



**The Global Water Initiative – West Africa
(International Institute for Environment and Development (IIED)/
International Union for the Conservation of Nature)**

Terms of Reference, 12 January 2013

Assignment:	Regional literature review on supporting agricultural knowledge and information system and farmer innovation in large dam sites in West Africa
Responsible to:	Jamie Skinner and Barbara Adolph
Objectives:	To identify good practice, and successes, as well as failures and lessons learnt, from interventions supporting smallholder farmers' ability to develop sustainable and productive agricultural systems (particularly rice) in West African dam sites.
Time frame:	1 March to 15 July 2013
Location:	Largely desk-based, with communication with IIED and respondents / stakeholders via skype / phone / email. If considered necessary, some travel in the region to obtain relevant information / documents can be included (needs justification).
Budget:	Up to a maximum of US\$ 40,000

1. Background to GWI

The Global Water Initiative (GWI) is a policy analysis and advocacy programme supported by the Howard G. Buffett Foundation. Previous work of GWI focused on the challenges of providing long-term access to clean water and sanitation, access to water for rural production, as well as the protection and sustainable management of ecosystem services and watersheds. The second phase, which started in October 2012, aims to ensure that water is used efficiently and equitably, enabling farmers to improve food security and become more resilient to (climate) change through sustainable agricultural production.

The core GWI countries Mali, Senegal, Burkina and Niger are all semi-arid and water scarce. Yet they all have large river systems flowing through them and many projects to store and divert this water for irrigated agricultural production have been implemented over the last century. Rain fed agriculture focuses mostly on millet and sorghum, with some traditional low yielding rice fields along valley bottoms and floodplains. Livelihood security strategies include investing in a range of farming/livestock/commercial activities which, in the face of fluctuating rainfall, spread the risks of livelihood failure in drought years.

National policies for food security focus on rice as the main irrigated food crop, and using large dams as a means of both producing electricity and storing water to allow for dry season irrigation, and where feasible, double cropping. At different scales, irrigation can also serve to irrigate market gardens, or industrial sugarcane, however the GWI focus is on irrigated cereal production (rice) and its contribution to food security, both for the livelihoods of the smallholders who cultivate on large scale irrigation schemes and as a national strategy. Over 90 dams have already been built in West Africa to support irrigation and 40 more are on the drawing board. However, the productivity of existing irrigation systems is far below the anticipated / expected performance standards for many reasons: they suffer from serious capacity underutilization; crop yields are low; risk and uncertainty high; and water conveyance and water use efficiencies are among the lowest in the world. In consequence, rice is the most important agro-food import, representing around 20% of agricultural imports within the sub-region over the last thirty years. Countries of the Niger basin envisage a quadrupling of large scale irrigation investment to over 2,000,000 ha by 2025.

Over the next five years, GWI will lead a regional process to better inform the debate on irrigation options and efficient and equitable water use through advocating for policy change in three main areas:

- Firstly, answering the question whether large scale, expensive irrigation schemes, designed to produce food (rice), are doing so at competitive prices and good economic rates of return, as well as meeting household livelihood security needs? Such infrastructure remains a priority component of national, donor and regional policies. GWI will challenge the development effectiveness of intensive irrigation schemes and engage policymakers in an informed debate around investment choices.
- Secondly, advocating for support to smallholder farmers in existing large scale schemes to sustainably improve agricultural practices and productivity, developing and sharing and adopting innovations. Poor system performance is caused primarily by insufficient and poorly developed linkages between the different actors in the agricultural innovation system. Improved agronomic and market knowledge needs to get to those who need it, in a form that can be used for social learning.
- Thirdly, improving the governance systems around current and future dams so that all local beneficiaries of water use share water and land equitably, exploiting opportunities for investment in diverse activities, avoiding conflicts between users and fostering secure and sustainable livelihoods for pastoralists, farmers and fishermen.

This consultancy will contribute to the second thematic area providing an understanding of good practices and lessons learnt in supporting smallholder farmers in dam sites.

2. Objective of the consultancy

The objective of the review is to identify good practice and successes, as well as failures and lessons learnt, from interventions supporting smallholder farmers' ability to develop sustainable and productive agricultural systems in West African dam sites through appropriate interventions that address farmers' needs and enhance equity and sustainability. These could include e.g. processes to ensure access by farmers to relevant agricultural knowledge and information (including use of ICTs), strengthening farmer capacity and networks, fostering local innovation, supporting timely access to agricultural inputs and credit, improving access to markets and to market information, developing an enabling policy environment, supporting institutional capacity development of smallholder farmers and other key actors, improving linkages between actors and agreeing on terms of engagement, etc. The consultancy will inform other analytical studies of GWI and guide GWI's advocacy options.

