have been variable in the extent to which they have effectively engaged with the policy discourse within their own countries. It was easier to form an opinion on this in the countries that I visited. In the Caribbean, CANARI appears to have been very effective in using its action learning groups to review, reflect upon, and communicate its findings to the broader policy community. In the Caribbean, the CANARI process appears to provide the main regional forum for discussions of PES/PWS. In Indonesia, a lot of effort has gone into advocacy for PWS to government policymakers but the policy process in Indonesia is rather opaque and difficult to understand or influence. I was struck by the fact that the staff of international agencies potentially interested in PWS showed rather little awareness of the project. The Indonesian process was more one of advocacy addressed towards government agencies in Jakarta and Bogor rather than one of debate amongst practitioners. In Bolivia, Fundación Natura has made major efforts to engage with policymakers in the Santa Cruz area and is leading a process amongst those people; it has had less influence at the national level. Interviewees held the view that the IIED project had led the policy-making process in South Africa. Influencing policy in China and India is clearly a more challenging undertaking but interviewees suggested that even in these difficult countries the IIED project had been “punching above its weight” in the policy arena. The learning from the study tour to Costa Rica for project participants is generally thought to have generated valuable contributions to the policy discourse in partner countries. *Rating 8.*
- C. Reporting of results: the project has produced a large number of technical papers. Most of these are readily accessible from project websites. I was unable to review more than a small proportion of all of the papers in the time available. My impression, supported by

my questionnaires and interviews, was that many of these reports may have had limited readership. At the time of writing, the synthetic country reports are still not available and these should be the main vehicle for communication to wider audiences. Some of the policy briefs that have been produced – for instance on the Winrock website for the Indian study – contain more background information on why and how the project was undertaken than accounts of the lessons learned. An early draft of a sequel to *Silver Bullet or Fools' Gold?* by Porras and Grieg-Gran provided a valuable synthesis of both the learning from the project but also from the authors' assessment of international initiatives in general on PES/PWS – this has the potential to be a major high-impact publication. It is clear from interviews and the questionnaire that most of the effective communication has occurred during face-to-face meetings. IIED has been able to exploit a series of events sponsored by UNEP and Forest Trends in getting its message across and may have contributed a disproportionately high share of the empirical material that has been debated at these events. The fact that representatives of IIED's national partners have been able to attend these events has been a very positive outcome of the project. *Rating 7.*

- D. 'FLOWS': 'FLOWS' is an electronic newsletter on PWS produced in Washington by Sylvia Tognetti and financed by IIED and the World Bank. It is circulated to a mailing list of about 900 people in English and Spanish. (An Indonesian version of some of the 'FLOWS' issues has been produced.) 12 editions of 'FLOWS' have been produced. 'FLOWS' is not owned by IIED and it is designed to meet the needs of a wide constituency of people concerned with PWS. The work of a number of other projects and initiatives are flagged in 'FLOWS'. To a large extent, 'FLOWS' owes its continued existence to the support that it has received from IIED and it has been used effectively by IIED to disseminate the results of the IIED project. 'FLOWS' is at present undertaking a review of its readership and their perceptions of its values. *Rating 8.*
- E. Websites: each of the national partners has established a website to communicate its PWS work. In general these function well and provide a useful way of accessing information. *Rating 7.*
- F. Opportunity for peer-reviewed publications: no publications in the peer-reviewed literature have yet emerged from the project. It could be argued that it is not the role of a project of this sort to contribute to basic science. However I feel that an opportunity will be lost if the rich findings of all of the action research do not find their way into the formal literature. A lot of the grey literature that has been produced by the project will have a short shelf life and will not be accessed by some important groups of constituents – North American academia for instance. In addition, the challenge of getting synthetic papers through a process of peer review would help to focus the minds of both IIED and its partners' staffs and might increase the rigour of the analysis. Some of the project publications are excessively anecdotal and require the challenge of a peer-review process. *Rating 5.*
- G. IIED's profile as an international leader on PWS: amongst PWS insiders IIED is seen as an important player. It is not seen as the undoubted leader to the extent to which the quality of its contributions would merit. Thus some interviewees commented that IIED was doing the work and other organisations with higher international visibility were getting the credit. In terms of the ultimate outcomes of the project this may not matter – as long as the results feed into the process then success has been achieved. However, its relatively modest profile may put IIED at a comparative disadvantage in securing further funding for work on the issue. *Rating 8.*

- H. 'Shedloads' – television coverage. A television documentary film funded by the project and based upon its field work was commissioned from the Television Trust for the Environment<sup>1</sup>. The technical quality of the production is good and it has been aired on BBC World to broad international audiences. It does not appear to have been given sufficient promotion in the partner countries. The only version available in Bolivia was dubbed into English in spite of the fact that it was filmed in Spanish and it has not been shown on Bolivian national television. A Spanish version has, however, been broadcast in Central America. An Indian documentary 'Lake Matters' – based on 'Shedloads' – has been produced and is said to have been influential in India; information on its broadcasting was not available. *Rating 8.*
- I. Comparisons with other PWS initiatives – RUPES etc. The only other major international initiative on PWS that is similar to the IIED PWS project is RUPES. This is a project funded mainly by IFAD and implemented by ICRAF. It operates only in the uplands of Asia and has a longer duration than the IIED project. It takes a more scientific approach to the problems and has been more rigorous in its approaches to measuring watershed performance and in applying state-of-the-art knowledge of forest hydrology. IIED and RUPES communicate well, with reciprocal representation on advisory groups and at meetings. There are synergies between the projects and these are being exploited. RUPES has probably had a somewhat lower profile in the policy arena than IIED. IIED has performed well in exploiting its areas of comparative advantage *vis-à-vis* ICRAF and RUPES. *Rating 8.*
- J. Impact on the global policy discourse: there is general agreement amongst all those interviewed that the project has had significant impact on the international policy discourse on PES/PWS issues. Some persons interviewed felt that with better communications and more targeted messaging this impact might have been greater. There was a feeling that IIED's visibility and profile in international discussions may not have been as great as should have been possible given the resources of the project. It appears rather that by feeding new information, analysis, and practical experience into the processes, IIED achieved its influence in a low key manner. IIED made a valuable contribution by enabling its national partners to be represented at international events. A "community of practice" has been built and it would be desirable that some way might be found to maintain its activity. *Rating 8.*
- K. Practical impact in the partner countries: if impact on the global discourse was modest, key impact within the countries has clearly been very significant. Most respondents to the questionnaire, and most people interviewed within these countries, clearly thought that the IIED project had been the main process for exploration and development of PWS-type mechanisms in their countries. In several countries there was evidence of government uptake of ideas and programmes based upon the IIED work. Several interviewees commented that the concept of PWS had been virtually unknown in their country before the IIED activities began. *Rating 9.*
- L. Follow-up – the Bellagio meeting: in all of the partner countries some follow-up work is planned by the local partners or by government institutions. Some of this work is already funded from non-IIED/DFID sources; other partners are actively seeking funds elsewhere. National governments are supporting follow-up work in some countries and may do so in all of them. A project being initiated by WWF/CARE with DANIDA funding is picking up where IIED is leaving off in several countries (with some IIED involvement). The IDB is beginning PWS work in the Caribbean, as is CIDA in Indonesia, and other donors seem likely to support work in other countries. Nonetheless, some national partners who have embarked upon valuable programmes may now suffer from a lack of

