



# **Pro-poor Rewards for Environmental Services in Africa (PRESA)**

## **Annual Work plan and Budget for 2011**

**IFAD Grant No. 953**



# PRESA WORK PLAN (YEAR 4) 2011

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## Background

The **PRESA** programme (**Pro-poor Rewards for Environmental Services in Africa**) fosters the development of fair and effective agreements between modifiers of ecosystems services and beneficiaries if these services in the highlands of East and West Africa. It uses different tools, approaches, and methodologies to promote the development of agreements to contribute to poverty reduction and ecosystem conservation. PRESA also engages policy makers to ensure an enabling environment as well as the private sector to and sustainability of the reward mechanisms.

Overall PRESA seeks to: i) foster the development, implementation and assessment of workable environmental service agreements in three core and four associate landscapes in the highlands of East and West Africa, ii) catalyze policy support and private sector participation in environmental service agreements in Kenya, Tanzania, Uganda and Guinea, and iii) provide proactive and responsive support to the dissemination and application of assessment tools, negotiation methodologies, prototype mechanisms and monitoring tools among a PRESA community of practice, including other IFAD projects, regional and national Katoomba networks, NGOs and national organizations active in the innovation of new approaches to pro-poor rewards for environmental services in the highlands of East and West Africa as well as promoting cross-regional lesson learning with the IFAD supported ICRAF-led project on Rewarding the Upland Poor for the Environmental Services they provide (RUPES).

PRESA project components are linked to the 3 objectives and include: **i) landscape-level engagement (L), ii) private sector and policy engagement (P), and iii) community of practice (C).** Project activities undertaken during the year under review are linked to these 3 components as reported in the next section.

PRESA project is being implemented in associate and core sites. PRESA core landscapes include:

C1: Mount Kenya East/upper Tana River catchment in central Kenya;

C2: Ulugurus Mountains in the Eastern Arc of Tanzania

C3: Fouta Djallon upper catchment area in Guinea

The associate landscapes include:

A1: Usambaras Mountains (East and Western Usambaras in Tanzania);

A2: Upper Aberdares catchments in Central Kenya that provide water to Nairobi City;

A3: Nyando and Yala basins in Western Kenya; and

A4: Western highlands (Bushenyi District) of Uganda.

## 1.0 Achievements made in 2010

### C1: Mount Kenya East/upper Tana River catchment in central Kenya

Assessment of soil erosion risk was completed in 2009 and is being revised with higher resolution data. Technical studies on willingness to accept (WTA) were completed. People with larger land demanded for greater pay in order to get into land management contracts. Also people who were already in MKEPP were willing to get into contracts for relatively lower pay – because they were possibly already benefiting. One article was submitted to the Journal of Environment Management in July 2010.

A study of the Drivers of land use change was initiated through Focus Group Discussions and Household Interviews.

A study relating land use to catchment hydrology will be completed in March 2011.

A meeting with KENGEN as the potential buyer is yet to be conducted to explore willingness to pay (WTP).

PRESA had offered to contribute technical information on flow estimation and assessment of irrigation potential in the development of the sub-catchment management plan (SCMP). However, the Water Resource Users' Association (WRUA) acquired some funding and went ahead to develop the SCMP without waiting for PRESA's input. PRESA research is still on-going and results will be shared with the WRUAs to refine the SCMP.

### C2: Ulugurus Mountains in the Eastern Arc of Tanzania

Studies on WTA were completed in 2009. Research is almost complete on prototype payment mechanisms initiated with 100 farmers to grow indigenous trees in the Kinole watershed

### C3: Fouta Djallon upper catchment area in Guinea

Site characterisation was completed and potential ecosystem services identified in three sub-sites: Coyah, Balayan Souroumba and Madina Oula. Delineation of these sites is underway. Positive response was obtained from dialogue with policy makers and potential private sector buyers with regards to the potential ecosystem services. The RES potential for enhancing water flows to supply a local water bottling company in Coyah sub-site is being analysed using existing hydrological data.

