REPORT OF THE MONITORING AND EVALUATION WORKSHOP

HELD FROM 2-4 NOVEMBER, 2011, RESIDENCE PRESTIGE, OUAGADOUGOU, BURKINA FASO

Paschal B. Atengdem
BACKGROUND AND CONTEXT

The Monitoring and Evaluation workshop was organized for key staff of the Volta Basin Development Challenge (VBDC) as part of the process in developing a Monitoring Plan for the VBDC of the Challenge Programme Water and Food (CPWF) Phase II. The Challenge Programme on Water & Food in Volta Basin (CPWF-Volta) was initiated as part of the global CGIAR Challenge program on Water and Food currently on-going in Asia, Africa and South America. The CPWF research (Phase II) in the basin is planned to run from 2010 - 2013 as a follow-up on the first Phase of CPWF which ran from 2003-2009. The current program explores the institutional and technical aspects of small reservoir development and maintenance, embedded within a wider rainwater management system for the Volta River Basin.

The main objective of the research program is to respond to: “Improve rainwater and small reservoir management to contribute to poverty reduction, and improved livelihoods resilience and people’s well-being in the dry lands of Burkina Faso and Northern Ghana while taking account of implications for downstream water users including ecosystem services”.

The Volta Basin Development Challenge (VBDC) was therefore an initiative to achieve that objective through five interconnected but focused research-for-development projects, termed as V1, V2, V3, V4 and V5.

The key Expected results of each of the 5 interconnected projects are highlighted below.

V1: Targeting & Scaling up: based on socio-economic and bio-physical assessments, it will develop a web-based ‘decision-support tool’ to identify appropriate sites to introduce successful Agricultural Water Management interventions. (Partners: SEI, INERA, OoU, SARI, KNUST).

V2: Management of rainwater for crop-livestock Agro-ecosystems: will identify, evaluate, adapt, and disseminate best-fit integrated rainwater management strategies (RMS), comprising of technological solutions, directed at different domains of the agro-ecosystems, strengthened by enabling institutional and policy environments and linked to market incentives that can drive adoption. (Partners: ILRI, IWMI, WUR-PPS, INERA, WRI & SNV)

V3: Management of Small Reservoirs: focuses on integrated management options at local scale for small reservoirs (SR), in a multiple use context. These include maintaining infrastructures, protecting and where necessary improving the water quality for the various uses; enhancing water productivity potentials; and seeking for equity (Partners: CIRAD – G- EauIRD, 2iE, TU-Delft, WRI, INERA, SARI).

V4: Governance of rainwater and small reservoirs: Project V4 will provide understanding of the processes that govern IWRM policy-making, practice and research in the basin and identify demand-driven opportunities for the management and the governance of rainwater and small reservoirs at the
watershed (sub-basin) level. This will enhance impacts of on-going policy initiatives in the Volta basin. (Partners: IWMI, CIRAD; UPR-Green, SP-PAGIRE, WRC, WRI, UDS).

**V5: Coordination and enabling change** this project is responsible for leadership and coordination of the above VBDC projects to ensure coherence, integration, alignment and delivery of research outcome related rainwater and small reservoir management. It is also an active concept development and feedback mechanism for the VBDC as a whole. (Partners: VBA, GWP, IWMI and INERA)

For each of the projects, a theory of change was defined and expressed in project outcome logic model (OLM) which shows average of four outcome pathways per project. Based on the project OLMs, the VBDC level OLM was also drafted, and needs to be improved and agreed upon.

**TERMS OF REFERENCE**

The workshop was organized under the Terms of reference as attached in Appendix 1. The key tenets of the TORs was to facilitate discussions of the Outcome Logic Models of the 5 projects (V1, V2, V3, V4, and V5) by lead staff of the projects towards more clarity of the projects' theories of change and therefore focus the Main Project Outcomes, the Outcome targets, Indicators of progress towards the Outcome Targets, and ultimately develop a Monitoring Plan for each project – or at least draft a framework for the Monitoring Plan for each team to use in finalizing its Monitoring Plan.

**OBJECTIVES OF THE WORKSHOP AND ASSIGNMENT**

The objectives of the workshop and contract were stated as follows:

**Main Objective:** review the current project M&E documents and finalise BDC level monitoring plan.

The Specific objectives were to:

1. Check through the individual project OTIPs to review the actors, outcome targets, sharpen the indicators, and the tools for the baseline. The outcome targets all need to be SMARTer (specific, measurable, attributable, realistic, timebound)
2. Check that the actors, outcome targets, indicators in the OTIB are consistent and aligned with project strategies, milestone plan, actor engagement plan and the communication plan
3. Develop a VBDC level monitoring plan based on the revised projects' OTIB to include subsequent monitoring beyond baseline as well as all information on the tools to use

**METHODOLOGY**

The workshop was held from 2-4 November in Residence Prestige in Ouagadougou, Burkina Faso. The Basin leader also had discussions with the consultant towards preparations by the team for the workshop and to determine the dates and processes of facilitation.
The participants to the workshop included members of the VBDC Coordination team as follows:

