REGIONAL RIVER BASIN CONSULTATIONS

2ND AG MEETING
FRIDAY, 13TH JANUARY, 2017
DR. LWIN LWIN WAI
OBJECTIVES

The purpose of the regional river basin consultations is to engage stakeholders early in the SEA process to:

• Present the SEA objectives and identify how stakeholders can engage with the process
• Identify the key environmental and social (E&S) issues and opportunities facing river basin development
• Carry out participatory stakeholder mapping and analysis at the river basin level
INTRODUCTION TO THE SEA OF HYDROPOWER
GROUP ACTIVITY 1: IDENTIFY ISSUES AND OPPORTUNITIES
GROUP ACTIVITY 2: PARTICIPATORY MAPPING
REGIONAL RIVER BASIN CONSULTATIONS

- **Thanlwin**: Taunggyi, Shan State & Loikaw, Kayah State
- **Sittaung**: Bago & Taungoo, Bago Division
- **Chindwin**: Monywa, Sagaing Division
- **Tanintharyi**: Dawei, Tanintharyi region

**Sub-national government**: Region/state offices of MONREC, MOEE and other ministries

**Civil society workshops**: Broad interest groups including; environmental, governance and security, transparency and accountability, law enforcement, conflict, peace process and ethnic minorities
## PARTICIPANTS

<table>
<thead>
<tr>
<th>City/town</th>
<th>CSO workshop</th>
<th></th>
<th>Region/State government</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td>Taunggyi</td>
<td>16</td>
<td>17</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Loikaw</td>
<td>13</td>
<td>8</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Bago</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Taungoo</td>
<td>18</td>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Monywa</td>
<td>22</td>
<td>10</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Dawei</td>
<td>19</td>
<td>5</td>
<td>16</td>
<td>4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>88</td>
<td>46</td>
<td>50</td>
<td>25</td>
</tr>
</tbody>
</table>
DATA ANALYSIS AND PRESENTATION

• The stakeholders identified a total of 540 issues and 298 opportunities, placed under various thematic headings

• The stakeholder groups decided which themes they would put the issues and opportunities in

• In subsequent analysis the issues and opportunities were placed under 62 categories based on their content

• The underlying content of issues in some of the categories overlaps
OVERALL FREQUENCY OF WORDS IN THE IDENTIFIED ISSUES AND OPPORTUNITIES
ISSUES RAISED BY STAKEHOLDERS IN ALL BASINS

Most listed categories of issues

- Environmental pressures
- Governance
- Hydropower dams
- Accountability and transparency
- Development
- Impacts from mining
- Transportation
- Conflict
- Erosion
- Land issues
- Fisheries
- Flooding
- Displaced people
- Public services
- Agriculture
- Access to electricity
- Sedimentation
- Cultural pressures
- Knowledge
- Indigenous people/ethnic minorities
ENVIRONMENTAL PRESSURES

Most listed selected environmental pressures

- Deforestation
- River pollution
- Damage to the ecosystem
- Environmental pressures
- Illegal logging
- Bio-diversity loss
- River pollution from household waste
- Damage to ecosystem and biodiversity
- River pollution health impacts
- Gold mining
- Loss of wetlands
- Loss of biodiversity
- Deforestation in watershed

Water regulation can be affected if building dam on Thanlwin river

- Water quality degradation
- Water and soil pollution
- Scarcity of fish
- Scarcity of aquatic animals
- Deforestation in catchment area

Chindwin  Sittaung  Tanintharyi Region  Thanlwin
Most listed selected environmental pressures

- There is no rule of law
- Weak/no law enforcement
- Parallel administrative structures in force
- Lack of local voice
- Constitutional problem: state and ethnic groups have no rights over own natural resources
- Weak law enforcement, eg. illegal logging
- There is no law on the use of natural resources
- The government is highly centralized
- Regional government lacks authority
- Problems related to foreign investment, need to identify criteria for investments
- No good local laws and policies
- Need local people to agree to government and private projects
- Local government lack authority
- Lack of good policy
- Labour right violations
- Forced agreement to project from local people
- Complicated administrative problem - parallel administrations
- Communication between central, regional and local governments is inadequate
KEY ISSUES AT THE BASIN LEVEL
THANLWIN RIVER BASIN

- The main issues and opportunities were conflict, development, environmental assets, environmental pressures, governance and hydropower dams.

- **Ranging views**: from a position that there should be no hydropower until peace has been secured, to seeing opportunities for small projects that could benefit local areas.

- **Contested areas**: areas are controlled by the military, ethnic armed organizations (EAOs), authorities, and people assisted armed groups.

- **Ethnic minorities**: Need to recognize the role and rights of ethnic minorities.

- **Control of natural resources**: State government and ethnic minority groups do not have rights or control over natural resources.

- **Governance**: Limited transparency between the government, the private sector and the public.
THANLWIN RIVER BASIN

- **Displacement:** Large numbers of people have been forcibly displaced by the military and many people are in internally displaced person (IDP) camps from civil war.