---

<sup>1</sup> A United Kingdom-based organisation that produces television documentaries on environmental issues for free distribution in developing countries.

continuity of funding. Fundación Natura (Bolivia), IIED, CIFOR and other participants in this project have secured support from the Rockefeller Foundation and DGIS (Holland) for a high-level meeting at the Bellagio Centre in Italy on PWS, and the work of the IIED project will clearly provide much of the input for that meeting. The Asian partners in the IIED project are planning a meeting to discuss follow-up in early 2007 in Bogor. *Rating 9.*

- M. Exit strategy and IIED follow-up: although a lot of good follow-up is occurring this is somewhat *ad hoc* and the absence of a clear exit strategy from the original log frame was a weakness. *Rating 7.*
- N. The need for a clear, well-communicated policy message: this review has been based upon the very wide range of documents that have been produced during the project. The final reports have not been available except in their earlier drafts. Similarly, no single synthetic report of the main lessons learned is yet available. Much of the learning from the project was systemic and experiential; however there is a need and opportunity for a report aimed at wider audience of policymakers and others who were not directly involved in the project. There will be a need for both a full synthesis of findings and also for a policy brief aimed at decision-makers. This material will need to be communicated in different ways – for instance at side events at COPs etc. of the MEAs etc.

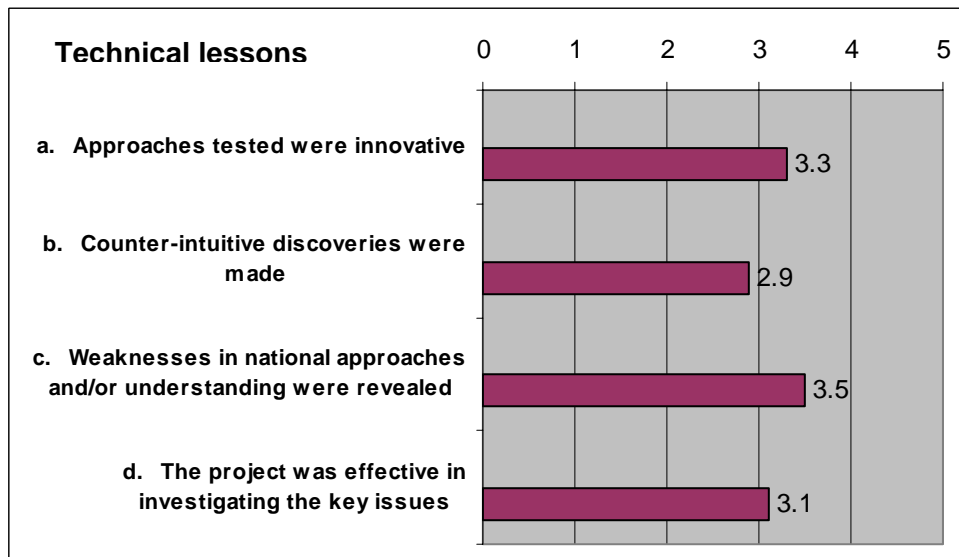
### **3.2 Results of the questionnaire survey**

The questionnaire was circulated by email or provided in person during interviews to 30 people who had been involved in the project, or who by reason of their professional activities had views on the conduct of the IIED PWS project. 14 responses were received and are presented in the following summaries. The participants had varying degrees of interest or direct involvement in the project and they do not constitute a valid sample whose responses could be submitted to statistical analysis. The quantitative assessments – parts 1, 2 and 3 of the questionnaire – almost all received favourable scores but this was to some extent an artefact resulting from the vested interest of participants in awarding themselves self-evaluations – nonetheless the scores are in general consistent with the discussions of the issues that have been presented above.

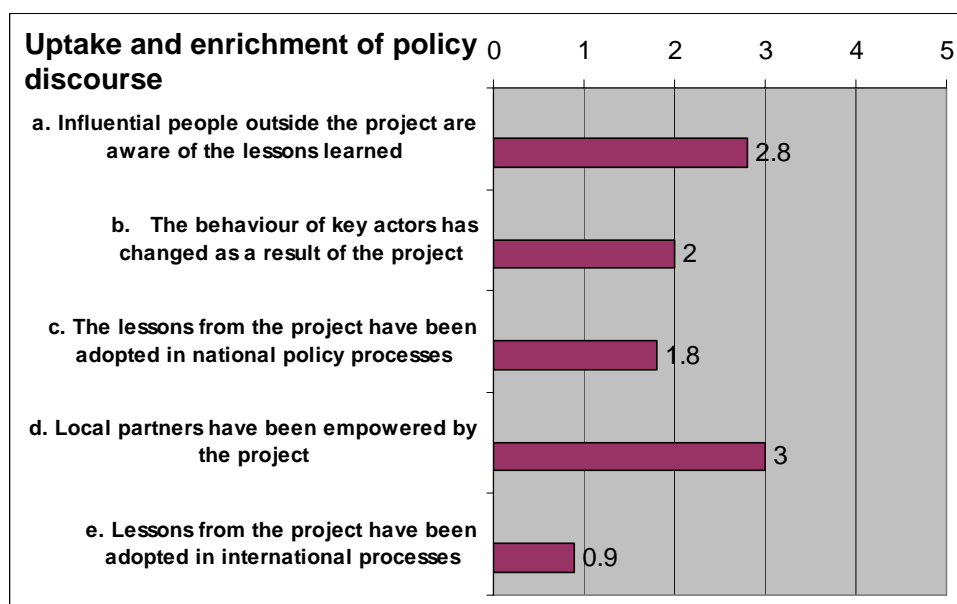
**Figure 1: Analysis of questionnaire results, project process**