### A1: East and Western Usambaras in Tanzania

Building on the ICRAF-CIFOR Landscape Mosaic Project and ASB, biodiversity and carbon were as key ES to collaborate on. A REDD feasibility study has been initiated.

### A2: Upper Aberdares catchments in Central Kenya (Sasumua)

Studies on WTA were completed. WTP studies were made on Nairobi water consumers. This was followed by a meeting and informal discussions with Nairobi Water to explore the potential of reducing soil sedimentation by increasing the water tariff in order to finance good landuse practices upstream. However Nairobi Water did not regard sedimentation as a major problem, felt that the regular transfer of funds to the Water Resources Management Authority (WRMA) as required by the Water Act was sufficient and said that the authority to increase tariffs was beyond them. A policy brief is being finalised. A report on WTP study is being prepared and will be further processed into a journal article at the beginning of next year.

During the development of the sub-catchment management plan by the WRUA, PRESA contributed information coming from initial diagnosis of the soil erosion risk and the analysis of alternative landuses to reduce water sedimentation.

#### A3: Nyando and Yala basins in Western Kenya

Initial steps were taken towards forming a consortium among pre-existing partners, to take leadership in building a PES case in the Nyando basin. A PhD student undertook conservation auction experiments just outside the upper Nyando basin to determine attitudes and level of trust towards PES intervention.

#### A4: Western highlands (Bushenyi District) of Uganda.

The Trees for Global Benefits program trained and organized farmers to produce eco-labeled honey. It conducted negotiations between a buyer, an intermediary and producers. It also scaled up the number of farmers involved in growing trees for carbon and conducted monitoring of their planted trees for first payment.

NAHI completed a value chain study for selected ecosystem services along River Wambabya and trained farmers on carbon trading and engaged potential buyers of carbon offsets and eco-labeled honey. It also developed a landscape management plan for River Wambabya watershed.

#### Other achievements

1. A Kenya national RES readiness analysis is on-going.
2. The mid-term review was undertaken
3. The International Advisory Committee meeting was conducted.
4. A one-week training on outcome mapping was done involving site-level and boundary partners from Kenya, Uganda, Tanzania and Guinea. This training, facilitated by ILRI and IIRR, was aimed at formulating progress markers/indicators as well as participatory planning of site-specific project activities for 2010 and beyond.

A web-based reporting system was designed, informed by the outcome mapping. Data input is on-going. It is challenging at this stage to implement the monitoring strategy as developed during the workshop. A simpler matrix has been developed instead, which is being updated continuously as information is generated. The comprehensive monitoring system would make more sense to implement at the start of a new phase of the project.

## 2.0 Planned Activities for 2011

### **L. Foster development, implementation and assessment of workable environmental service agreements in three core and associate landscapes in the highlands of east and west Africa**

**L1.** Delineation of sites will be finalized in the Ulugurus and Usambaras. In Fouta Djallon, the potential for engaging mining companies in investing in biodiversity offsets will be explored. A policy brief will be developed to inform the upcoming national policy reviewing mining contracts.

Baseline projections of ecosystem services will be developed for all PRESA core sites. These will be describing the potential impact of the current landuse trends on the key ecosystem service over the next ten years or more for each core site. Baseline studies for Sasumua were already done where the sediment and runoff risks under the current landuse trends were estimated.

A monitoring strategy will be developed for each site to show what will be monitored, the methodologies for monitoring and evaluation and the existing institutions that may undertake monitoring.

Spatial databases will be continually updated with new information from on-going studies and shared as appropriate with partner organisations, researchers and students. PRESA currently has a total of 12 geo-databases. Each PRESA site has its own geo-database (A1-A4 and C1-C3) and each PRESA country has its own (X2-X5). In addition there is an Africa-wide geo-database (X1). These databases are constructed to be modular, following a common structure, and are highly portable. They are currently not downloadable from the PRESA website but will be delivered via FTP or CDROM on request. PRESA has an online map library at: [www.box.net/presamaps](http://www.box.net/presamaps) for users not requiring GIS data.

A training manual on use of a GPS and GIS will be developed and uploaded on the website.

