WORKSHOP REPORT

First Technical Working Group Meeting and Training Workshop on Integrated River Basin Management in Key River Basins in Lao PDR

LUANG PRABANG, LAO PDR
SEPTEMBER 30-OCTOBER 5, 2013
### Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>CIAM</td>
<td>cumulative impact assessment and management</td>
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<td>DESIA</td>
<td>Department of Environmental and Social Impact Assessment</td>
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<td>DWR</td>
<td>Department of Water Resources</td>
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<td>ESIAs</td>
<td>Environmental and Social Impact Assessments</td>
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<td>IRBM</td>
<td>Integrated River Basin Management</td>
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<td>MONRE</td>
<td>Ministry of Natural Resources and Environment</td>
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<td>QA/QC</td>
<td>quality assurance and quality control</td>
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<td>TWG</td>
<td>technical working group</td>
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*Figure 1: Workshop participants included officials from three provinces and 17 districts of the Nam Ou River Basin.*
Introduction

IFC is working with the Department of Water Resources (DWR) in the Ministry of Natural Resources and Environment (MONRE) in Lao People’s Democratic Republic to build capacity in integrated water resources management and practical environmental and social risk management of cumulative impacts assessment, in order to achieve sustainable water resources management in selected river basins.

The Nam Ou River Basin has been selected as the pilot area for field activities. Training and capacity building focuses broadly on Integrated River Basin Management (IRBM) and specifically on cumulative impact assessment and management (CIAM) of water resources, as well as the development of a River Basin Profile for the Nam Ou River Basin provincial and district authorities in Luang Prabang, Phongsali and Oudomxay Provinces. The profile aims to build an understanding of the characteristics of the Nam Ou River Basin to contribute to river basin planning and capacity building. A technical working group (TWG) has been established as a platform to share information on project activities, consisting of representatives from DWR, IFC, and provincial/district authorities from the Nam Ou River Basin.

IFC’s cooperation agreement with DWR provides support in the following areas:

- Improvement and revision of the National Water Resources Policy, Strategy and Action Plan and the Water Law (and implementing decrees);
- Managing environment and social risks at the basin level through capacity development regarding CIAM and environmental flows management;
- Carrying out necessary studies in the Nam Ou River Basin (e.g., Basin Profile/strategy development), to lay the foundation for a River Basin Committee; and
- Developing a basin level hydro-mining forum, which will be replicated in selected river basins and serve as a training platform that will link to the national-level Hydropower Developer's Working Group.

A priority of this program is to help build capacity and support training for key stakeholders responsible for managing the Nam Ou River Basin at the national, provincial, and district levels. Development of a Nam Ou River Basin Profile will help document the current physical, social and economic issues occurring in the basin, through collection of available data and information. It will also be used for future river basin planning and for developing solutions to water management issues in the basin.

This report summarizes the activities completed between September 30 and October 5 2013, including: i) first meeting of the TWG; ii) a workshop on IRBM held in Luang Prabang; and, iii) a bio-physical, social and environmental field training program conducted on the lower Nam Ou River. The agenda and list of participants for the TWG meeting is provided as a separate attachment.

Figure 2: Located in north-eastern Lao PDR, the Nam Ou River Basin has been selected to conduct pilot field activities.
Key Activities and Results

Technical Working Group Meeting

The first TWG meeting was successful in bringing together key stakeholders (mainly MONRE, PONRE and DONRE from three provinces and 17 districts) from the Nam Ou River Basin to discuss IRBM issues. The main objective of the meeting was to introduce the purpose and scope of the training, proposed capacity-building activities and preparation of a river basin profile to be undertaken within the Nam Ou River Basin. An important first step was for members of the TWG, DWR and IFC to describe their expectations for the overall program and to identify priority activities to be undertaken in the basin.

DWR took the opportunity to deliver and convey their mandate to the provincial and district officials, and requested their assistance in gathering data and information for developing the River Basin Profile.

Participants were updated on the status of the National Water Resources Strategy and Action Plan, and revisions to the Water Law. The need for development of water resources to contribute to poverty reduction, while ensuring protection of the environment and improvement of social well-being, was emphasized.