<table>
<thead>
<tr>
<th>No</th>
<th>First and Last names</th>
<th>Organisation</th>
<th>Email address</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Séraphine Kaboré/Sawadogo</td>
<td>Researcher, Institut de l'Environnement et des Recherches Agricoles (INERA), Burkina Faso</td>
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</tr>
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<td>2</td>
<td>Korodjouma Ouattara</td>
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</tr>
<tr>
<td>3</td>
<td>Oumar Traoré</td>
<td>Researcher (INERA), Burkina Faso</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Paschal Atengdem</td>
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<td>5</td>
<td>Olufunke Cofie</td>
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<td>6</td>
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<td>7</td>
<td>Dindané Adjara</td>
<td>Intern, VBA/CPWF</td>
<td></td>
</tr>
</tbody>
</table>

The workshop applied a participatory discussion approach whereby all participants were stimulated to contribute through brainstorming, small buzz sessions. Where necessary brief technical presentations were made by the Basin team leader and Consultant to elaborate on key requirements and meaning of the components of the Outcome Logic Model (OLM) and the principles and expectations of developing an effective Monitoring Plan including Monitoring Indicators, How, When and Who to measure the indicators – as part of a comprehensive Monitoring Plan. A brief video was also used at a stage to stimulate discussions on how change can be initiated. Participants also undertook role play type exercises to develop pathways for change in selected problem areas.
A Scene from the workshop is presented below:

The sessions were built around the following themes which were presented during the opening session:

- Clear understanding of the OLM
- Right strategy to gather M&E data from the “5 Vs”
- Clarity in relationships between the key concepts: OLM, stripped OLM; OTIB; ToC etc
- Have SMARTly defined indicators
- Draft a monitoring plan for action

The sessions worked on at least two (2) outcome pathways for each project (V) as a sample for the project teams and coordinating team to follow-up for the complete plan.
The pictures of the flip charts below show the discussion objectives and subsequent schedule of activities for the 3 days workshop. As mentioned above the process was totally interactive and participants were involved in discussing and agreeing on the schedule and activities therein.

Day 2: Schedule for the day – 3rd Nov-2011

**MORNING**

1. Recap of Day 1 – 08.30 -08.40
2. The OLM Components: 08.40-09.40
3. The Basin Level OLM: 09.40-10.40
4. The stripped OLM: 10.40-11.40
5. Fill in BREAK: 11.40 – 12.00
6. Conclusions on VBDC’s Theory of Change: Clarity, Challenges, Role of M&E: 12.00-13.00
7. LUNCH: 13.00 – 14.00

**AFTERNOON**

1. Role of M&E in VBDC: 14.00-14.30
2. The OTIB M&E Plan – **Components** (Actors, Outcome Targets, Indicators, Milestones): 14.30-15.30
4. Wrap up: 16.30-17.00

Days 1 and 2 were used to review the key concepts of the OLMs /OTIBs. As shown in Fig. 2 the team sought to get a clear understanding of the OLM; then appraise the right strategy to gather M&E data from each of the Vs; get deeper insights into the relationships between the concepts; develop SMART indicators; and draft monitoring plans for each of the Vs.
The first day focused mainly on reviewing the meanings in the concepts and rationale of the OLM. The lead facilitator worked with the Team leader to present background information and literature for participants to review for in-depth understanding of the rationale and processes involved in developing the OLMs as well as moving from the OLM through the OTIB to incorporating a monitoring plan. As shown on the flip chart Fig 3 above emphasis was on “understanding the Theory of change” and finalising the VBDC OLM in the morning. The afternoon was used for sharpening the Outcome Targets (OTs) and fine-tuning indicators for monitoring the achievement of the OTs. These were all as a process towards developing the monitoring plans.

The process also involved daily participatory reviews/evaluation of the process and outputs for the day. A simple process of brainstorming the participants for their perceptions and remarks as an evaluation for the day was used. The figure below shows how the review results were displayed simply and followed by discussions for necessary changes for the next day’s schedule. The entries show positive and negative impressions/feelings for the respective days. These were discussed for improved performance in the day.
KEY OUTPUTS OF THE WORKSHOP

The first challenge for the team was to reflect on the project goals and structure as a basis for developing a joint strategy and Monitoring Plan.

1. **The Challenge Program on Water and Food in the Volta Basin (Appendix 5)**

Key elements of the CPWF were presented by the Basin Leader to stimulate a reflection of the concerns for the workshop. The presentation highlighted the following:

- **Aim of CPWF**
- Volta Basin Development Challenge (VBDC): structure and objectives
- Project V5: objectives and structure
- Strategic Interventions
- M&E and Adaptive Management
- CPWF M&E of Learning – Added Value

The full presentation is attached as Appendix 5.