**L2.** In some sites existing landuse technologies have been identified. For example in Kapingazi, some terracing, grass strips, fanya juu and fanya chini soil conservation are being implemented. In Sasumua, grass strips, Fanya juu and Fanya Chini are practiced while in the Ulugurus where slopes very steep soil conservation measures being implemented include grass strips, stone strips and tree planting. The next stage in technology targeting is using predictive models on the potential impact of these and any new ones on the ecosystem service compared to the baseline scenario. Technologies will be reviewed further based on criteria such as quality and quantity of biophysical service, social, financial and economic feasibility: effort per unit of service generated, opportunity costs, required duration to deliver service, potential for upscaling: land tenure/availability, size etc. Progress has already been made in Sasumua and Kapingazi for water and in the Albertine Rift for afforestation and forest conservation. In Sasumua, a Hydrology model was used to predict what might happen to run off, water yield and sediment flow under alternative landuse scenarios. For AR, technical specifications for trees were made to predict what might happen to carbon sequestration if certain tree species are planted under different configurations. A landuse technology review tool will be developed.

**L3.** Willingness to pay and willingness to accept studies will be completed in the Ulugurus and Fouta Djallon. Outcomes will be analysed to identify prototype reward mechanisms to be tested with farmers in 2012.

Private sector engagement is still ongoing via round table discussions. There is need to clearly distinguish RES as an investment option as opposed to tax. In the Upper Aberdares, partnership will be sought with local advocacy NGO(s) to take the negotiations further to reach WSREP and the Water Board.

**L41-3.** Discussions are on-going with Katoomba Group and UNDP to collaboratively convene one regional workshop including private sector stakeholders and government and community stakeholders and NGOs from Kenya, Uganda, Tanzania, Malawi and Guinea. Private sector participants will include direct beneficiaries of ES from PRESA sites as well as potential buyers who may not necessarily be benefiting directly from the service. The workshop will involve training in PES and REDD+ opportunities and potential risks, under these key topics:

- State of carbon and water markets
- Opportunities for agricultural carbon and watershed projects
- REDD+ opportunities assessment
- Social impact assessment

This will be followed by discussions identifying and discussing constraining/enhancing situations for PES. It is expected that this regional event will create a foundation for future site by site engagements of policy and private sector stakeholders in PRESA sites.

**L43.** Existing institutional structures for achieving scale, regulating/coordinating potential services agreements will be identified especially from review of site characterization information. In the Nyando-Yala basin, PRESA will support the establishment of the consortium which will serve as a platform for future negotiations, broadening the community of PES practitioners. The consortium will then work independently as a boundary organization for PES promotion.

**L44.** Across all sites landscape characterization reports will be reviewed supplemented with field work to identify existing community networks for achieving scale, regulating/coordinating potential services agreements

**L45.** Technical advisory notes will be developed on

- a) Negotiations - how to develop a case for RES.
- b) As support to the sub-catchment management plan in the Upper Aberdares (Sasumua), PRESA will work with WRUAs to design a technical package containing information on baseline projections, landuse scenarios and conjoint analysis and how to incorporate PES/RES approaches in catchment/landscape management plans.

These will be uploaded on the PRESA website and announced in the newsletters. Printouts will also be generated and disseminated to field partners.

## **P. Catalyse policy support and private sector participation in environmental service agreements in Kenya, Tanzania, Uganda and Guinea**

**P1.** At least one country-level assessment of PES/RES readiness study will be conducted to supplement a similar ongoing review within Kenya. In Tanzania and/or Uganda, the studies will build on the REDD Opportunities Scoping Exercise (ROSE) studies that were conducted by Katoomba Group. The national reviews will be supplemented by reviews of site level bylaws and institutions. Policy brief(s) and other documentation will be generated from these studies. There is potential to collaborate with Katoomba Group and UNDP in the implementation of these activities and discussions have already been initiated.

**P2.** Presentations of topical PRESA findings will be made in at least 3 regional/international fora. These may include outcomes from the water study in Sasumua, the policy legal and institutional analysis and the review of PES tools.