3. Tasks for the consultancy / key questions to address

a. Map out the mechanisms, (project or programme) interventions, services and policies supporting smallholder farmers' irrigated agriculture in existing (large scale) irrigation schemes.

The consultant would develop a framework for mapping the different parameters for different dam sites, in order to be able to compare and contrast specific topics across sites. It is expected that at least 20 dams supporting smallholder agriculture should be included in the analysis (out of over 100 large dams in the region that support irrigated agriculture. Questions to address include (but are not limited to) the following:

- Intervention logic and history:
 - What was the original intervention logic with regards to smallholder agriculture in the dam sites, when the dams were originally planned?
 - How has this logic changed over time? (e.g. in some sites we observed that dams were constructed with smallholders in mind, but when smallholders did not 'deliver' on production for various reasons, future interventions focused increasingly on larger farmers / investors / firms rather than on family farms.
 - What main programmes / projects / interventions / policies have operated in the sites? What is the time frame and scale of these processes and how have issues of sustainability been addressed?

- Access to, ownership of and control over means of production: For each of the means of production, namely (1) land – irrigated and dryland; (2) water for irrigation and livestock, (3) financial resources / credit, (4) agricultural implements, (5) inputs (such as good quality seed, fertilisers, herbicides, pesticides, labour), and (6) markets, answer the following questions:
 - How do different types of smallholder farmers (i.e. women, men, better-off, poor, young, old, different ethnic groups, local residents or migrants) access these means of production the dam sites? Who owns them, who controls them, who manages them and how?
 - For land: What types of title deeds / user rights to irrigated and non-irrigated land in the dam site do farmers have?
 - For credit: What are the terms (duration, interest rate, collateral etc.) of different types of lenders?
 - For markets and transformation: How do different types of smallholder farmers transform and market their agricultural produce? Consider formal and informal channels.
 - Has this changed over time? If yes, how and why?
 - Are there differences between access to these means of production for (dam) irrigated fields and for land outside the dam command area? If yes, what are these differences?
 - What (programme or policy) interventions have happened to support access to these means of production?
 - To what extent have these interventions explicitly targeted poor smallholder farmers, women and youth? How has this targeting been done in practice?
 - How and by whom were these designed, planned, implemented and evaluated? What was the role of smallholder farmers and other key (local) actors (e.g. local government, local traders, CSOs) in this process? This question refers to effective participation of and engagement with these groups, and the extent to which they could drive the process.

- Access to knowledge and information and support to farmer-led innovation

- What are the main sources of agricultural knowledge and information for different types of smallholder farmers in the dam sites (farmer-to-farmer, agricultural extension, NGOs, traders, ICTs)?
- What examples are there of farmers innovating? In what domains (technology, institutional, social...)?
- What supports these processes and what hinders them?
- Are there examples of farmers' knowledge and innovations being shared/ disseminated? By whom and how? Role of ICTs in this?
- Farmer organisational development:
 - How are different types of smallholder farmers organised (formally and informally)? This includes cooperatives, farmer groups, women groups, and informal labour groups.
 - How has this changed over time?
 - What programme and policy interventions have happened to support farmer organisational development?
 - To what extent have these interventions explicitly targeted poor smallholder farmers, women and youth? How has this targeting been done in practice?
 - How and by whom were these designed, planned, implemented and evaluated? What was the role of smallholder farmers and other key (local) actors (e.g. local government, local traders, CSOs) in this process?
- Organisational and institutional linkages:
 - What linkages are there between key institutions (credit, input supply, farmer organisations, advisory services, markets)? How do they communicate? Is there any forum / platform / network bringing these actors together? If yes, how is this supported / facilitated / managed?

b. Identify the strengths, weaknesses and lessons learned from processes and policies to support smallholder farmers in dam sites; answering the questions:

- What has worked and why? What is the evidence for this?
- What has not worked and why? When assessing what worked, consider criteria of
 - relevance (to what extent processes and policies responded to the needs of key stakeholders, in particular farmers),
 - effectiveness (the degree to which objectives were achieved), impact (long term changes brought about by the interventions),
 - equity (distribution of benefits from the interventions between different groups – including wealth categories, gender, ethnicity, generation), and how the intervention has reduced or increased existing differences in well-being, power and influence)
 - Sustainability (extent to which the systems and processes created are likely to continue operating beyond the duration of the intervention)

c. Undertake a policy analysis of factors supporting and hindering smallholder farmers' livelihoods

- How have policies either supported or hindered processes resulting in enhanced / positive impact on / equity and sustainability of smallholder farmers' livelihoods?
- Provide specific examples where policies have influenced the parameters above under a. (Access to, ownership of and control over means of production; Access to knowledge and information and support to farmer-led innovation, farmer organisational development and organisational; and institutional linkages) in one way or another

- d. Make Recommendations on the areas that GWI should focus on in order to most effectively advocate for effective policies** to support smallholder farmers in existing large scale schemes to sustainably improve agricultural practice and productivity.
- What policy changes need to be made in order for these approaches to be scaled up?
 - What lessons can be learned from these processes for GWI's activities over the next 4 years?
 - Who else is already advocating for these changes, and where could GWI best add value?
 - What types of partnerships and interventions should GWI focus on to add value?