- **Resettlement:** Further displacement and resettlement in connection with the construction of big hydropower dams is a serious issue for CSOs.

- **Environmental assets:** Wide range of ecosystems with high biodiversity, and ecosystems that are in good and natural state and can be protected.

- **Fisheries:** The loss of fish species due to overfishing is a concern now, and further loss of fish species due to hydropower is a concern for the future.

- **Benefits:** Access to electricity, water for irrigation/livestock, employment and revenue generation.
PARTICIPATORY MAPPING: THANLWIN
SITTAUNG RIVER BASIN

**Environmental pressures:** deforestation, logging, illegal logging and logging within water catchment areas, water pollution from gold mining and agriculture

**Sedimentation and erosion:** Erosion of riverbanks, landslides, sedimentation in the river channel, sand mining is also an issue.

**Land:** States and ethnic groups do not have rights over their own land

**Accountability and transparency:** Authorities are not accountable and there is no rule of law. Communication between the central regional and local government is inadequate

**Participation:** Weak public participation in hydropower projects e.g. feasibility study for Bawgata HPP
SITTAUNG RIVER BASIN

Benefit sharing: share benefits from hydropower with local communities and ethnic minorities

Transportation: Hydropower development could contribute to improved transportation

Employment and local economy: Development of the local economy creating employment opportunities for communities are priorities

Agriculture: Reservoirs may inundate agricultural land but also may provide additional water for irrigation
Sedimentation in river channel
Impact on Agriculture from irregular irrigation
Loss of Fish species/ Impact on Fishery
River Bank Erosion
Soil fertility deterioration
Higher level of surface runoff
Changes of Water Level
Change of Delta Formation
Salinity
Changes of Coastal Area
CHINDWIN RIVER BASIN

Environmental pressures: Mainly related to impacts from mining and deforestation and illegal logging.

Mining: Water pollution and groundwater issues including public health implications as water not suitable for drinking, and causing skin problems

Transportation: Roads are underdeveloped and navigation affected by sedimentation

Flooding and drought: Flooding occurs twice a year and has impacts on agricultural land, severe drought also experienced.

Sedimentation and erosion: Sedimentation and riverbank erosion due to deforestation and exacerbated by sand and gravel mining and in-stream mining.
CHINDWIN RIVER BASIN

**Industry:** Development of industrial zone in Kalay and Monywa towns, electricity can support economic developments

**Forestry:** Effective forest management and establishment of community forests

**Environmental governance:** manage wastewater from mining and systematic mining sector regulation. Regulate mining activities and sand and gravel in-stream mining

**Navigation:** Creates trade and employment opportunities and should be improved.

**Fisheries:** include fish stocking in rivers, constructing fish ladders if hydropower dams are built, and improve the marketing of fisheries sector

**Alternative energy:** Solar energy and wind energy could be considered
Chindwin

- Khamti (Jade Production) and Gold Mining
- Homalin (Gold Mining)
- Nikel Production
- Deforestation due to coal mining
- Maharmyaing Forest Area
- Coal mine
- Shwemuhtaw Pagoda
- Alongtawkathapa National Park
- Shwetaungoo Pagoda
- Moenyinthanbotedae Pagoda
- Phowintenvaung ancient pagodas
- To protect environmental degradation in Letpadaung Mountain
TANINTHARYI REGION

Governance issues: No coordination between central, regional and local government. Limited public participation and no rule of law to restrict illegal logging and mining.

Environmental pressures: in some cases due to development projects, damages to ecosystems and impacts on key biodiversity areas and loss of wetlands.

Security: Foreign investments have negative impacts on local people e.g. no local benefits from gas exports and high electricity prices.

Special economic zones (SEZ): Negative environmental impacts including air and water pollution from SEZ. Loss of labour rights and wage inequality to migrant workers.

Land grabbing: Communities forced to accept project and land confiscated which leads to loss of livelihoods.
TANINTHARYI REGION

Public participation: Civil society must have the right to participate in decision-making and there must be a public space for debate. Free prior and informed consent (FPIC) considered

Benefit sharing: include implementation of CSR and policy and law on revenue sharing from development projects.

Hydropower: construct small high-tech dams with low environmental impacts and lower energy production

Natural gas: Exploitation of natural gas resources instead of hydropower

Economic development: include ecotourism and tourism, trade, development of small and medium enterprises for local people

Conservation: creating protected areas for wildlife and fish, establish national parks and in general improve ecosystems
Tanintharyi

- Heinnae Natural Forest
- Kanbaut Minerals, Natural Gas
- Heinda Minerals Production
- Thakyettaung Coal Production
- Banchaung Coal Production
- Pyinbugyi
- Reserved Forest
- Mangrove Forest Protection Area
- Coal Mining
- Fishing Zone
- Lanpi Marine National Park
- Oil Palm
- Coal Electricity Production