**Figure 2: summary of questionnaire results, technical lessons learned**



**Figure 3: summary of questionnaire results, uptake and enrichment of policy discourse**



The second part of the questionnaire allowed respondents to give unstructured responses to six questions. These were:

1. What was learned from the project?
2. How might the project have been better designed?
3. Have any opportunities for adoption been missed or not adequately exploited?
4. Did other issues impact on the effectiveness of the project?
5. Are there other similar projects that had more or less impact?
6. Who are the other major players in this area? Has IIED worked effectively with them?

The following is a selection of the responses to these questions:

1. What was learned from the project?
  - There are two major drivers that move the PWS or eco-compensation in China, which are different from most international experiences. One is the supply-side upstream government/communities. The other is the higher level of government control.
  - Most eco-compensation programmes have no livelihood impacts at the household level but might have welfare impact at the regional level, which might also be unique in China.
  - Property rights issues underlie the role of government and market in PWS. Our study shows that government's dominance of PWS schemes in China results from two major reasons. One is the ambiguity of property rights of the land or forest which provides environmental services. The other reason is that the Chinese government is a powerful government with plenty of resources (financial/institutional/political) at its disposal.



- The market has a role to play where the watershed is relatively small, involved parties are limited, services could be well-defined, and the demand-side downstream party has a clear willingness to pay. Large public schemes are facing financial constraints and other limitations in China.
- Linkages between upstream users/protectors and downstream beneficiaries (or victims) are very complex.
- Willingness to pay for environmental services is not motivated by environmental considerations but largely by financial savings imperatives.
- Projects of this nature must take more account of specificities of countries and regions (*Caribbean*).
- Property rights and environmental regulations need to be well-defined and enforced (which they aren't in South Africa).
- Small, focused, unsophisticated mechanisms are more likely to succeed than complex, sophisticated PES mechanisms.
- Government support and understanding is essential.
- A serious lack of economic and hydrological data limited the accuracy and relevancy of the study. I believe if the 'real' costs and benefits (in terms of quantified water released) can be accurately estimated, and an estimate of the transaction costs can be determined, then a big leap forward can be made in the implementation of PES.
- On a cross-country level, I think the radically different experiences/philosophies of partners precluded a common starting point. Conclusions and methodologies varied widely, reducing the effectiveness of cross-country project lesson learning.
- In the case of India, no such study on PES had ever been done before to the best of my knowledge. So it offered a completely new way of looking at old problems.
- There were implicit PES-like examples available on the ground already (though not stated in those exact terms) which this study helped to uncover and build on (*India*).
- A key initial learning from the scoping phase in India was that markets or payments for PES would probably not be the silver bullet on their own; they need to be complemented by other mechanisms. What is really needed is the right mix of government regulation (e.g. taxation systems) + informal community/incentive mechanisms based on existing social norms of give and take + market-based systems, which are configured in a way that yields positive outcomes on the ground. For example, an effective and well-directed taxation system could arguably, in some cases, be more effective and efficient than an artificially-constructed and externally-imposed PES system.
- Danger of creating unrealistic expectations/'monetising' of goodwill among rural communities.
- Better understanding of national issues and problems.
- Better identification of who the key players are. This is very much dependent on the stakeholder and country in question – e.g., in Indonesia an important lesson is that transactions and management can in fact take place without heavy involvement/oversight of government (whereas this would barely seem a lesson elsewhere). Please see Indonesia country report for a full appraisal of lessons learned in that context.

- Internationally, many of us who started off as either extremely sceptical or extremely positive about the PES concept have developed far more nuanced understandings: of dependence on context, interplay with non-economic incentives and systems for land management, and so on.
  - A real strength of the project has been avoiding too much over-determination from the centre – countries have very much gone their own way, appropriate to country context, and yet at the same time there has been good inter-country learning via the regular project meetings.
  - Institutions matter at local level and their presence and interest impacts project outcomes.
  - Exposure visits can play a major role in orienting local stakeholders.
  - The interplay of scientific and local knowledge is useful in determining what activities to pursue and where to pursue them.
  - Intermediary organisations are required for facilitation of payments (upstream-downstream transaction).
  - PES as trigger for accelerating local dynamics (social, economic and ecological).
  - PES cannot ignore needs of local people other than conservation.
  - PES implies education and empowerment.
2. How might the project have been better designed?
- For a diagnostic study, more efforts and resources could be put on the collection and review of the existing PWS-like cases – as many as we can find. It seems that the intensive point case study claims too many resources compared with the non-point extensive review and field visit.
  - If the project period is long enough, we could have an adaptive management of the project, i.e., change something substantially as the diagnostics proceeds.
  - There are two ways to set up a research partnership for the project. One way is that IIED organises a partnership and appoints a national leader. This is the present way. The other is to find the leading member first and ask the leading member to organise the partnership. The advantage of the second way is that there will be a close partnership and it allows the leading member to co-ordinate the partners more effectively.
  - Better selection of watersheds, with clearer identification of downstream beneficiaries with an inbuilt self-interest in upstream protection and an ability to pay (*Caribbean*).
  - Seed money for testing actual incentives (*Caribbean*).
  - The project did not foresee the deeper involvement of the private sector, especially tourism (*Caribbean*).
  - I believe it was very well-designed. It is only disappointing that nothing was actually implemented, but I don't think this was any fault of the project design. I believe that the timing for implementation is just wrong due to the land reclamations currently going on (*South Africa*).
  - More emphasis might have gone to making the government realise that its goals of poverty alleviation and economic growth will not be compromised by PES. I believe that to get anything implemented requires government buy-in (understanding and support) from the very beginning, which I do not think was the case here (*South Africa*).

