



Pro-Poor Hydropower Pilot Project – Summary Document

Basic Concept

Pro-Poor Hydropower (PPHP) is a concept by which the rural poor of Nepal are facilitated into the profitable ownership of their water resources. This is achieved through development of **commercially profitable** and **socio-ecologically acceptable** hydropower projects with the local poor gaining **significant** ownership of the projects. Significant ownership is defined as ownership of shares that earn dividend that represents a sizable earning when compared to the household’s other earning streams. Achieving this ‘significant’ ownership can be realized either through the local poor owning a majority of a small project (‘pure’ approach) or through the local poor owning a small part of a big project (‘dilute’ approach) - or a sliding scale in between.

What PPHP is not:

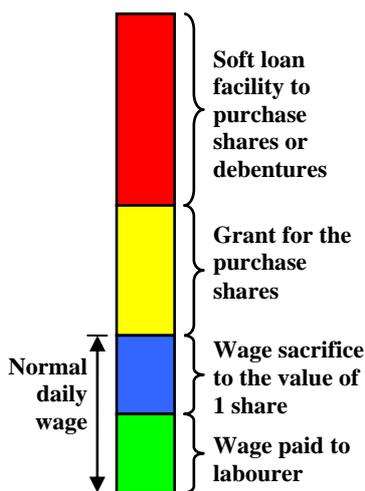
PPHP is not similar to micro hydropower projects (MHPs) that are common in rural Nepal. These tend to be small scale (less than 100kW) projects which supply electricity to the local community. This usually happens as a social development project rather than a commercial one – since MHPs are rarely profitable or financially sustainable. They key aspect of PPHP is to provide income to the local community, rather than providing electricity.

Donor/INGO supported Hydropower development in the past

Bilateral donors and INGOs have a significant track record of promoting hydropower projects in Nepal. Most urban areas are served by a national electricity grid that has approximately 600 MW of power generation capacity connected to it. Most people living in rural areas (the majority of Nepal’s population) are not connected to the national grid. There is significant work being done to address this through government subsidised off-grid small-scale energy initiatives¹.

A number of the power projects connected to the national grid have been developed on a commercial basis and when well designed and built, have proved to be very profitable². Thus wealthy expatriate and Nepali investors are earning significant amounts through the development of the hydropower potential of Nepal.

Put this way, the results of the donor/INGO interventions in hydropower do not seem so beneficial for the poor – with the rich seeming to have benefited the most. However, it should be realised that during



the process, and as a result of these projects, the poorer people living near these projects have enjoyed significant benefits³. These include: rural electrification, basic infrastructure (roads, water supplies, bridges etc), some employment, training, irrigation and many others. Nepal as a whole has benefited in having (almost) sufficient electricity generation capacity to meet its needs, institutions able work in the furtherance of more hydropower development, a boost to Nepal’s economy and money in the government’s treasury. However, these projects would still better meet the needs of the poor, if the poor actually gained more directly from the wealth generated from their rivers. This is what the Pro-Poor Hydropower Project addresses.

But how can the rural poor attain majority ownership?

The mechanism by which the local poor attain majority ownership is by building on the labour component of the project’s construction and

Figure 1. Mechanism by which the local poor earn shares

¹ The Alternate Energy Promotion Centre, AEPC is the main agency responsible for this.

² In the case of Butwal Power Company yearly dividends now produce as much as 25% return on initial investment.

³ In fact, Butwal Power Company’s, Andhi Khola 5MW plant, has recently received the UNESCO/ IHA Blue Planet Award for its contribution to the community.



operation. Generally, the local poor have nothing to invest except their own labour. In PPHP, opportunities for the local poor to be employed on the project are maximised. Their labour is paid for in both cash and equity (shares) – see Figure 1. The labourer earns shares by sacrificing part of their wage.

This wage sacrifice can be then multiplied through a grant and/or soft loan facility. For each share that is earned through labour contribution, a certain amount of shares can be purchased through a grant (from donors). Another few shares can be purchased through a soft loan facility, which may be invested as a debenture in the project in order to give the local poor early return on at least part of their investment. The exact balance between the wage sacrifice, the grant and the soft loan will depend on the actual size of the local labour component in each project. The grant facility will likely not exceed 15% of the total hydropower project value.