## **C. Provide pro-active and responsive support to the dissemination and application of assessment tools, negotiation methodologies, prototype mechanisms and monitoring tools among a PRESA community of practice**

**C1.** Technical advisory notes, GIS and GPS manuals will be uploaded on the PRESA website and announced in the newsletter.

Subject to availability of funds, a Nyando-Yala atlas will be developed by synthesising all the information that has accumulated from different partners over the years into accessible format for future users.

**C2.** At least 3 articles for journal publication will be generated from the work in Sasumua, Kapingazi and Uganda

**C3.** The website will be updated regularly

**C4.** Summaries of all workshops convened by PRESA will be published and disseminated via the website and newsletters.

**C5.** The potential for strengthening linkages with or even merging the PRESA newsletter with that for the Katoomba Group will be explored. This has the potential for widening the thematic coverage and also reaching a broader community.

**C6.** The IAC meeting will be held in the fourth week of March 2011 possibly in Tanzania.

### 3.0 PRESA BUDGET 2011

| Objective                                       | Item                                  | Cost             |
|---|---------------------------------------|------------------|
| <b>1. Landscape Level Engagement:</b>           | Personnel costs                       | 20,500           |
|   | Professional services                 | -                |
|   | Training and operational travel       | 12,151           |
|   | Other research expenses               | 3,250            |
|   | Landscape assessment and prototype    | 31,000           |
|   | capital equipment                     | -                |
|   | Admin and Overhead                    | 8,697            |
|   |                                       | <b>Sub-total</b> |
| <b>2. Policy and private-sector engagement:</b> | Personnel costs                       | 20,500           |
|   | Professional services - Consultancies | -                |
|   | Training and operational travel       | 12,151           |
|   | Other research expenses               | 3,253            |
|   | Site assessment and prototype         | 8,000            |
|   | capital equipment                     |                  |
|   | Admin and Overhead                    | 5,707            |
|   |                                       | <b>Sub-total</b> |
| <b>3. Community of practice:</b>                | Personnel costs                       | 20,500           |
|   | Professional services - Consultancies | -                |
|   | Training and operational travel       | 12,151           |
|   | Other research expenses               | 3,253            |
|   | Site assessment and prototype         | 5,000            |
|   | capital equipment                     |                  |
|   | Admin and Overhead                    | 5,317            |
|   |                                       | <b>Sub-total</b> |
| <b>4. Project management (M&amp;E)</b>          | Personnel costs                       | 20,500           |
|   | Professional services                 |                  |
|   | Training and operational travel       | 12,150           |
|   | Other research expenses               | 3,253            |
|   | Landscape assessment and prototype    |                  |
|   | capital equipment                     |                  |
|   | Admin and Overhead                    | 4,667            |
|   |                                       | <b>Sub-total</b> |
| <b>Total 1+2+3+4</b>                            | <b>Grand Total</b>                    | <b>212,000</b>   |

## 4.0 Detailed site level work plan

| Outputs  | Activities  | Sasumua  | Ulugurus   | Usambaras   | Fouta Djallon  | Albertine Rift   | Upper Tana  | Nyando and Yala |
|--|---|--|--|---|--|--|---|-----------------|
| <b>L1.</b> Baseline/ Characterisation reports for all of the core and associate landscapes | L11. Complete characterization develop baseline projections of key ecosystem service and develop monitoring strategy for key ES | Q1. Develop monitoring strategy – what to monitor and which institutions might be involved                 | Q1. Assess potential for carbon from aforestation with FAO<br>Q2. Conduct water balance study<br>Q2. Do baseline scenario without a water rewards scheme<br>Q3. Develop monitoring strategy – what to monitor and which institutions might be involved | Q1. Conduct feasibility study for REDD+<br><br>Q2. Develop monitoring strategy – what to monitor and which institutions might be involved | Q1. Do baseline scenario projection without water payments<br><br>Q1. Develop monitoring plan – what to monitor and which institutions might be involved | Q1. Develop monitoring plan – what to monitor and which institutions might be involved | Q2. Do baseline projection for Water quality and quantity<br>Q2. Develop monitoring plan – what to monitor and which institutions might be involved |                 |
| <b>L2.</b> Technology targeting tool developed   | L21. Analyse potential impact of different landuse scenarios on the on ecosystem service  | Q1. Refine landuse options in terms of water quantity<br>Q1. Project required scale for significant change | Q3. Review landuse options (existing and new) to predict impact on water quality and quantity  |   | Q3. Review landuse options (existing and new) to predict impact on water quality and quantity  |  | Q3. Review landuse options with KARI and GWC to project their impact towards green water production   |                 |

