The Council Study: Social assessment approach and methodology

Vientiane, September 24 2015
Social Assessment of Development Scenarios

Topics in this presentation:

1. Introduction
2. Approach and methodology
3. Data availability
4. Next steps
1. Introduction
Objectives

As set out for the Council Study as a whole:

1. Further understand the **socio-economic consequences** of water resources development (positive and negative); and

2. **Enhance the BDP process** to support the Member Countries (MCs) in the sustainable development of the basin; and **promote capacity building**, raise awareness and build trust
Scope

Drivers

- All MRC-related water resource developments and impacted by scenarios
- Exogenous developments and their estimated impact on social conditions in 2007, 2020 and 2040

Spatial

- All areas within the LMB impacted by water resources development

Technical

Based on the agreed MRC Indicator Framework Strategic indicators:

- Living conditions and well-being
- Livelihoods and employment in MRC sectors
Philosophy behind approach

The approach and methodology builds on that used in previous assessments by BDP and IBFM

*What’s different?*

**We now have data!** – two SIMVA surveys (2011/2013-14) focussed on the mainstream corridor and a MRC basin-wide socio-economic database populated with national statistics typically at district and/or provincial levels.

These data enable the more comprehensive approach envisaged earlier and only now possible (*exposure and dependency*)
Philosophy behind approach

What’s also different?

In response to CS objectives, the social assessments are designed to evaluate cumulative impacts at each time step (2007, 2020 and 2040).

This approach provides:

- A projection of the overall consequences at each time step, enabling consideration of equity
- Alignment with the concept of the SoB monitoring actual development impacts in order to see whether we achieve the objectives
- The basis by which to assess incremental impacts between time steps, paving the way for later exploration of optimal and sustainable development pathways
Philosophy behind approach

What’s also different?

Assessment indicators have been reviewed and revised, taking into consideration:

- The requirements of the CS for comprehensive evaluation of the consequences of water resources development
- The need for assessment indicators that are responsive to the changes brought about by water resources development
- Defining indicators in a manner that maximises use of assembled data and minimises further data collection needs

The assessment approach has also been improved by factoring in the historic development trends and exogenous and development, together with greater opportunities to employ spatial (GIS) analysis.
2. Approach and methodology
# Strategic and assessment indicators

<table>
<thead>
<tr>
<th>Strategic indicators</th>
<th>Living conditions and well-being</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>❑ Water security</td>
<td>❑ Employment</td>
</tr>
<tr>
<td></td>
<td>❑ Food security</td>
<td>❑ Gender equity</td>
</tr>
<tr>
<td></td>
<td>❑ Income security</td>
<td></td>
</tr>
<tr>
<td></td>
<td>❑ Health security</td>
<td></td>
</tr>
</tbody>
</table>

Previously expressed as simply levels of resilience, now expressed in terms more tangibly related to the consequences of water resources development.
Overall approach to social assessment

- Scenario definition
- GIS Spatial analyses of distribution
- Exogenous situations in 2007, 2020 and 2040
  - Demographics: Size and structure of population
  - Exposure: Location/size of impacts
  - Sensitivity: Response to change
  - Resilience: Capacity to cope with change
- Exogenous developments
- Impact assessment
- Hydrological and biophysical changes

Thematic studies
- Potential mitigation measures

Socio-economic team
- SIMVA and MRC socio-economic databases
- Literature review on socio-economic trends

Other CS teams
- Literature review on socio-economic trends

Socio-economic consequences of water resource developments on:
- Living conditions & well-being: Water security, Food security, Income security, Health security
- Employment: Employment, Gender equity

www.mrcmekong.org
Trends analysis and exogenous development

Development trends and projections by BDP reveal that the socio-economy of the LMB is rapidly changing.

This will impact on the numbers and resilience of the rural population to withstand change and will increase the value of vulnerable assets.

These analyses will be reviewed and extended to determine the impacts of exogenous development on the status of those exposed to water resource development impacts in 2007, 2020 and 2040, much of which will lead to improved social conditions.
Impact assessment - 1

1. The LMB is spatially analysed by overlaying biophysical zones and administrative areas.

2. Demographic and social condition data are determined for each sub-unit of area (e.g., A and B).

3. Demographic and social condition data sets are estimated for 2007, 2020, and 2040.

Biophysical zones

SIMVA sampling points

Provincial or district data

Social conditions in sub-unit area B based on uniformly distributed administrative area data

Social conditions in overlap area A based on weighted SIMVA point data and uniformly distributed administrative area data
4. Impacts associated with biophysical changes are uniformly spread across each bio-physical zone and calculated against social data for sub-unit area A.

5. Other potential impacts, eg irrigation development, are evaluated through further spatial analysis overlain on sub-units areas A and/or B

Other impact areas (generally not biophysical), eg irrigation, reservoir development etc
3. Data availability
## Data needed and sources
### Strategic indicator 1: Living conditions and well-being

<table>
<thead>
<tr>
<th>Assessment indicators</th>
<th>Data needed</th>
<th>Data sources</th>
</tr>
</thead>
</table>
| **Water security**    | • Quantity & quality  
                        • Safe water supply for household consumption  
                        • Water for agriculture and irrigation  
                        • Water for fishing and aquaculture  
                        • Flood & drought management | ✓ SIMVA 2011  
                                                    ✓ SIMVA 2013-2014  
                                                    ✓ MRC Socio-economic database  
                                                    ✓ Thematic studies/MRC discipline database  
                                                    □ Additional national statistics |
| **Food security**     | • Access to sufficient and safe food for household consumption  
                        • Ability to purchase food |              |
| **Income security**   | • Money generated by themselves or received as remittent  
                        • Diversity of income generation/alternatives  
                        • Actual/expected income |              |
| **Health security**   | • Access to available health facility  
                        • Health status |              |
## Data needed and sources
### Strategic indicator 2: Employment

<table>
<thead>
<tr>
<th>Assessment indicators</th>
<th>Data needed</th>
<th>Data sources</th>
</tr>
</thead>
</table>
| Employment            | • Dependency on fish  
                      | • Dependency on OAAs  
                      | • Dependency on irrigations and riverbank cultivation | ✓ SIMVA 2011  
                      | ✓ SIMVA 2013-2014  
                      | ✓ MRC Socio-economic database  
                      | ✓ Thematic studies/MRC discipline database  
                      | □ Additional national statistics |
| Gender                | • % of women positive impacted and  
                      | • % of women negative impacted | ✓ SIMVA 2011  
                      | ✓ SIMVA 2013-2014  
                      | ✓ MRC Socio-economic database  
                      | ✓ Thematic studies/MRC discipline database  
                      | □ Additional national statistics |
4. Next steps
Next Steps:

• Preparation of report with a detailed description of the socio-economic impact assessment approach and methodology

• Presentation and discussion of the report during the 6th RTWG meeting
Social Assessment of Development Scenarios

Thank you for your attention