Provincial authorities also presented their priorities with respect to IRBM and environmental management in their jurisdictions (see Box 1).

The meeting provided an important forum for provincial and district authorities to share information and ideas regarding IWRM, current and planned natural resource developments, and environmental issues in the Nam Ou River Basin.

Box 1: Provincial Priorities, Needs and Concerns

- Assistance with planning and management of the Nam Ou, especially in priority sub-basins
- Flood and drought management
- Surface water, groundwater and industrial wastewater management
- Database for storing and managing environmental data required for the Nam Ou River Basin Profile
- Equipment for environmental monitoring
- Participation of other key sectors in planning and management processes and technical training

Figure 3: Central, provincial and district authorities met to discuss integrated river basin management issues and capacity building needs for water managers in the Nam Ou Basin.
**Luang Prabang Training Workshop**

A technical training program was conducted from October 1-2, 2013 in Luang Prabang to provide background information on IRBM, CIAM and to assist with preparation of a Nam Ou River Basin Profile.

Participants included water resource managers and environmental staff from the three provinces and 17 districts in the Nam Ou River Basin (plus DWR staff from the central government). General understanding of water resource management concepts among participants was limited, and for many this was their first introduction to IRBM and CIAM.

Participants discussed the linkages between social issues, livelihoods and environmental impacts on water resources; the need for relevant stakeholders to be involved in the planning and management of water resources; and, ways to promote better water management practices. The importance of obtaining a solid baseline dataset on the Nam Ou River, and quality assurance and quality control (QA/QC) of all data collected for the profile, was emphasized.

The Luang Prabang workshop was successful in providing basic training to local government agencies related to IRBM, CIAM and field data collection techniques. Approaches and recommendations for preparation of the River Basin Profile were also presented by both the DWR and IFC technical teams. However, common understanding on the scope and methodology to be used for development of the Nam Ou River Basin Profile needs to be reached and agreed upon. The overall objectives and outcomes were met and comments from participants were generally positive (see Annex).

The need to include all relevant sectors involved in management and developments in the Nam Ou Basin, particularly hydropower, mining, agriculture, and fisheries, was discussed in detail. Participants requested future training programs be conducted at the provincial and district levels, perhaps focusing on sub-basins within the Nam Ou catchment.
Nam Ou Field Training Program

Following the Luang Prabang workshop, a 2-day hands-on field training program was conducted for all participants on the Nam Ou River at Nong Khiaw in the villages of Ban Sopvanh and Ban Park Bak, Ngoi District. Aquatic environmental sampling techniques were demonstrated in the field, including physical (water and sediment quality) and biological (fisheries, benthic invertebrates) sample collection. Social data collection tools were also applied, including seasonal calendars, historical timelines, and community mapping techniques that used traditional ecological knowledge.

Participants actively assisted with data collection and were very interested in gaining experience using the field sampling equipment. All participants recorded their observations on field data sheets designed for the program, for reporting during the Lessons Learned Workshop held at the end of the program.

Valuable data and information were collected which could be applied to future development of the Nam Ou River Basin Profile. Participants requested that future training programs include more field time, so that practical skills in data collection and analysis could be strengthened. Overall evaluations were positive (see Annex).
Key Issues and Challenges

A number of key challenges and issues related to the training and capacity building program in the Nam Ou River Basin were identified, as follows:

1) Provincial and district environmental staff are faced with competing demands from multiple water users in different sectors. Local authorities have limited knowledge of water resource management, IRBM and CIAM principles, and inadequate financial resources, which impacts their ability to fulfill their mandates.

2) Coordination between the public and private sector is limited, especially concerning large developments. Furthermore, coordination among provincial and central level government officials is necessary to transfer knowledge and to improve understanding of impacts associated with large developments.

3) Successful IRBM requires involvement of a variety of different stakeholders and sectors at all stages of the process. Other key stakeholders need to be involved in future training programs.

