Local shares related plans of hydropower companies under various stages of construction

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Rationale

• A follow up of ICIMOD-Niti “Benefit sharing in hydropower” study

• Our study identified shares as an “unfinished” business and flagged a number of issues:
  – Who are eligible? (Local vs. non locals; individuals vs. institutions)
  – What is the right time to issue shares?
  – How to bring in social inclusion in a market instrument like equity shares?

• But above all, it underlined how local communities often invested in shares without adequately understanding the financial instrument of shares and all it entails

• Can we run an experiment (randomized control trial) to see if running financial literacy programs in randomly chosen hydropower projects leads to changes in share buying behavior?

• We started our data collection from hydropower companies with generation license, but not yet complete, as baseline data. IPPAN helped facilitate this work.
### Data collection process

<table>
<thead>
<tr>
<th># of companies</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>112</td>
<td>As on 26\textsuperscript{th} August 2016</td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
</tr>
<tr>
<td>97</td>
<td></td>
</tr>
<tr>
<td>72</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td></td>
</tr>
</tbody>
</table>

Data was collected using a short questionnaire (12 questions). 72 companies under various stages of construction will eventually produce 2095 MW of electricity spanning all the way from now to 2022.
Status of completion of hydropower projects

- **1-30%**
  - Total capacity: 1121 MW
  - Number of projects: 38
- **31-70%**
  - Total capacity: 142.9 MW
  - Number of projects: 14
- **71-99%**
  - Total capacity: 699.4 MW
  - Number of projects: 18
- **Not started**
  - Total capacity: 131.7 MW
  - Number of projects: 2

**Legend:**
- Blue: Total capacity (MW)
- Red: Number of hydropower projects
Classification of projects by size

<table>
<thead>
<tr>
<th>Hydropower projects by size</th>
<th>Total capacity in MW</th>
<th>Number of hydropower projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;=5 MW</td>
<td>77.2</td>
<td>20</td>
</tr>
<tr>
<td>&gt;=5 MW - &lt;= 25 MW</td>
<td>465.5</td>
<td>34</td>
</tr>
<tr>
<td>&gt;= 25 MW - &lt;= 50 MW</td>
<td>293.3</td>
<td>8</td>
</tr>
<tr>
<td>&gt;= 50 MW - &lt;= 100 MW</td>
<td>343</td>
<td>5</td>
</tr>
<tr>
<td>&gt;=100 MW</td>
<td>916</td>
<td>5</td>
</tr>
</tbody>
</table>

Cumulative capacity (MW) of hydropower plants under construction
Hydropower projects according to date of completion

Year when the project will start commercial operation

- Total capacity (MW)
- Number of hydropower projects

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Capacity (MW)</th>
<th>Number of Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>33.11</td>
<td>3</td>
</tr>
<tr>
<td>2017</td>
<td>675.27</td>
<td>19</td>
</tr>
<tr>
<td>2018</td>
<td>202.5</td>
<td>16</td>
</tr>
<tr>
<td>2019</td>
<td>468.02</td>
<td>18</td>
</tr>
<tr>
<td>2020</td>
<td>470.46</td>
<td>10</td>
</tr>
<tr>
<td>Beyond 2020</td>
<td>245.62</td>
<td>5</td>
</tr>
<tr>
<td>NA</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><em>Beyond 2020</em></td>
<td></td>
<td>2.4</td>
</tr>
</tbody>
</table>

Total capacity (MW) and Number of hydropower projects for each year.
Status of construction of transmission lines

- Already completed: 7 projects
- Under construction: 30 projects
- Construction not yet started: 35 projects

Commercial operation (year)/Transmission readiness:
- ▲ 2019, Yes
- □ 2019, Under-Construction
- ▲ 2018, Yes
- □ 2018, Under-Construction
- ▲ 2017, Yes
- □ 2017, Under-Construction
- ▲ 2016, Yes
- □ 2016, Under-Construction

Map showing the status of transmission lines across different regions in Nepal.

Data source: ICIMOD
Will the company issue local shares?

- 53 companies are willing to issue local shares.
- 4 companies have already issued local shares.
- 5 companies will issue local shares.
- 10 companies will not issue local shares.
- 10 companies are undecided.
Share issue plans of hydropower companies

- **Already issued**: 48.9
- **Yes, will issue shares**: 1596
- **No, will not issue shares**: 50.1
- **Undecided**: 399.5

- **Willingess to issue shares**
- **Total capacity (MW)**
- **Number of hydropower projects**
Who are eligible for local shares?

- **Affected VDC**: 29
- **Affected district**: 23
- **Both affected VDC and District**: 2
- **PAF/SPAF**: 1
- **TBD**: 2

Legend:
- Affected VDC
- Affected district
- Both affected VDC and District
- PAF/SPAF
- TBD
Are institutions allowed to buy shares?

- Yes: 36
- No: 21

VDCs, DDCs, Cooperative, Women’s groups, Schools
Various user groups are some examples
Timing of issue of share

- Undecided: 6 projects
- Once the project is operational: 16 projects
- During construction: 35 projects
Rationale for timing of issue of local shares

- Due to local demand
- For financing the current project
- Financing not needed for current project
- For financing future project
- All SEBON conditions were met for share issue
- More than one stated above

% of responses

During construction

Once the project is operational
Other issues

• How much shares are reserved for “locals”
  – In majority of cases, its 10%, in few instances, it goes up to 50%

• How does allocation happen when shares are over-subscribed?
  – Decisions made on pro-rata basis
Next steps

• Complete this database, add few more questions – suggestions please?

• Is running any kind of financial literacy program in projects about to release shares a good idea? Suggestions please?
Thank you