Discussions which followed the presentation reflected on the need to integrate the subsequent research results and Research for development (R4D) approach into planning and policy. The following issues received consensus for attention:

- A need to Collaborate within the VBDC
- A Need for evidence of change (indicators) for the project interventions
- A need to show clear evidence of Influence on Research processes
- A need to determine “What” and “How” to “Influence research” noticeably: i.e. to identify indicators to use to measure the “influence” on the processes and outcomes of the innovative project approach
- A need to be clear about how to use the VBDC results
- Determining “What” and “how” to observe and measure the use of research results by beneficiaries and communities.

Key components of the Research for Development (R4D) approach were stated as:

- Build research strategy on constraints defined by all stakeholders
- Include indigenous knowledge e.g. ethno-veterinary medicine
- Involve stakeholders in evaluation of results before release
- Participatory problem analysis
- Participatory solution prioritization
- Participatory evaluation
- Integrated means: Multi-/Inter disciplinary; multi actors

These were briefly discussed for deeper understanding within the context of the project objectives. An interactive exercise was then used to facilitate the conceptualisation of the inter-relationships of the 5 Vs as a System with intricate links and need to function holistically. The exercise involved brainstorming
the participants for their knowledge and conceptualisation of the Human Body System as an embodiment of several sub-systems. The output was the diagram below.

LESSONS FROM THE HUMAN BODY SYSTEM COMPARED TO THE INTEGRATED APPROACH (V5: V1-V4)

The discussions exposed that the project is holistic as presented in the aim of the VBDC, which is also a sub-system of the CPWF. V1, V2, V3, V4, and V5 are therefore sub-systems of the VBDC with intricate linkages for realising the objectives of the VBDC. The intra and inter-relationships of the 5 Vs therefore need to be recognised in developing a Monitoring Plan for all the Vs. It was also noted that the role of V5 was that of coordinating and monitoring the inter-relationships to ensure smooth holistic drive towards the programme goals. This could be likened to the central nervous system of the Human Body as a sub-system to trigger other sub-systems on their performance.

The overview of the VBDC therefore concluded with participants appreciating the need to address the monitoring plan holistically since the success or failure of all interventions of the 5V teams would be assessed according to the diagram of the VBDC programme as presented below.
2. Understanding the OLM Pathway: Practice session

The next challenge was to have deeper reflection on the concepts of the Change Theory and OLM and OTIP. The participants worked in pairs on cases as examples to elucidate the meaning and relationships between and amongst the concepts. The figure below was an example of an agronomist’s OLM pathway. One of the pairs conceptualised the problem of “insufficiency of food for the populace of Burkina Faso” or “Food Insecurity” and therefore identified key requirements of a pathway to use research to address this problem.

As shown on the flip chart pictures below the key issues included the following:

Research should work towards getting the farmers to do the following:

- Use of “good seed”
- “fit the planting time with the rainy season”
- Adopt “good soil fertility management”: fertilisers etc
- Use “rainwater management”
- Adopt Pest control measures: insecticides, weedicides etc

This will lead to “GOOD HARVESTS” / YIELDS.

Further discussion of the pathway issues revealed that the researchers would use journal articles, international conferences and promotion as “proxy” measures of successful research results.
The discussion then exposed the challenges of identifying output targets and indicators that such targets had been achieved which tend to be illusive primarily because the researcher tends to imagine and develop targets and indicators without the participation of the beneficiary. In this case of seeking to research for food security it would have been necessary to empathise with the farmer and rural household to answer the question of “If there is Food Security what would the researcher observe at the consumers’ end?” in other words the OT and indicators should include and even focus more on the consumer of the research outputs of “good seed”, “good soil management practices”, “good water management practices”, “good pest control practices” etc – which are Outputs of research, not Outcomes. When farmers use these outputs the results are then Outcomes of the research, and if the researcher is concerned beyond outputs then the OTs and subsequent indicators should include what will happen at the consumer of the research outputs end.

**The OLM Thoughts of an Agronomist**

![Figure 4: An Agronomist's Pathway to Food Security](image)

This discussion led the workshop into a further exploration of some concepts of the Theory of Change and the OLM.

The facilitator then led the participants to discuss some of the statements of Outcome Targets presented by the research teams so as to determine their suitability for monitoring or otherwise. A key challenge presented here was that participants should focus on the key requirement that Outcome Targets should reflect “Changed behaviour / action”. The OTs must therefore use “action words = verbs”
for clarity and good focussing. The monitoring indicators would then be “SMART” statements to observe the achievement of the OTs over the project life. Some of the exercises and outcomes are presented in the charts below.

**Examples of working from OTs to Indicators:** As shown in the chart the first thoughts of OTs were given as:

- Increased interest of stakeholders / researchers in the project approach (participatory approach – team approach)
- Increased awareness of the outputs of the projects
- Increased willingness to work as a team

From these first thoughts of OTs the participants brainstormed to answer the questions of:

- How can “increased interest” be observed and measured? i.e. what indicates “increased interest”?
- How can “increased awareness” be observed and measured? i.e. what indicates “increased awareness”?
- How can “increased willingness” be observed and measured? i.e. what indicates “increased willingness”?

