

Enhancing the understanding of the conditions, changes and trends in the LMB to inform sustainable hydropower planning

Initiative for Sustainable Hydropower (ISH)

**ISH11** 

Improved Environmental and Socio-Economic Baseline Information for Hydropower Planning

Good information underpins all aspects of hydropower planning, development and management, and is vital to maximise opportunities and reduce risks across economic, social and environmental dimensions for all stakeholders.

The ISH11 covers the following topics to enhance the understanding of the conditions, changes and trends in the Lower Mekong Basin to inform sustainable hydropower planning.



# Improved environmental and socio-economic information for hydropower

The Phase 2 Report is intended to provide a pathway that can help Member Countries obtain a clear and scientifically-sound understanding of conditions, changes and trends in the LMB to inform hydropower planning and management.

#### **Informing** sustainable hydropower development

The ISH11 study addresses fundamental aspects of the MRC's Basin Development Strategy (2011-2015) "to improve the sustainability of hydropower development" and "to acquire essential knowledge to address uncertainty and minimize risks of identified development opportunities". The study team has reviewed information needs relevant to hydropower planning and management based on Mekong-Specific issues and international experiences.

### **Basin-wide information**

The study focus is not on project-specific information needs that would be pertinent to a development site, but rather on the whole-of-river and long-term information that can complement and provide a context for hydropower project and site-specific information.

# **Guiding framework**

The ISH11 study team developed a 'Guiding Framework for MRC Basin-Scale Information for Hydropower Planning and Management' to help structure a status and gap analysis and target improvement proposals.

#### Multi-disciplinary approach

The team has identified the status, gaps and

Framework for the following disciplines: aguatic ecology, fisheries, hydrology, sediments, socioeconomics and water quality.

# **Highest priority actions**

Nineteen improvement proposals have been identified addressing all disciplines and aspects of the Guiding Framework. ISH will work with Member Countries to address the highest priority actions through relevant MRC Programmes and the Council Study.

# The highest priority improvement actions identified are to:

Update the hydropower project database with respect to all LMB dam-related projects

Finalize and establish standardized fish sampling methods and apply at locations important to hydropower information needs

Strengthen the bio-monitoring database to better support multi-disciplinary analysis of environmental data important to hydropower

Enhance sediment monitoring methods, location and timing for hydropower information needs

Enhance water quality monitoring parameters, locations and timing to enable integrated analysis of environmental data

## **Capacity building and decentralization**

Many of the proposed actions have direct benefits with respect to building regional capacities, supporting the decentralization process, and contributing to the information needs of other studies currently being conducted in the region.