- An assumption was made that the Caribbean was ready for adoption of PES; this readiness was not established beforehand.
- The project might have sought to identify other similar global/regional market payment schemes and assessed their effectiveness in the Caribbean context.
- Partners ranged from a for-profit ex-government department (S. Africa), to a large academic research institution (Caribbean), to a small project implementer (Bolivia). This range was too much. Partners thus had little in common, and found bilateral lesson-learning difficult.
- Despite the abovementioned range, most partners had a background in research. They thus performed the research component of the project excellently, but were unsuited to the implementation phase. A different mix of partners, or ensuring that local research partners were accompanied by implementing partners, may have alleviated this problem.
- Research was fine, but the implementation of the pilot phase seemed somewhat strange to me. As we have learned in Los Negros (and many others have learned in projects around the world) it really takes a commitment of 3 plus years to get projects up and running. The pilot implementation, without planning and funding for future follow-up, at the best seems likely to unnecessarily raise expectations, and at worst detrimental to the PES concept.
- Design for the scoping phase was generally ok – being open-ended and an entirely new idea it offered considerable flexibility.
- Should have involved some more key players at national level, i.e., SEPA (*China*).
- Better involvement of local NGOs (*China*).
- An action learning project on such a complex topic needs a much longer time frame – it seems a terrible waste to abandon financial + international support to the country projects just as they are beginning to flower. A project like this should be 5-10 years minimum.
- One assertion with which I would previously have agreed but no longer do, is that the project would benefit from greater emphasis on scientific investigation of the links between hydrology and land use. In my experience during the project, buyers of services and government policymakers do not demand this evidence – only scientists and international commentators ask for it. The utility of scientific evidence will probably only kick in once schemes are better developed.
- Initially at least there was a big problem in communicating a complex concept through a long chain of project participants: international PES thinkers and theorists – IIED project co-ordination team – national co-ordination teams – local-level implementers – sellers of PES – buyers of PES. The project could perhaps have benefited from more IIED time on the ground in the various countries (but IIED staff time is very expensive, so was curtailed to keep the project more cost-effective).
- At a national level we sometimes floundered in finding quality hydrological expertise. Looking back, occasional technical hydrological advice would perhaps have been useful. This may have been more our need; countries like South Africa which have good hydrological expertise probably didn't face such issues (*India*).
- Need good selection of potential buyers and sellers (water-dependent business).
- Need to lobby and intensively communication with key players.
- Respond to demand side of the buyer for watershed protection.
- Understanding of the regulations is helpful for design.

3. Have any opportunities for adoption been missed or not adequately exploited?

- It will be good if we build a stronger partnership with other major PWS players such as Forest Trends, especially in the dissemination phase of our project.
- Yes. It is believed very real opportunities now exist to implement PES in the Ga-Selati River catchment as many of the land claims previously preventing this from happening have recently been settled.
- Previous high-ranking managers at the Lapelle Water Board, who were 'old-school' in their approach to water management, are expected to be retiring soon and possibilities may present themselves to get this large and very significant stakeholder to be proactive and supportive of PES in the region (*South Africa*).
- The results of the project have not been fully incorporated into the international PES dialogue. Given how much has been invested in this project, and IIED's leadership in PES research, IIED should be the globally-recognised world expert. It is not. Other NGOs and newly created PES support groups such as the Katoomba Group are leading the global agenda, while IIED's contribution is rarely recognised. IIED could usefully improve its outreach strategy.
- Too early to say.
- Certainly – there is massive space for scaling up and out. Also, the current schemes are new and fragile and probably need a bit more deft support.
- Nationally – should have chosen a macro-site in Himachal Pradesh as well (*India*).
- Options on strategy to mobilise conservation funds; say through tax, service fee, water bill collection, CSR, environmentally-sound credit, etc.
- Need to initiate issuance of implementing regulation on collection of water resources management services fee.
- Need to institutionalise process of the PES scheme is not adequate (no time, no budget).
- Need to scale up process and formalisation of the scheme in (local) government procedure.

4. Did other issues impact on the effectiveness of the project?

- The budget is limited, which hinders more field trips both within and outside China.
- The lack of political will of the Department of Water Affairs and Forestry to bring about changes was, and is, a significant barrier to adoption. Continual awareness and education campaigns promoting PES are essential to changing this (*South Africa*).
- As reflected in the choice of partners, IIED never seemed to know how much a focus it wanted on: 1) an analysis of if, how, where and when can PES work? and/or 2) how can PES fit into wider watershed management strategies? At the 2005 London meeting, some participants requested an expansion of the project to be an analysis of how 'PES-plus' – using non-market tools as well as PES – can be used to manage watersheds. These partners were seemingly oblivious of the fact that the world has been using non-market tools to manage watersheds for generations, and that the PES component is the 'plus' that it is innovative to investigate. Unfortunately, IIED never cleared up the confusion or focused the project on what was truly innovative. Perhaps IIED was too 'participative' with the partners.

- Lack of funds limited the scope and extent of the research especially at provincial level (*China*).
  - Most project partners were over-committed and could not provide the necessary and timely input (*China*).
  - One interesting problem that has emerged is that the project is meant to ‘test’ PES – i.e., the project implementers take a neutral, objective stance to assess the effectiveness of schemes – but in practice setting up a PES scheme means that you have to get stakeholders interested – in short, you have to ‘promote’ PES. The balance between testing and promoting was, I think, quite a challenge for country teams.
  - Continuity is important. Many changes in local staff occurred in one site in India.
  - Supply demand (water problems) encourages buyer of the services to allocate fund.
  - Good facilitation on the ground (people-centred development).
  - Integration of the project into income-generating activities.
5. Are there other similar projects that had more or less impact?
- The China Council for International Cooperation on Environment and Development (CCICED) launched a similar action research project on PES (called eco-compensation in China). It is also based on case studies and aims to disseminate their research findings to policymakers. They held an international conference on PES on August 24-25, 2006 and attracted government officials and the public as well.
  - I do not know of any that have had more impact than this one. There may be projects that are currently ongoing but due to their lack of impact I am unaware of them.
  - IIED has led the field in long-term, high quality PES research. Unfortunately, so far the project’s impact has been limited by insufficient outreach.
  - Katoomba and Forest Trends, while they had little/low quality research, have ‘sold’ their results very effectively and now are the leaders in the field with the highest impacts on decision-makers.
  - In Bolivia, this is the only PES research project and so is having high impacts.
  - Older existing examples in India, for example pani panchayats, sukhomajr<sup>2</sup>i, etc. provided some very interesting insights in terms of PES-like systems. But again, what is important is not by what name it is called, or which institution lays a claim for the credit for the idea, but what positive outcomes these are actually able to deliver on the ground, and how they can be successfully scaled up.
  - No other projects at present with a strong focus on PES; impact can only be measured in the long term! (*China*.)
  - RUPES – in the Indonesia case this has not been a matter of ‘more’ or ‘less’ impact but instead very complementary activities. There has been an interesting complementarity between the RUPES approach to site selection based on ‘scientific evidence’ and the IIED-LP3ES approach based on ‘willing buyer’. The RUPES and LP3ES teams have also worked well together on seminars, translations and publications.