The brainstorm got the results that:

- **Increased awareness** can be seen from: changes in number and frequency of contacts between stakeholders; number of events in which research agenda is included.
- **Increased awareness:** can be seen from stakeholders defending the outputs; recommending the outputs etc;
- **Increased willingness:** can be seen from using the output; defending or recommending it etc;

Another example was for the participants to evolve monitoring indicators for the OT of “Stakeholders are involved in planning” as a change in behaviour towards adopting the project approach. The participants identified the following as possible indicators:

- Invitation of partners to planning sessions (frequency; number; mode of invitation; timeliness)
- Level of sharing information
- Participation
- Contributions from partners
- Joint report preparation
- Inter-institutional committees etc.
Other examples which were used to gain more insight into setting SMART monitoring indicators are as follows:

**Examples of Process and Indicators developed**

**Output Target = VBA & GWP supports VBDC research**

- VBA and GWP Recognise relevance of VBDC research (1st stage thinking of indicators)
  - # of requests for VBDC research inputs (making it SMART – better but not yet perfect)
  - # of references to VBDC research (SMARTer, but can still improve on Time aspect i.e. to measure use of results and process)
- VBA and GWP Supporting VBDC research (OT improved)
  - Increased support for VBDCs (as a measure of OT but not SMART)

**Output Target: Key Regional policy and extension officers should have**

- Changed behaviour/action = Develop regional level integrated RMS Action Plan = OT
- Indicators for this OT:
  - There is/are a plan(s)
  - Number of planning sessions for developing action plan(s)
  - Number of Learning Platforms (LPs)
  - Frequency of meeting for planning
  - Number of actors/stakeholders attending planning session(s)

The participants were drawn to the need to always **brainstorm from all stakeholders to collect all possible indicators out of which the team would then select the SMART ones for inclusion in the monitoring plan**. This ensures that the rationale for selecting the indicators of achieving the OTs are inclusive of all stakeholders and takes the respective perspectives of appraisal into consideration.

**3. SOME EXPOSITIONS ON THE THEORY OF CHANGE & SETTING MONITORING INDICATORS**

Two sessions were further used for the purpose of facilitating deeper understanding and appreciation of the Theory of Change and setting Monitoring Indicators.

One session presented a video entitled “**How to change the world**”. Lessons drawn from that video included:

- Change planned can be different from the realised end
- Beware of planning for change which could eventually not be the desired change (“wrong change”)
- “There is nothing like failure”, all “failure” is “experience” for improved actions subsequently
- Seek change for small things – before big things. Cumulatively get big from small changes
• There is a need to address the causes of the problems e.g. why are the kids on the street? As a way of addressing the needs to keep the children off the street. Don’t just focus on providing for the needs of the street children
• Always ask: and so what? To move beyond one stage of indicator to deeper level indicators.

In the second session a short presentation was made on powerpoint slides addressing key principles and characteristics of monitoring indicators. The full presentation is attached as Appendix 4. The following were the salient points of the presentation:

- Definitions, explanations of Monitoring Indicators
- Characteristics of Indicators
- Selection of indicators
- Examples of indicators
  • Social Development Indicators
  • Economic Development Indicators
  • Political/organisational Development Indicators

4. The Monitoring Plan

The final sessions were devoted to reviewing and making input to developing the Monitoring plans for each of the 5Vs. As shown in the flip chart picture it was observed that the Monitoring Plan should include a schedule for:

- When to measure the indicator – timelines
- How to measure the indicators – tools
- Who is responsible for monitoring/measuring the indicator at the scheduled time

All these form components of the Monitoring Plan and serve to identify the progress towards achieving the Outcome Targets and eventually the Project Outcomes.

The participants then went into developing the Monitoring Plans on two pathways for each of the projects. The pathways on which Monitoring Plans were completed are presented in the Table below.
Samples of the Pathways for which participants developed Monitoring Plans

