

## BUSINESS MODEL

The following business models are proposed by ADB to be adopted for MMHPPs:

BM	MHP Site	Asset Management During Development and Construction Phase		Asset Management During Operation Phase	
No.	Capacity	Project Owner	Project Developer	Asset Owner	Asset Operator
A.I	0 – 200 KW	PEDO	Development Contractor (NGO)	PEDO	Community
A.II	0 – 200 KW	PEDO	Development Contractor (NGO)	Community	Community
A.III	200-500 KW	PEDO	Development Contractor (NGO)	PEDO	O&M Provider
A.IV	200-500 KW	PEDO	Development Contractor (NGO)	Community	O&M Provider

PEDO propose to adopt business model AI for projects upto 200 KW and AIII for projects with capacity 200 – 500 KW. The business models AI and AIII to be adopted by PEDO are explained as following:

### **Business Model A.I**

For micro hydel plants upto 200 KW capacity the suitable business model is A.I. In this business model PEDO will take the entire responsibility for development of the asset. In that case, PEDO will be awarding a development contract. Later on the operation and maintenance is the responsibility of the community. Ownership will be remained with PEDO. For implementation PEDO together with Community shall follow the steps listed below:

1. Site Proposed by Community: Proposal of site and recommendation of MHP capacity based on experience and comparison with existing sites in the neighborhood.
2. Site Selection by PEDO: PEDO selects site proposals and approves it as part of micro hydel program phase II.
3. Assignment of development contractor: PEDO assigns a development contractor (by lot)

4. Site Assessment by development contractor: Site survey and preparation of feasibility study for the assessment of the site.
5. Site Approval by PEDO: Approval of the site by PEDO, based on the feasibility study by the developer.  
In parallel to activities 4 and 5:
6. Social feasibility by community and development contractor: Social mobilization and community communication initiated and guided by development contractor.
7. Project Set-Up by PEDO: PEDO is implementing the necessary project set-up in the community, including committees for project implementation, procurement, maintenance, audit and grievance.

Main objective of step number 6 and 7 is to establish the organizational framework for the long-term operation of the asset.

### **Business Model A.III**

For MHP in the capacity range from 200 KW to 500 KW the convenient business model is A.III, where projects are developed by a development contractor under the ownership of PEDO. Later on the asset remains in the ownership of PEDO. Due to increasing complexity and need for special skills it seems inappropriate for the operation and maintenance by the community, that's why the operation and maintenance is awarded to an O&M provider coming from the private sector. The implementation of the business model for micro hydel plants from 200 KW to 500 kW shall follow the implementation path below:

1. **Site Proposed by Community:** Proposal of site and recommendation of MHP capacity based on experience and comparison with existing sites in the neighbourhood
2. **Site Selection by PEDO:** PEDO selects site proposals and approves it as part of micro hydel program phase II.
3. **Assignment of development contractor:** PEDO assigns a development contractor (by lot)
4. **Site Assessment by development contractor:** Site survey and preparation of feasibility study for the assessment of the site.
5. **Site Approval by PEDO:** Approval of the site by PEDO, based on the feasibility study delivered by the developer.  
In parallel to activities 4 and 5:

6. **Social feasibility by community and development contractor:** Social mobilization and community communication initiated and guided by development contractor.
7. **Capacity Assessment:** PEDO assess communities' capability to manage the asset and decide if the asset is transferred to the community or if PEDO shall remain the owner of the asset.
8. **Project Set-Up by PEDO:** In dependence of outcome of step no. 7 PEDO is implementing the necessary project set-up in the community, including committees for maintenance, audit and grievance.