---

<sup>2</sup> Traditional community management systems in India.

- Other such projects are just being explored in India at present.
- WWF (Consortium WWF Netherlands-CARE International and IIED).
- Environmental Services Program-USAID.

6. Who are the other major players in this area? Has IIED worked effectively with them?

- Since I have only been involved in the project for the last 4 months, I am not fully aware of all the players that the IIED worked with over the 3 years of the project. Below are two very important players (other than government, which I have already mentioned) that I believe any future work should incorporate early in the process (*South Africa*).
  - I know the Development Bank of Southern Africa is very supportive of PES, and I see a possible role for the bank as an intermediary in the PES transactions that will definitely facilitate the process of implementation.
  - The major other players that are essential are the big industries and mines. Without their support and understanding (particularly because they will be the ones paying the money for the services, which they currently aren't prepared to do, or are very wary of doing, because water prices are going up and they are being charged quite heavily for wastewater discharges) PES will never work.
- The State Environmental Protection Administration (SEPA) of China is one of the major players in PWS in China. The Chinese project partnership has worked closely with SEPA, and helped shape its policy on PWS.
- Katoomba/Forest Trends: IIED has not maximised the potential of the relationship, though this may change at Katoomba's South Africa meeting next month.
- CIFOR and WWF are major actors and IIED has worked well with them.
- PES is still very new to China. On the other hand, there are many PES-like national projects under way which are usually regarded as either poverty alleviation or conservation projects and not considered or assessed as PES projects, even though they would fall under those criteria. As PES covers a wide range of topics and line agencies, there are many possibilities for future collaboration with major players, but it depends on where a project sets its priorities. IIED's first project was also an attempt to take stock of who is who and where they work. The next steps would be to select an appropriate future partner.
- Businesses that are potential buyers of PES – some good direct outreach to companies, e.g., in Indonesia, and internationally tangential engagement e.g., via Katoomba Group.
- Research-wise, RUPES (see above), WWF, CARE – good relationships.
- Forest Trends/Katoomba group – we presented project findings in the Katoomba Africa meeting at Cape Town in November 2006 (*India*).
- RUPES programme of ICRAF– IIED is a co-organiser in the RUPES workshop on PES in Jan 2007 in Indonesia, and represented in the steering committee.

## 4. Overall conclusions and recommendations

The project has been effective in addressing an important set of issues at a time when decisions were being made both nationally and internationally on PES/PWS-type mechanisms. IIED's work has provided a lot of the substantive input to an international debate where untested hypotheses and speculation were dominant. The project has made major contributions to understanding of PWS issues in all of its partner countries.

No serious deficiencies in concept, design, execution or communication have been identified. The budget for the project appeared at first sight high but given the ambition of the project and the inevitable high costs of multi-country research activities of this nature, the budget was justified and well spent.

A few weaknesses identified during this study were:

1. A failure to invest sufficient time and effort in getting all project participants to share the same conceptual framework and understanding of terms at the outset of the project.
2. This led to a suboptimal selection of sites – more strategic sites might have been found, particularly in India, the Caribbean and Indonesia.
3. The possibility of developing a typology of sites, or to use analytical tools to enable better cross-learning between sites, was not fully exploited.
4. The fact that it was not possible to rotate the project meetings around all of the partner countries – this would have strengthened cross-site learning and also enhance the national policy impact.
5. More intermediate synthetic communications aimed at audiences beyond the immediate participants in the project would have been valuable.
6. More technical specialists should have been deployed to support work at the field sites – for instance forest hydrology expertise was clearly lacking at a number of sites.
7. The project was very ambitious for the short time available.
8. A clear exit or follow-up strategy was lacking, although most partners seem to be self-organising to maintain their activities.

The main strengths of the project were;

1. The project responded to an urgent need to actually move beyond hypotheses and speculation and attempt to examine PWS in real-life situations.
2. IIED approached the issues in a very open-minded way and did not champion any pet solutions or views.
3. IIED constituted a genuine multi-national team that worked and learned together – it did not impose its own views of desirable outcomes on the national participants.
4. IIED's facilitation was skilful and of an appropriate intensity.
5. Local partners were empowered by their involvement in the project.
6. Counter-intuitive findings, or at least findings that ran counter to conventional wisdom, were made and effectively communicated to various policy discourses.
7. In spite of the short period available for the project, a lot was achieved in quite difficult situations and the project did move the international policy discourse forward.

8. A far greater realism now exists amongst those concerned with watershed protection about the situations where market mechanisms may be used and those where such mechanisms may not be appropriate. There is greater understanding of the range of market mechanisms that may be deployed and of the need for a diversity of forms of regulations, compensations mechanisms, and incentives.



## **Appendix 1: Terms of reference**

### **Developing Markets for Watershed Protection Services and Improved Livelihoods**

#### **1. Background to project**

##### **1.1 Project development:**

In October 2001, IIED embarked on a project to explore the potential of market based approaches to maintain watershed services that support local livelihoods. Diagnostic reviews of markets for watershed services were carried out in the Caribbean (Grenada, Jamaica, St. Lucia, Trinidad), India, Indonesia and South Africa<sup>3</sup>. These diagnostic studies paved the way for a three-year action-learning project 'Developing markets for Watershed Protection Services and Improved Livelihoods'. The purpose of the project is to 'increase understanding of the potential role of markets mechanisms in promoting the provision of watershed services for improving livelihoods in developing countries'. The project is financed by the UK Government Department for International Development (DFID). Project activities started in October 2003. The original date for the completion of the project was September 2006. IIED has however secured a no-cost extension from DFID up to 31 December 2006.