<table>
<thead>
<tr>
<th>Project</th>
<th>Pathway 1</th>
<th>Pathway 2</th>
<th>Pathway 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>V1</td>
<td>Development and investment agents: using the support tool (based on multidisciplinary approach) for targeting investing in agricultural water interventions</td>
<td>They are up-scaling the use of the tool as an alternative, or complement, or verification tool to better target investments in agricultural, land and water management</td>
<td></td>
</tr>
<tr>
<td>V2</td>
<td>Farmers: Benefit from the effects of using integrated RMS: They are applying key aspects of integrated RMS in their farming activities</td>
<td>Key regional policy and extension officials from ministries of agriculture, livestock and water: Do more effective implementation and dissemination of RMS</td>
<td></td>
</tr>
<tr>
<td>V3</td>
<td>LOCAL COMMUNITIES: Are integrating new knowledge and skills acquired from project on water resource management into their production systems at the community and farm level.</td>
<td>DISTRICT LEVEL: ((Government officials etc and Local Administrative Authorities, and other development workers (NGOs) that support water users at the local level)) “are using research results and recommendations on improved management options for planning, design, and (support of the multiple uses) implementation of the SRs”.</td>
<td>RESEARCHERS: are working as teams in planning, and implementing integrated, multi-disciplinary research and modelling for SR’s for use by local communities.</td>
</tr>
<tr>
<td>V4</td>
<td>(a) IWRM policy makers etc: &quot;are using participatory approaches in their policy development and implementation&quot; (b) IWRM policy makers are using participatory approaches for enhanced watershed management: OR: (c) they are applying participatory approaches for watershed policy development and implementation</td>
<td>Local communities and decision makers are practising long term integrated watershed planning &amp; management</td>
<td></td>
</tr>
<tr>
<td>V5</td>
<td>Ministries of Agriculture, Water, livestock, Environment, sub-basin organization, government agencies in BF and GH Integrate research results into planning and policy</td>
<td>VBA and GWP Integrate research results and R4D approach into planning and policy</td>
<td>VBDC Researchers Adopt CPWF R4D approach</td>
</tr>
</tbody>
</table>

**Note:** Since the workshop the process of developing the Monitoring Plan has been taken further with a draft as attached for consideration by the teams for improvement and finalisation for use.
5. EXPECTED FOLLOW-UP ACTIONS: PLANNED OUTCOMES/ WAY FORWARD

Due to the need to involve more project staff as well as the extent of work which was still needed to finalise the Monitoring Plan the workshop came to a close with the understanding that the process of finalisation of the Plan would continue through e-mail communication and other electronic modes. The following were noted for follow-up action:

**V2: the team would ensure that**
- 1 Regional level pathway would be fully developed
- 1 community level pathway would be fully developed
  - Both to target: “Have better understanding of the benefits and ..... of integrated WWM strategies”

**V1: the team would ensure that**
- To complete pathway for Development and investment agents
- Develop indicators clearly (FC and PA)
- Share with the team (PLs)
- Do baselines (before 2012)

**V4: the team would ensure that**
- Link Project action plan to OTIP to get 1 monitoring plan

**V3: the team would ensure that**
- Comment and update to current status as for the others
- Observe OTIP and narrative plan of action for conformity with the others

6. THE VBDC MONITORING PLAN

Since the workshop a draft Monitoring Plan has been produced and circulated for discussions and inputs. This plan is attached as a separate excel file to this report.

7. End of Session Evaluation

There was an end of session informal evaluation whereby the participants took turns to state their observations of the process and outputs, and or outcomes achieved during the 3 days workshop. The following observations were made:

- Understanding of OT, and indicators now very good
- Very practical session so learnt well
- Good methodology
  - Slow facilitation – good for learning
  - Reflective learning process
- Very engaging – high level of participation
- Increased understanding of process of setting monitoring indicators
- Increased energy to drive on with developing the monitoring plan
The workshop came to an end with a call to continue working towards getting a final version of the monitoring plan before the end of the year.
APPENDICES

APPENDIX 1: TERMS OF REFERENCE

VBDC MONITORING PLAN

Background and Context
The Challenge Programme on Water & Food in Volta Basin (CPWF-Volta) was initiated as part of the global CGIAR Challenge program on Water and Food currently on-going in Asia, Africa and South America. The Volta basin lies predominantly in Ghana & Burkina Faso, with very small catchments in Benin, Ivory Coast, Mali & Togo. The basin is inhabited by 19 million people, 70 per cent of whom are rural. Economies are reliant on agriculture, mostly rainfed, across four agro-ecological zones, with rainfall varying between 500-1100 mm/year. Highly variable rainfall during the growing season presents problems of short season droughts, even where total rainfall appears adequate. Less than 10 per cent of the average total rainfall ends up in the river, making river discharge, and those who depend on it, highly sensitive to variations in annual rainfall. Yields—and hence water productivity—are low; often 10 per cent or less of potential. The CPWF research in the basin (2010 -2013) follows up on the first Phase of CPWF (2003-2009) and plans to utilise the learning emerging from. The current program explores the institutional and technical aspects of small reservoir development and maintenance, embedded within a wider rainwater management system for the Volta River Basin. The main objective of this research program is to respond to the above situation by: Improving rainwater and small reservoir management to contribute to poverty reduction, and improved livelihoods resilience and people’s well-being in the dry lands of Burkina Faso and Northern Ghana while taking account of implications for downstream water users including ecosystem services. This is the Volta Basin Development Challenge (VBDC) which we plan to achieve through five interconnected but focussed research-for-development projects, termed as V1, V2, V3, V4 and V5. Expected results of each of the projects are highlighted below.

V1: Targeting & Scaling up: based on socio-economic and bio-physical assessments, it will develop a web-based ‘decision-support tool’ to identify appropriate sites to introduce successful Agricultural Water Management interventions. (Partners: SEI, INERA, OoU, SARI, KNUST).