4. Proposed methods and sources

The consultants are advised to use the following methods (additional methods can be proposed):

- Undertake a review of related documents. These will include in particular reports, reviews, evaluations and impact assessments of existing large dam projects and agricultural programmes / projects aiming to support smallholder farmers in dam sites. More general reviews of agricultural research and extension programmes in West Africa might also be of use. Where appropriate, the study should draw on the wider literature on farmer innovation and agricultural advisory services (beyond West Africa and beyond focus on smallholder irrigation). It is expected that the consultant would include at least 20 large dam sites in this regional review, ideally more.
- Undertake interviews (depending on location face-to-face, but more likely by telephone, Skype and/or email) with key stakeholders who have a good understanding of the experiences of policies, programmes and projects in the region. Interviews could include a range of stakeholders from the public, private and not-for-profit sector.
- Draw on the consultants' understanding of smallholder farmers in the region, agricultural knowledge and information systems / innovation systems, and the specific situation in West African dam sites, in order to recommend how GWI can best add value to this thematic area.
- Liaise throughout with the GWI leader 'farmer innovation' and with consultants working with GWI on an action research initiative in three dam sites, and provide feedback on their progress on request. Skype calls / VCs will be organised by GWI to ensure that communication between the different teams is happening throughout the assignment.

5. Qualifications / experience of the consultants

The evaluation will be carried out by a team of two consultants with complementary knowledge, skills and experience. Between them, the following knowledge and experience is required:

- An up-to-date understanding of the current development debates around approaches, tools and mechanisms to support smallholder farmer agricultural development and innovation in West Africa
- Background knowledge / understanding about large dam sites in West Africa and the agricultural development interventions used to support smallholder farmers in these sites
- Experience in and commitment to undertaken appropriate disaggregation of information by wealth categories, gender, ethnicity (or whatever relevant socio-economic categories apply), to go beyond the generic category of 'smallholder farmers'.
- Experience in undertaking focused desk reviews, accessing and processing a wide range of materials from different sources. This will require good connections in West Africa to access studies that might not be in the public domain.

- Good communication and writing skills, in particular experience in undertaking telephone / skype interviews and in analysing and synthesising a large amount of information from diverse sources. Fluency in French and English.

6. Expected outputs

a) *Inception report*

An short (max. 5 pages) inception report outlining the methods and materials the consultants plan to use (and how they anticipate accessing this material), a draft outline for the report, a work plan and a timetable should be submitted to IIED / GWI three weeks after the start of the assignment.

b) *Interim reports*

The consultants will submit, on request from GWI, periodic updates (1-2 pages) on initial findings and planned activities, in order to facilitate communication between the consultants and other GWI partners / stakeholders.

c) *Final report*

The draft final report should be submitted by 1 May and include the following:

- One page outlining the key conclusions and recommendations
- A three page executive summary;
- No more than 30 pages which will include a section that provides a clear description of the methods used both to gather and analyse information; and
- Annexes and references to be appended to the full report as appropriate.

The consultants will prepare an accompanying PowerPoint presentation that highlights the key findings of the report for presentation to GWI staff and other stakeholders as required.

The consultants will incorporate comments received from IIED into the draft report and will present the revised draft to IIED. The evaluation will be completed (and final payment made) once all comments from IIED have been taken into account, and once that report has been accepted by IIED.

The consultants are expected to link throughout the assignment with the GWI leader ‘farmer innovation’ and with consultants working with GWI on a livelihoods action research in two dam sites, and provide feedback on their progress on request.

Envisaged time line

Start of contract:	1 March 2013
Submission of inception report:	22 March 2013
Submission of draft final report:	1 May 2013
Comments received from IIED:	15 May 2013
Revised draft presented to GWI:	1 June 2013
Final report:	15 July 2013

7. Application procedure

Interested consultants are requested to submit a short (max 10 pages, excluding CVs and budget) capability statement and proposal to Barbara Adolph (barbara.adolph@iied.org) and Jamie Skinner (Jamie.Skinner@iied.org) by 15 February 2013, including:

- Reflections / comments on the TOR;
- A proposal, outlining how the consultants aim to approach the assignment, what methods they intend to use, and a draft work plan;
- Capability statement with examples of similar work undertaken;
- CVs of proposed consultants and their roles in the consultancy;
- A budget including a breakdown of fees, operational costs and any other expenses.

All these documents can be submitted in French or English.