##### **1.2 Project methodology:**

IIED is enabling country-based partners to pursue programmes at field sites in India, Indonesia, South Africa and the Caribbean. At these sites, country partners and IIED are taking an 'action-learning approach' to develop schemes for payments for watershed services (PWS). These sites are providing IIED and its partners an important opportunity for real-time learning about the process of developing payments for watershed services and their potential impact on the poorer residents of the watersheds. In Bolivia and China, project partners are assessing the potential for PWS through a series of diagnostic studies. Within each country, learning groups have been set up to allow stakeholders to compare and disseminate lessons to policy makers. At an international level, country partners, together with IIED have compared experiences and extracted lessons at annual project advisory group meetings.

In both the action-learning and diagnostic country sites, the approach and specific activities taken up reflect the unique circumstances within that country. In the action-learning countries there is a broadly similar approach that involves:

Developing a core research team as a partnership between IIED and a locally based organisation. In order to establish a field presence within the selected action learning sites, additional partnerships between the core research team and local field-based organisations were developed in each of the countries.

Selecting sites and initiating the facilitation of payments for watershed services. In Indonesia and the Caribbean the watersheds and the location of the sites within the watersheds were identified during the diagnostic studies. In India and South Africa, the teams introduced an additional stage in which preference criteria were drawn up and used to select the case study areas from a larger pool of sites. At some sites (in India and Indonesia), the core team formed partnerships with ongoing initiatives. At other sites, however, the research teams had to initiate the process of stakeholder engagement largely from scratch.

Supporting payment facilitation with a series of studies on land use – hydrology relationships and livelihoods at all the project sites. These studies are important in building a comprehensive picture of the key issues at each site. These studies sought different degrees of participation with stakeholders, depending on the context, the scale of the issues, and the skills available.

---

<sup>3</sup> Diagnostic reports available at: [www.iied.org/forestry/research/projects/water.html](http://www.iied.org/forestry/research/projects/water.html)

Forming and facilitating ‘learning groups’ to reflect on the lessons learned from the site-level activities. The learning groups typically comprise a range of stakeholders from government, civil society and, where possible, the private sector. Some partners have supplemented the learning groups with a combination of targeted seminars, exchange visits and other strategies aimed at engaging with particular groups.

### 1.3 Project Finance:

The total cost of the project is £2.148 million over three years (see Table 1).

**Table 1: Project budget by year and output in Pounds sterling (source: Project document)**

Output	FY 03/04	FY 04/05	FY 05/06	FY 06/07	Totals
1. Action learning in 4 countries	232,092	357,183	452,183	127,092	1,168,550
2. Diagnostics in 2 further countries	57,983	125,567	122,867	15,283	321,700
3. Methods, tactics, policy community	88,958	219,617	211,917	117,258	637,750
4. Evaluation				20,000	20,000
Totals	379,033	702,367	786,967	279,633	2,148,000

## 2. Tasks for evaluator

This document sets out the terms of reference for the project evaluators. It is proposed that the evaluation will be conducted between July and October 2006.

The primary purpose of the evaluation is:

- To assess the project’s performance, achievements and impacts in relation to its stated goal, purpose, outputs and activities.

More specifically, the evaluator will assess, and give roughly equal attention to each of the following four tasks:

### 2.1 The project design for addressing the stated goal, purpose and outputs:

The evaluation will review the initial design of the project. In particular the evaluator will assess the internal logic and ‘quality of entry’ of the project, its purpose, outputs, objectively verifiable indicators and their means of verification. This will include explorations of appropriateness, specificity, efficiency, creativity, innovation, flexibility and political timeliness of activities and institutional relationships. The evaluator will also assess the project’s collaborative approach and ‘action-learning’ methodology.

### 2.2 The project’s performance and achievements:

The evaluator will assess the extent to which the project has performed in terms of the stated purpose, outputs and indicative activities set out in the project document. The evaluator will therefore assess the extent to which the project has achieved the project output and purpose in relation to the stated objectively verifiable indicators. The evaluators will also identify and assess the indirect and ‘spin-off’ achievements and impacts of project activities – the evidence of changed discourse, levels of engagement and relevant activity catalyzed.

### **2.3 Project implementation, management and administration:**

The evaluator will assess the implementation of the project by IIED and the country level project partners. Specifically the evaluators will assess:

- How effectively and efficiently IIED coordinated and led the project.
- The capacity of IIED and its key partners to implement the project.
- Collaboration between IIED and partners, and amongst partners, through the project
- Project administration, including finance, by IIED and its partners.
- Reporting within the project and by IIED to DFID on the progress of the project.
- Response and adaptation to changing circumstance through the project.

### **2.4 Lessons learned:**

An interim set of lessons about payments for watershed services stemming from the project is contained in a December 2005 draft document: 'Fair Deals for Watershed Services. Learning from new attempts to develop payments for watershed services that benefit livelihoods'. The evaluator might consider for example: How robust are these lessons? How transferable are these lessons to other sites and countries?

### **3. Evaluation recommendations:**

Based upon the review of the project design, its achievements and the assessment of implementation and lessons learned, the evaluator will make recommendations to DFID, IIED and its partners as appropriate, and including:

- Comments on the activities to be completed before the end of the project.
- Comments on the scope and the future direction of their involvement in payments for watershed services and their impact on livelihoods.
- The appropriateness of the collaborative action-learning approach to payments for watershed services.

### **4. Evaluation methodology:**

The evaluation will take place between July and October 2006. The evaluator will provide independent opinion and assessment. The evaluator will have the assistance of the lead adviser for the project at DFID and IIED staff to:

**4.1 Undertake a thorough review of all the project documents and communication products.** This will include the work plans agreed between IIED and its partners, project, country and site specific reports. The evaluators will review the websites of the partners developed using funds from the project.