V2: Management of rainwater for crop-livestock Agro-ecosystems will identify, evaluate, adapt, and disseminate best-fit integrated rainwater management strategies (RMS), comprising of technological solutions, directed at different domains of the agroecosystems, strengthened by enabling institutional and policy environments and linked to market incentives that can drive adoption. (Partners: ILRI, IWMI, WUR-PPS, INERA, WRI & SNV)

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**V5: Coordination and enabling change** This project is responsible for leadership and coordination of the above VBDC projects to ensure coherence, integration, alignment and delivery of research outcome related rainwater and small reservoir management. It is also an active concept development and feedback mechanism for the VBDC as a whole. (Partners: VBA, GWP, IWMI and INERA)

For each of the project, a theory of change has been defined and expressed in project outcome logic model (OLM) which shows average of four outcome pathways per project (refer to the excel sheet – OLM). Based on the project OLMs, the VBDC level OLM has also been drafted, though needs to be improved and agreed upon.

**Towards Monitoring and Evaluation of the VBDC**

The M&E is to be done at two levels: at project level and at the basin (VBDC) level.

**A. Project level**

Each of the CPWF projects is expected to link research to developmental outcomes. Hence projects will be evaluated across three dimensions: the delivery of quality research outputs, learning towards achievement of development outcomes and financial management.

*Research outputs* as used here are the project deliverables that mark the completion of a set of activities as described in the project Gantt Chart (refer to the excel sheet Gantt). Every 6 months, projects agreed to deliver 4-6 milestones which are either research or process deliverables. *Outcomes are changes in people’s practice* as well as changes in people’s knowledge, attitude and skills (KAS) as defined in the OLM.

Projects are expected to monitor their outcomes and progress towards their outcome targets. In order to do this, each project has defined (following steps in Box 1) their *Outcome Target, the Indicator* and Baseline Plan (OTIB) where projects indicate which are the outcomes to which they believe they will contribute the most, what those changes will be, and how they will measure their contribution and the changes observed (Refer to excel sheet OTIB)

<table>
<thead>
<tr>
<th>Box 1: Developing Monitoring plan</th>
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<tbody>
<tr>
<td><strong>1.</strong> Choose the <strong>key two to four</strong> outcome pathways where the project expects to make the most contribution.</td>
</tr>
<tr>
<td><strong>2.</strong> For each outcome pathway set an outcome target, or targets</td>
</tr>
<tr>
<td><strong>3.</strong> Select one or more indicators that will measure progress towards each outcome target</td>
</tr>
<tr>
<td><strong>4.</strong> Describe the practicalities of doing the measurements, including monitoring tools.</td>
</tr>
<tr>
<td><strong>5.</strong> Describe how the project would establish the starting conditions (the baseline) against progress will be measured.</td>
</tr>
<tr>
<td><strong>6.</strong> Describe how the project will measure subsequent conditions/progress including frequency and who does what</td>
</tr>
</tbody>
</table>

*Note that:* the outcome target is an attempt to qualify and quantify the change, and the outcome indicator(s) are what would be measured to know whether anything is happening. Each project is expected to do a combination of indicator based and non-indicator based (using the most significant change) monitoring. What projects will implement from the baseline/monitoring plan will depend on further discussions between the Project Leader and the Basin Leader and will constitute part of the BDC level monitoring system.
B. **Basin level**
Project V5 will work together with PLs to put in place a monitoring framework (based on each Project plan following A above) that will allow cumulative learning and change to take place and well documented. Hence, the framework for VBDC-level monitoring is derived ‘bottom up’ from individual project outcome logic models. A first step is to have the VBDC theory of change expressed in an OLM and then to develop the monitoring plan linking to project level monitoring in ‘A’ above.

C. **Implementation.**
Due to the intertwined nature of the overall M&E (project and basin levels), it is being proposed that one representative from each project is selected to team up with the coordination team, V5 to adequately cover the knitty gritty of monitoring in the projects. Results are then fed into the reflection workshops which should provide a mechanism for adaptive management for the projects and for the VBDC as a whole.

**Where we are in the process and what are the next steps**
Projects have revised their OLM and developed OTIB (on-going revision for some projects).

Next steps are:

1. Check through the individual project OTIPs to review the actors, outcome targets, sharpen the indicators, and the tools for the baseline. Where possible, outcome targets should focus on practice and behaviour change because they are more concrete than KAS changes. Progress indicators can include KAS changes in some cases KAS can still be in outcome targets. The outcome targets all need to be SMARTer (specific, measurable, attributable, realistic, timebound)
2. Check that the actors, outcome targets, indicators in the OTIB are consistent and aligned with project strategies, milestone plan, actor engagement plan and the communication plan
3. Develop a VBDC level monitoring plan based on the revised projects’ OTIB to include subsequent monitoring beyond baseline as well as all information on the tools to use
4. It is likely that the monitoring load may still be too much. Therefore we expect further prioritization by project leaders