4) Development on the Nam Ou, and its importance for river basin planning, which needs to be included as part of the program. Provincial and district authorities were keen to discuss this subject and to obtain advice and technical assistance from the DWR, IFC team and relevant sectors, which will be further explored.

5) There is a significant amount of existing secondary data on the Nam Ou River Basin which should be used to prepare the River Basin Profile. The IFC team proposes to draw heavily on the existing secondary data and also identify key sub-basins for more detailed analysis, as it is not possible to collect detailed information from the entire basin. Primary data collection will be a challenge for the provinces and districts, as there is no centralized database of existing information, and limited budget for collection of this information, particularly, bio-physical, social and environmental data. Obtaining access to secondary data, especially Environmental and Social Impact Assessments (ESIAs), has thus far proven to be challenging.

Figure 7: Participants discuss key issues and challenges in the basin by creating historical timelines that detail floods and drought years and the development of important infrastructure.
Conclusions and Recommendations

General

- The training workshop program was successful in meeting its overall objectives, and laid a foundation for future cooperation with key stakeholders in the Nam Ou River Basin.
- The workshop demonstrated that provincial and district authorities can benefit from IFC expert team advice through direct 'on-the-ground' technical support. Future training and capacity building activities should maximize time spent in the field, and include more hands-on training relevant to preparation of the Nam Ou River Basin Profile.

Training and Capacity Building

- Future capacity building and training should focus on personnel from the provinces and districts, since this is where the need is greatest.
- Representatives from a variety of sectors such as hydropower, mining, and agriculture, other government ministries (e.g., Ministry of Energy and Mines, or Ministry of Energy and Mines) and the private sector should be involved in future training programs.
- Consideration should be given to conducting future training with active participation of the Department of Environmental and Social Impact Assessment (DESIA) in MONRE (e.g., using the Nam Ou sub-basins as the case study area).
- Participants expressed great interest in having more field time in future training programs, so that the equipment and sampling techniques could be demonstrated over a longer period of time. Collection of actual samples, field identification of different organisms (fish, benthic invertebrates, etc.), and possible laboratory analysis of samples, was also recommended for future programs (see

Box 2: Recommendations from Workshop Participants for Future Training and Capacity Building Activities:

- IRBM and IWRM concepts
- River basin management planning
- Hydrological modeling
- Biodiversity surveys
- GIS and database management
- Focus on field data collection and analysis of samples
- Water quality analytical training

Figure 8: Participants share their lessons learned, impressions and preliminary findings from the workshop and field activities at the end of day 5.
Consideration should be given to focusing training and capacity building to fewer numbers of trainees and on one province at a time, with the possibility for expansion to other provinces in the future. Phongsali should be considered, given that this province currently receives limited technical support from donors and also has many development projects there.

- A field program in Q1 2014 in Phongsali is recommended, including five to seven days of field training for provincial and district authorities on IRBM and social and environmental field sampling. A reconnaissance team should travel to Phongsali in advance to discuss training needs with Phongsali officials, ensure adequate preparations are made, and to scope out field sampling locations.

Figure 9: Participants give their recommendations on future training and capacity building needs.
Nam Ou River Basin Profile

The following is recommended by IFC for development of the Nam Ou River Basin Profile:

- Agreement on the proposed methodology and process for the River Profile development (e.g., purpose of the profile, review background data sources, develop TOC, collect data, write report);
- Relevant secondary data and documents should be provided by DWR;
- Involvement of other sectors and government ministries (and the private sector) in the River Basin Profile review process, to ensure it is comprehensive and credible;
- All relevant issues related to developments on the Nam Ou need to be included (e.g., impacts from hydropower, mining, irrigation, etc.);
- Study area boundaries must be agreed upon (watershed boundaries, not provincial boundaries for data collection and analysis);
- The River Basin Profile will be prepared to international standards (IFC’s Performance Standards) and addresses key issues in the Nam Ou Basin, including Integrated River Basin Planning needs, CIAM and broad stakeholder engagement. National guidelines are currently under preparation by MONRE.

Figure 10: Provincial and district participants call-out for more training on how to effectively manage the Nam Ou River Basin.