**4.2 Review 2004 and 2005 Annual Project Reviews submitted to DFID (Prism Reports)**

**4.3 Identify and visit at least two action-learning partners and at least one diagnostic country partner.**

It is expected that the country partners will facilitate site level visits for the evaluators. With the assistance of the country partners the evaluators will also interview representatives of the action-learning and diagnostic country partners, members of the learning groups, site based partners (where appropriate) and other stakeholders with interest in payments for watershed services.

**4.4 Using the experience from the site visits the evaluators will engage through email and telephone with the other project partners where a personal visit was not possible.**

**4.5 Identify a set of stakeholders from the global community interested in PWS.** A subset of these stakeholders will be contacted and interviewed.

**5. Time-frame for consultant:**

The evaluation will take place between [July?] and October 2006. Due to the global nature of the project, the evaluator is not expected to commit the budgeted time in a single block. An agreed timetable will be compiled by the project coordinator and the evaluators. The estimated input from the evaluator will be 20 days.

**6. Budget for consultant:**

The total cost of the evaluation will not exceed £14,400.

**7. Expected outputs:**

The evaluation of the markets for watersheds project will be presented in a single report. IIED and its project partners will receive a draft of the report upon which they will be able to comment. The consultant will consider these comments in the preparation of the final report.

The report should contain an extended executive summary that will be translated into Central American Spanish, Bahasa Indonesian and Chinese. The translations will be the responsibility of the consultant.

In addition, the evaluator will prepare an accompanying PowerPoint presentation that highlights the key findings of the report. The evaluator will present his evaluation to a meeting that will include: DFID representatives, the IIED Project Team and other selected IIED employees.

**8. Management and coordination of evaluation:**

The evaluation will be coordinated by IIED through the project coordinator (Ivan Bond) with the support of the Project Manager (James Mayers). The terms of reference and approach of the evaluator will be agreed in partnership with John Hudson of DFID who is the project's lead advisor in DFID (London). The evaluator's country and field visits will be coordinated by the lead persons from each of the project partners.

## Appendix 2: Questionnaire survey pro forma

### IIED Payments for Watershed Services Project

I have been asked by DFID and IIED to evaluate the recent IIED action research project on Payments for Watershed Services. I would very much appreciate any thoughts that you might have on the strengths and weaknesses of this project. In particular your views on the following specific questions:

For each of the following questions indicate whether you strongly agree (1), or strongly disagree (5), or give an intermediate score.						
	Strongly agree				Strongly disagree	No opinion
	1	2	3	4	5	
<b>1. The project process:</b>						
a. IIED has exercised leadership in this field						
b. The underlying concept as expressed in the logframe is sound						
c. The basic approach of the project was correct						
d. The project responded to a perceived need in the host country at the time that it was initiated						
e. Relations with local partners were good						
f. The relationship with local partners was equitable and beneficial to both parties						
g. The administrative management by IIED was efficient and effective						
h. The project has helped to build local capacity for this sort of work in the future						
i. National partners performed well in project implementation?						
j. IIED supervised and backstopped the project well						
k. The project was cost-effective						
l. Communications with other countries involved in the project were effective						
m. The web sites performed well and were useful						
n. Project meetings and the policy briefs were valuable						
<b>2. Technical lessons learned:</b>						
a. Approaches tested were innovative						
b. Counter-intuitive discoveries were made						
c. Weaknesses in national approaches and/or understanding were revealed						
d. The project was effective in investigating the key issues						
<b>3. Uptake and enrichment of policy discourse:</b>						
a. Influential people outside the project are aware of the lessons learned						
b. The behaviour of key actors has changed as a result of the project						
c. The lessons from the project have been adopted in national policy processes						
d. Local partners have been empowered by the project						
e. Lessons from the project have been adopted in international processes						

Other issues :	
a. What was learned?	<ol style="list-style-type: none"><li>1.</li><li>2.</li><li>3.</li><li>4.</li></ol>
b. How might the project have been better designed?	<ol style="list-style-type: none"><li>1.</li><li>2.</li><li>3.</li><li>4.</li></ol>
c. Have any opportunities for adoption been missed or not adequately exploited?	<ol style="list-style-type: none"><li>1.</li><li>2.</li><li>3.</li><li>4.</li></ol>
d. Did other issues impact on the effectiveness of the project?	<ol style="list-style-type: none"><li>1.</li><li>2.</li><li>3.</li><li>4.</li></ol>
e. Are there other similar projects that had more or less impact?	<ol style="list-style-type: none"><li>1.</li><li>2.</li><li>3.</li><li>4.</li></ol>
f. Who are the major other players in this area? Has IIED worked effectively with them?	<ol style="list-style-type: none"><li>1.</li><li>2.</li><li>3.</li><li>4.</li></ol>

Please send you reply to Jeffrey Sayer: [jsayer@wwfint.org](mailto:jsayer@wwfint.org)  
Or by mail to: Jeffrey Sayer, 107 Route de Lally, 1807 Blonay, Switzerland.

### **Appendix 3: Partial list of persons interviewed.**

(It was not possible to obtain the names of all of the people interviewed during the field visits as many meetings took place in large groups).

#### DFID, London:

John Hudson  
John Palmer

#### IIED, London and Edinburgh

Ivan Bond  
James Mayers  
Sonja Vermeulen  
Marianne Grieg-Gran  
Elaine Morrison  
Ina Porras  
Duncan Macqueen

#### International

Kirsten Schuyt – WWF Netherlands  
Sven Wunder – CIFOR  
Josh Bishop – IUCN  
Bruce Campbell – CIFOR  
Stewart Maginnis – IUCN  
Peter Frost – independent consultant – New Zealand

#### India

Chetan Agarwal  
Sandeep Sengupta

#### Bolivia

Nigel Asquith  
Maria-Teresa Vargas  
Henry Campero – WWF  
Peter Cronkleton – CIFOR  
Juan-Carlos Sauma – Water engineer  
Bruno Soliz – CIAT  
Jaime Crispe – FAN  
Arturo Moscoso – ICEA  
Olvis Camacho – Regional government  
Edwin Rocha – ICO-SCZ  
Marco Antonio Del Rio – UPSA  
Numerous local participants in meetings

#### Indonesia

Munawir – LP3ES  
Meine van Noordwijk – ICRAF  
Chip Faye – ICRAF  
Markuu Kaininen – CIFOR  
Boen Poernama and others – Ministry of Forestry  
Numerous local stakeholders