**Annex: 5 Project documents (excel sheets of Gantt chart, Milestone plan, OLM and OTIB)**

**M&E Working Session: 2-4 November**
**Main Objective:** review the current project M&E documents and finalise BDC level monitoring plan.
**Specifically, it will involve the following activities corresponding to 3 days:**

4. Check through the individual project OTIPs to review the actors, outcome targets, sharpen the indicators, and the tools for the baseline. The outcome targets all need to be SMARTer (specific, measurable, attributable, realistic, timebound)
5. Check that the actors, outcome targets, indicators in the OTIB are consistent and aligned with project strategies, milestone plan, actor engagement plan and the communication plan
6. Develop a VBDC level monitoring plan based on the revised projects’ OTIB to include subsequent monitoring beyond baseline as well as all information on the tools to use

**Workshop Process**
- Pre-workshop discussion between Solphie Alvarez (CPWF), Basin Leader and Project leaders (on-going)
- Pre-workshop preparation by Basin leader and M&E consultant -ongoing

- 2-4 Nov: Workshop with about 10 participants representing: VBDC Coordination team (3), projects (2) and INERA (3)

**Reporting/Deliverable**

Workshop report inclusive of revised worksheets and VBDC monitoring plan
## APPENDIX 2: LIST OF PARTICIPANTS

**Training Workshop on M&E at Residence Prestige in Ouagadougou, Burkina Faso**  
2 – 4 November 2011

### List of participants

<table>
<thead>
<tr>
<th>No</th>
<th>First and Last names</th>
<th>Organisation</th>
<th>Email address</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sérépine Kaboré/Sawadogo</td>
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<tr>
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<td>3</td>
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<td>Researcher (INERA), Burkina Faso</td>
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<tr>
<td>4</td>
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</tr>
<tr>
<td>7</td>
<td>Dindané Adjara</td>
<td>Intern, VBA/CPWF</td>
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</table>
APPENDIX 3: DOCUMENTS AND OTHER MATERIALS USED DURING THE WORKSHOP

1. 5 Project documents (excel sheets of Gantt chart, Milestone plan, OLM and OTIB)
2. M. Adil Khan A Conceptual Framework of Results Based Monitoring and Evaluation and Indicators. Chief Socio-economic Governance and Management Branch, UNDESA
3. John Mayne, November 2008; Building an Evaluative Culture for Effective Evaluation and Results Management; ILAC Working Paper 8; Institutional Learning and Change (ILAC) Initiative - c/o Bioversity International Via dei Tre Denari 472°, 00057 Maccarese (Fiumicino), Rome, Italy.
4. Paul F. McCawley; Associate Director, University of Idaho Extension; The Logic Model for Program Planning and Evaluation.
5. The Flex Monitoring Team; April 2006; Creating Program Logic Models: A Toolkit for State Flex Programs; Universities of Minnesota, North Carolina at Chapel Hill, and Southern Maine.
APPENDIX 4: SOME EXPOSITIONS ON MONITORING INDICATORS

What are Monitoring Indicators?

- An indicator is ‘a brief and concise expression about a phenomenon that is studied, used as an approximation of (proxy for) the phenomenon.
- An indicator is, thus, an indirect statement or measure of something more complex. [...] they are therefore most often quantitative, but they may also be coined in qualitative terms.
- ‘Indicators are proxies for the real thing. [...] A central argument is that people’s own sense of indicators for vital aspects of their lives is better than the outsider’s predetermined indicator.’

- **Simplicity**: There is a general agreement that indicators do not describe the whole situation - they point to the direction of change rather than describe the change itself.
- **Proxy**: Indicators simplify social processes so that they are easily accessible to a wider audience.

Characteristics of Indicators

- **Measurement of change**: Indicators are designed to measure changes. A number that conveys information but does not give information in relation to changes is a statistic.
- **Direction**: Indicators are useful for pointing the direction of change, whether this is positive or negative, whether the situation is improving or worsening.
- **Measurement of change over time**: Indicators are designed to measure change over time.
- **Numerical or quantified qualitative data**: Indicators are usually numerical. They can contain qualitative data but this is usually quantified. When the numerical data is not based on numbers e.g. when a number is assigned for each qualitative category, it is important to remember that these numbers cannot be treated as ‘normal’ numbers and can only be used with special statistical techniques.
- **Comparability to a baseline or norm**: Indicators usually convey information that is compared to a baseline i.e. the situation prior to the beginning of the project or the implementation of a policy, or to a norm. Gender-sensitive indicators usually compare the situation of women to that of men within the same country. The situation of women of one socio-economic strata /ethnic group to another one within the same country or the situation of women from one country to that of women in another country could also be assessed in order to build a picture of changes in the situation of women.
- **Participation**: Qualitative indicators can boost stakeholders’ participation given that their opinion would be required in order to produce the indicator. The extensive literature on participation has shown the benefits of using such an approach and it is therefore in the interest of policy, programme or project designers to involve the different stakeholders from the very beginning of the project cycle.
Selection of indicators

- A number of indicators, both qualitative and quantitative, could be used in order to monitor and evaluate progress made towards achieving Objectives A, B and C.
- Objective A: Gender is effectively mainstreamed in the ILO and its activities.
- Decreased sex ratio gap at each professional level within the ILO staff structure.
- Increased percentage of ILO staff uses gender-related tools in their work.
- Increased percentage of ILO publications is gender-sensitive.
- Decreased sex ratio gap in relation to the type of meetings attended (e.g. increased percentage of men attend gender-related meetings and increased percentage of women that attend meetings on issues that are usually dominated by men).
- Increase in the percentage of ILO staff that show a positive attitude towards gender equality. (Quantifiable qualitative indicator)
- Decreased percentage of women-targeted projects/programmes and increased percentage of projects/programmes where gender is mainstreamed.