| Outputs   | Activities  | Sasumua  | Ulugurus   | Usambaras  | Fouta Djallon   | Albertine Rift | Upper Tana  | Nyando and Yala Basin |
|---|---|--|--|--|---|----------------|---|-----------------------|
| <b>L3.</b> Prototype reward mechanisms developed and tested with at least 100 farmers in Fouta Djallon                  | L31. Complete willingness to pay and willingness to accept studies  | Done   | Q3. Design and implement research agenda on tree planting as a reward mechanism for watershed services | Q1. Ongoing WTP to promote biodiversity conservation | Engage mining companies in biodiversity offsets. Develop a policy brief to inform national policy on mining contracts |                | WTA study done  | Q1.                   |
| <b>L4.</b> Workable reward mechanisms operational in at least two of the project landscapes – Fouta Djallon and Uluguru | L41 Engage with public agencies to generate interest in policy opportunities for environmental reward mechanisms            | Convene regional workshop for generating interest in pro-poor rewards for ecosystem services among government policy makers, private sector stakeholders and NGOs. |  |  |   |                |   |                       |
|   | L42. Engage with utilities, private firms and industry groups with interests in ecosystem services in the target landscapes | Build capacity of local advocacy NGO(s) to reach WSREP and the Water Board<br>Conduct roundtable discussions with potential buyers - direct                        |  |  |   |                | Conduct roundtable discussions with private sector buyers including direct beneficiaries of ES and other potential buyers |                       |

|                |   | beneficiaries of ES and others  |  |   |   |   |   |   |
|----------------|---|---|--|---|---|---|---|---|
| <b>Outputs</b> | <b>Activities</b>   | <b>Sasumua</b>  | <b>Ulugurus</b>  | <b>Usambaras</b>  | <b>Fouta Djallon</b>  | <b>Albertine Rift</b>   | <b>Upper Tana</b>   | <b>Nyando and Yala Basin</b>  |
|                | L43. Identify existing community networks for achieving scale, regulating/coordinating potential services agreements.             | Q2. Work with WRUA to develop technical package to support RES in the sub-catchment management plan.<br><br>Q2. Identify existing community networks for achieving scale, regulating/coordinating potential services agreements | Q2. Identify existing community networks for achieving scale, regulating/coordinating potential services agreements. | Q3. Identify existing community networks for achieving scale, regulating/coordinating potential services agreements | Q1. Identify existing community networks for achieving scale, regulating/coordinating potential services agreements | Q1. Identify existing community institutions for achieving scale, regulating/coordinating potential services agreements | Q1. Identify existing community institutions for achieving scale, regulating/coordinating potential services agreements | Q1. Complete the formation of a consortium of PES institutions for achieving scale, regulating/coordinating potential services agreements |
|                | L44. Develop a technical advisory note to support negotiations and agreements among stakeholders in the establishment of workable | Q3. Contribute to development of TAN  | Q3-4. Contribute to development of TAN   | Q3-4. Contribute to development of TAN  | Q3-4. Contribute to development of TAN  | Q3-4. Contribute to development of TAN  | Q3-4. Contribute to development of TAN  | Q2-4. Develop an atlas to inform the PES process  |