Caribbean

Sarah McIntosh – CANARI  
Nicole Leotaud – CANARI  
Angela Cropper – Cropper Foundation, Trinidad  
Dennis Pantin – University of the West Indies  
Sylvester Clauzel – Tourism consultant, St. Lucia  
Cletus Springer – Consultant, St. Lucia

South Africa

Russell Wise  
Nicola King

China

Jin Leshan – China Agricultural University  
Horst Weyerheuser – ICRAF



## Appendix 4: Key materials consulted

Comprehensive lists – most with text files – of the publications of the project are posted on the national websites of the partners and on the IIED website:  
[www.iied.org/NR/forestry/projects/water.html](http://www.iied.org/NR/forestry/projects/water.html)

The website addresses for the national partners are:

[www.naturabolivia.org](http://www.naturabolivia.org) (*Bolivia*)

[www.pesinchina.org](http://www.pesinchina.org) (*China*)

<http://www.canari.org/> (*Caribbean*)

[http://www.winrockindia.org/nrm/ap\\_dmwps.htm](http://www.winrockindia.org/nrm/ap_dmwps.htm) (*India*)

<http://www.lp3es.or.id/Pes/> (*Indonesia*)

[http://www.csir.co.za/plsql/ptl0002/PTL0002\\_PGE100\\_LOOSE\\_CONTENT?LOOSE\\_PAGENO=7237744](http://www.csir.co.za/plsql/ptl0002/PTL0002_PGE100_LOOSE_CONTENT?LOOSE_PAGENO=7237744) (*South Africa*)

In addition, IIED and its partners made early drafts of a number of other publications related to the project available for the review. They are not all listed here but they often provided the most up-to-date and thought provoking inputs.

The following project discussion papers were reviewed in the process of this evaluation:

IIED (draft) *Fair deals for watershed services. Learning from new attempts to develop payments for watershed services that benefit livelihoods*. Draft discussion paper. December 2005. IIED. London.

Geoghegan, T. (2005) *Challenges to establishing markets for watershed services: Learning from the country diagnostics*. Project discussion paper. June 2005. IIED. London.

Orrego, J. (2005) *The Plan Vivo experience with carbon service provision and the potential lessons for watershed service projects*. Project discussion paper. June 2005. IIED. London.

Published papers:

Frost, P. and I. Bond (draft) *CAMPFIRE and Payments for Environmental Services*. Submitted to Journal of Ecological Economics Special Issue on Payments for Environmental Services (accepted with changes).

Bond, I. (2006) 'Payments for watershed services and lessons learned from community based natural resources management (CBNRM)' in ETFRN. No. 45-46. Winter 2005/06.

Bond, I. (2006) 'Action-learning in practice: fair deals for watershed services' in ETFRN. No. 45-46. Winter 2005/06.

Other documents:

WWF (NL), CARE International and IIED (2005) *Equitable payments for watershed services. Phase 1, Making the business case*. Project submission to DGIS and DANIDA.

Workshop reports:

Frost, P.G.H. (2004) *Developing Markets for Watershed Protection Services and Improved Livelihoods*. Project Advisory Group Meeting. Amari Hotel, Bangkok, Thailand, 16 November 2004. Observations, Reflections and Suggestions.

Moinuddin, H. (2006) *Developing Markets for Watershed Protection Services and Improved Livelihoods*. One day IIED (internal) workshop. Friends House, London 8 December 2005. Workshop Report.

Bolivia:

Bustamente, R. and A. Duran (2005) *Servicios ambientales hídricos: análisis del marco legal y de políticas en Bolivia* (Translation: *Watershed services: the political and legal status in Bolivia*). Fudación Natura. Bolivia.

Molina, C. (2005) *Análisis del rol de la descentralización en la promoción de iniciativas de servicios ambientales hidrológicos*. (Translation: *The role of decentralization in promoting market mechanisms*). Fudación Natura. Bolivia.

Muller, R. (2005) *Priorización de cuencas Bolivianas para la implementación de sistemas de compensación por servicios ambientales (SCA)*. (Translation: *Analysis of where market mechanisms for watershed management may be appropriate in Bolivia*) Fudación Natura. Bolivia.

Caribbean:

Pantin, D. and V. Reid (2005) *Economic Valuation Study: Action Learning Project on Incentives for Improved Watershed Services in the Buff Bay/Pencar Watershed*. CANARI.

Cox, C. (draft) *Watershed Hydrologic Assessment and Management Regime Proposal for the Talvan Water Catchment Marquis Watershed, St. Lucia*. CANARI.

China:

Xiaoyun, L., D. Wang, L. Jin and T. Zou (draft) *Impacts of China's Agricultural Policies on Payments for Environmental Services*. IIED Project Desk Study II –The Study of Policies and Legislations Affecting Payments for Watershed Environmental Services.

Sun, C. and L. Chen (draft) *The Impact of Globalization on Land Use and Management and Payments for Forest Environmental Services in China*. IIED Project Desk Study III –The Study of Policies and Legislations Affecting Payments for Watershed Environmental Services.

India:

Winrock International (India) (2005) *Designing and implementing a communication strategy for mobilising resources for supporting wetland-friendly management practices in the catchment of the Bhoj Wetlands*. Final Report. Winrock International India.

South Africa:

Quibell, G. and R. Stein (2005) *Can payments be used to manage South African watersheds sustainably and fairly? A legal review*. Project paper # 3. CSIR. South Africa.

Visser, A. et al. (2005) *An analysis of the livelihoods of communities in the upper Ga-Selati Catchment*. Project paper #7. CSIR, South Africa.

Chapman, A. (draft) *Hydrology and land use in the Ga-Selati catchment*. Project paper # 8. CSIR, South Africa.

Other materials:

'Shed Loads – Paying to protect watersheds'. Six case studies of payments for watershed protection and New York Catskills/Delaware example (English, 120 copies; Spanish 50 copies; Bahasa Indonesian, 100 copies). Also broadcast on BBC World.

'Lake Matters': 23 minute review of the pollution problems and potential solutions in the Bhoj Wetlands, Bhopal, India.

CD of selected readings on watershed services (30 copies).