Site of the 20MW Nyadi Hydropower Project in Lamjung – being investigated for a PPHP project

The local non-poor (who will generally be unwilling to contribute labour) will also be able to purchase shares in the project.

How will the project be implemented?

In order to fully test the modalities of the PPHP concept, a pilot project is being implemented. Lessons learnt in the Pilot Project will then be applied to future PPHP projects. Currently PEEDA is investigating the modalities of using the PPHP concept within the 20MW Nyadi Hydropower Project being developed by a consortium of developers, with the lead developer being Butwal Power Company (BPC). PPHP will be a small component of this project, facilitating the poor into ownership of about 3% of shares and as such is being implemented in a ‘dilute’ approach.

Other projects have also been investigated, such as the 1MW Byamdang Khola Project in Rasuwa. This project would be developed as a ‘pure’ approach project with the local poor gaining majority ownership.

Who are the partners in the Nyadi PPHP Pilot Project?

Figure 2 details the partners in the PPHP project. The Nepali NGO **PEEDA** is the principle coordinating organisation and will take responsibility for implementing PPHP in the pilot project. PEEDA has a partnership agreement with INGOs to receive capacity building through this project. A suitable local community organisation from the project area will be selected to carry out the awareness raising and mobilisation of the community. The commercial hydropower developer is Nyadi Hydropower Limited (NHL), a company promoted by BPC and LEDCO. NHL is responsible for ensuring that the hydropower project is developed on a professional commercial basis. More details of the other parties in the project can be found within the concept paper⁴.

How will the local community participate?

PPHP’s greatest challenge will not be technical. It will be in actively involving the local community. For the Pilot Project, a local partner organisation will work closely with the local community, both the poor and the non-poor, to raise awareness about the PPHP concept, and to mobilise them into groups. In these groups, and with the help of the local partner organisation’s experience and some assessment tools, the project and the community will reach a consensus on who shall be defined as poor, and hence be

⁴ ‘Pro-poor Hydropower, Pilot Project’ Prepared by Mark Glover et al, PEEDA, Aug 2005 version 6



Explaining the PPHP Concept to Community Groups

entitled to participate in the shares-for-labour, grant & loan scheme. These poor will then receive the training they will need to contribute their labour input to the project.

It is also important for the success of the PPHP that the local non-poor are involved. They will be invited to participate, primarily as capital (cash) investors. Through the community group formation, a special emphasis will also be put on women's involvement and empowerment. As a target, at least 50% of the participants in the community groups should be women.

The local community will be challenged and capacity built to use their groups formed for PPHP also to initiate and run other community development activities,

based on their own needs. The local partner organisation will be a key player to achieve this.

The details of the community mobilisation works will be worked out in close cooperation with the local partner organisation.

Project Goal and Key Outcomes

The **direct project goal of pro-poor hydropower is income generation** through facilitating the rural poor of Nepal into the profitable ownership of their local water resources.

The key outcome of a successful PPHP project will be that a large part of a particular community – particularly the poor of the community – will have significant ownership in a profitable hydropower company that uses that community's river for hydropower generation. They will then receive regular and long-lasting cash income through dividends from their ownership. The community will also receive many spin-off benefits, such as having its awareness raised on various social and economic issues, training, jobs during construction, infrastructure, and some rural electrification (remembering that this is not the main purpose of the project) as well as skills to create small enterprises.

If successful, this model may be repeated in various locations throughout Nepal (and abroad) and have the potential to have a massive impact on poverty reduction.

Funding

The project has been funded primarily through the Norwegian Government Development Agency (NORAD). Initially this was through The Norwegian Himal Asia Mission (Tibetmisjonen), but currently the funding is through The Norwegian Embassy. This current funding is for the modality development and preparatory implementation phases for PPHP in the Nyadi Hydropower Project. Nyadi Hydropower Limited is also providing a proportion of the PPHP project funding.



Community Meeting in Rasuwa



Figure 2 Organisational Structure of PPHP in the Nyadi Hydropower Project