|  |  |  |  |  |  |   |   |  |
|--|--|--|--|--|--|---|---|--|
|  | mechanisms   |  |  |  |  |   |   |  |
| <b>Outputs</b>   | <b>Activities</b>  | <b>Sasumua</b>   | <b>Ulugurus</b>  | <b>Usambaras</b>   | <b>Fouta Djallon</b>   | <b>Albertine Rift</b>   | <b>Upper Tana</b>   | <b>Nyando and Yala Basin</b>   |
| <b>P1.</b> Technical reports and synthesis documents that clarify the business case for ecosystem management   | P11. Develop TAN for developing a business case for ecosystem service rewards                | Q1-3. Contribute to TAN on developing a case for ecosystem service rewards   | Q1-3. Contribute to TAN on developing a case for ecosystem service rewards   | Q1-3. Contribute to TAN on developing a case for ecosystem service rewards   | Q1-3. Contribute to TAN on developing a case for ecosystem service rewards   | Q1-3. Contribute to TAN on developing a case for ecosystem service rewards  | Q1-3. Contribute to TAN on developing a case for ecosystem service rewards  | Q1-3. Contribute to TAN on developing a case for ecosystem service rewards |
| <b>P2.</b> Technical reports and synthesis documents identify policy and institutional options for enhancing environmental service reward mechanisms | P21. Conduct one country-PES/RES readiness studies   | Q2. Contribute to PLI analysis with local level analysis of bylaws and local institutions that may constrain ES rewards                      | Q4. Conduct PLI analysis for Tanzania at a national level and also special local-level bi-law and institutional study for ES rewards | Q4. Contribute to PLI analysis for Tanzania at a national level and also special local-level bi-law and institutional study for ES rewards | Q4. Conduct PLI analysis for Guinea at a national level and also special local-level bi-law and institutional study for ES rewards | Q2. Contribute to PLI analysis for RES in Uganda at a national level and also special local-level bi-law and institutional study for ES rewards | Q1. Contribute to PLI analysis with local level analysis of bylaws and local institutions that may constrain ES rewards |  |
|  | P22. Make presentations in at least 3 international/regional fora on pro-poor RES            | Q2-4. Each site to aim at developing a paper to present to at least one workshop on pro-poor RES at country, regional or international level |  |  |  |   |   |  |
| <b>C1.</b> Technical advisory notes  | C11. Produce Technical advisory notes on negotiation, agreement structuring and developing a | Structure and disseminate technical advisory notes produced by PRESA. Disseminate TANs by RUPES and other partners                           |  |  |  |   |   |  |

|                                       |   |   |   |   |   |   |   |   |
|---------------------------------------|---|---|---|---|---|---|---|---|
|                                       | case of ES rewards  |   |   |   |   |   |   |   |
| <b>C2. Tools</b>                      | C21. Produce a compendium of tools by PRESA and other partners  | Produce and compendium, upload it on the website and announce it in the newsletter                  |   |   |   |   |   |   |
| <b>C3. Journal publications</b>       | Generate at least 3 articles for journal publication from PRESA work  | Generate at least 3 articles for journal publication from the work in Sasumua, Kapingazi and Uganda |   |   |   |   |   |   |
| <b>C4. Field and training manuals</b> | C22. Develop field and training manuals on key topics   | Design and produce training manuals for spatial analysis - GIS and GPS. Disseminate manuals         |   |   |   |   |   |   |
| <b>C5. Website</b>                    |   | Review effectiveness of website for information dissemination and periodically update               |   |   |   |   |   |   |
| <b>C6. Workshop summaries</b>         | Q2-4. Post summaries of workshops above onto website and in newsletters   | summaries of workshops above onto website and in newsletters  |   |   |   |   |   |   |
| <b>C7. Newsletter</b>                 | Analyse potential for strengthening linkages with or even merging the PRESA newsletter with that for the Katoomba Group | Q2. Submit at least 1 key story for publication in the newsletter                                   | Q3. Generate at least one article for publication in PES newsletter | Q2. Develop at least 1 article for the PES newsletter | Q3. Develop at least 1 article for the PES newsletter | Q2. Develop at least 1 article for the PES newsletter | Q4. Develop at least 1 article for the PES newsletter | Q4. Develop at least 1 article for the PES newsletter |
| IAC meeting                           |   |   |   |   |   |   |   |   |



