

MINI-HYDRO

MINI-HYDRO AND CRITERIA ASSUMPTIONS

GROUP MEMBERS

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DEVELOPMENTAL BENEFITS

- Job creation - Industries will be set up for more jobs for people. Technical and non-technical expertise is required to run the facility.
- Economic development - Infrastructural development in the area. Eg. The facility may elicit better road networks to site.
- Capacity building - With Ghana's first power plant being hydro, there is adequate capacity for its development. However, additional capacity building may be required for the running and transferring the mini-hydro technology.
- Use of local materials – Because of the small nature of the mini-hydro set-up, it can easily be manufactured locally with the availability of the
- Contribution to GDP – the impact is high and it's a good criteria
- Good effect on balance of trade – this can improve export and reduce import by way of processing primary materials.
- Health improvement – Indifferent to the technology
- Skills development – this is connected to the high capacity that has already been built in the hydro sector

Market Potential

- Level of initial capital outlay – Mini-hydro could compete with the other RE technologies if hydro projects are properly planned and executed.
- Affordability – Very affordable (cost per kW range from USD 1136 – 5630. Average cost of about USD 3085) as compared to other technologies of the same capacity.
- Investment sustainability – Sustainable but subject to climate and environmental conditions.
- Low maintenance – durability – requires minimal maintenance
- Commercial availability – Mini-hydro power can be utilized for productive uses by low power demand facilities.
- Replicability – low technology, easy to replicate, available capacity to replicate

Additional attributes

- Socially acceptable – Able to meet social needs
- Promote international trade – YES
- Promote sub-regional cooperation with respect to optimization in use of resources for development