EXAMPLES OF INDICATORS

<table>
<thead>
<tr>
<th>Social Development Indicators</th>
<th>Political/organisational Development Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death rate</td>
<td>Rates of hospitalisation</td>
</tr>
<tr>
<td>Life expectancy at birth</td>
<td>Rates of HIV infection</td>
</tr>
<tr>
<td>Infant mortality rates</td>
<td>Rates of AIDS deaths</td>
</tr>
<tr>
<td>Causes of death</td>
<td>Number of phone booths per 1000 residents</td>
</tr>
<tr>
<td>Number of doctors per capita</td>
<td>Number of radios/televisions per capita</td>
</tr>
<tr>
<td>Number of hospital beds per capita</td>
<td>Availability of books in traditional languages</td>
</tr>
<tr>
<td>Number of nurses per capita</td>
<td>Traditional languages taught in schools</td>
</tr>
<tr>
<td>Literacy rates, by age and gender</td>
<td>Time spent on listening to radio/watching</td>
</tr>
<tr>
<td>Student: teacher ratios</td>
<td>television by gender</td>
</tr>
<tr>
<td>Retention rate by school level</td>
<td>Number of programmes on television and radio</td>
</tr>
<tr>
<td>School completion rates by exit points</td>
<td>in traditional languages and/or dealing with</td>
</tr>
<tr>
<td>Public spending per student</td>
<td>traditional customs</td>
</tr>
<tr>
<td>Number of suicides</td>
<td>Number of homeless</td>
</tr>
<tr>
<td>Causes of accidents</td>
<td>Number of violent crimes</td>
</tr>
<tr>
<td>Dwellings with running water</td>
<td>Birth rate</td>
</tr>
<tr>
<td>Dwellings with electricity</td>
<td>Fertility rate</td>
</tr>
<tr>
<td>Church participation, by age and gender</td>
<td>Infant mortality rate</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
- Average annual household income
- Average weekly/monthly wages
- Employment, by age group
- Unemployment, by age group, by gender
- Employment, by occupation, by gender
- Government employment
- Earned income levels
- Average length of unemployment period
- Default rates on loans
- Ratio of home owners to renters
- Per capita income
- Average annual family income
- % people below the poverty line
- Ratio of seasonal to permanent employment
- Growth rate of small businesses
- Value of residential construction and renovation

- Number of community organisations
- Types of organised sport
- Number of tournaments and games
- Participation levels in organised sport
- Number of youth groups
- Participation in youth groups
- Participation in women’s groups
- Participation in groups for the elderly
- Number of groups for the elderly
- Structure of political leadership, by age/gender
- Participation rate in elections, by age/gender
- Number of public meetings held
- Participation in public meetings, by age and gender
APPENDIX 5: THE CHALLENGE PROGRAM ON WATER AND FOOD IN THE VOLTA BASIN (CPWF)

Aim of CPWF

- CPWF aims to increase the resilience of social and ecological systems through better water management for food production
- Through its broad partnerships, it conducts research that leads to impact on the poor and policy change

Volta Basin Development Challenge (VBDC)

- Integrated Management of Rainwater and Small Reservoirs for Multiple Uses

Objective:

- “Improving rainwater and small reservoir management to contribute to poverty reduction and improved livelihoods resilience while taking account of downstream and upstream water users including ecosystem services”.

![Diagram of VBDC Research and V1-V5 initiatives](image-url)
Project V5

- Coordination and Change: learning for innovation and adaptive management

Project Objective

- Ensure coherence amongst the VBDC Projects and align BDC research to stakeholders need so as to contribute to poverty reduction and improved livelihood resilience in the Basin
- Houses the support mechanisms (to V1-V4) for achieving the VBDC

Strategic Interventions

M&E and Adaptive Management

- Clear basin level M&E plan based on the V1-V5 impact pathways and harmonised BDC level theory of change
- Ensure learning oriented monitoring in the VBDC
- Regular reflection meetings.

CPWF M&E of Learning - Added Value

- Encourage communication within and across BDC projects
- Support creation of an enabling environment for change and ensure learning
- Allow flexibility, creativity, innovation to respond and make use of emerging opportunities
- Links to a peer assist mechanism
- Challenge and ensure that we do R4D, research outputs lead to positive change towards our BDC /CPWF goal