The Pro-Poor Hydropower Project (PPHP)

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PEEDA

People, Energy & Environment Development Association

Talk Outline

- Why do we need Pro-poor Hydropower?
- What is the concept
- The journey so far
- The ‘dilute’ approach – taking a new direction
- Challenges ahead

Poverty in Nepal

Have things been getting better ?

- Life expectancy: 51yrs in 1985 to 63 in 2006
- Maternal mortality 538 in 1996 to 281 in 2006
- Potable water 71% in 2002 to 77% in 2006
- Nepal's growth rate in 2006: 2.8%
- Poverty headcount 42% in 1996 to 31% in 2004

…… have they really got better?

Trends in consumption in Nepal

(by consumption decile)

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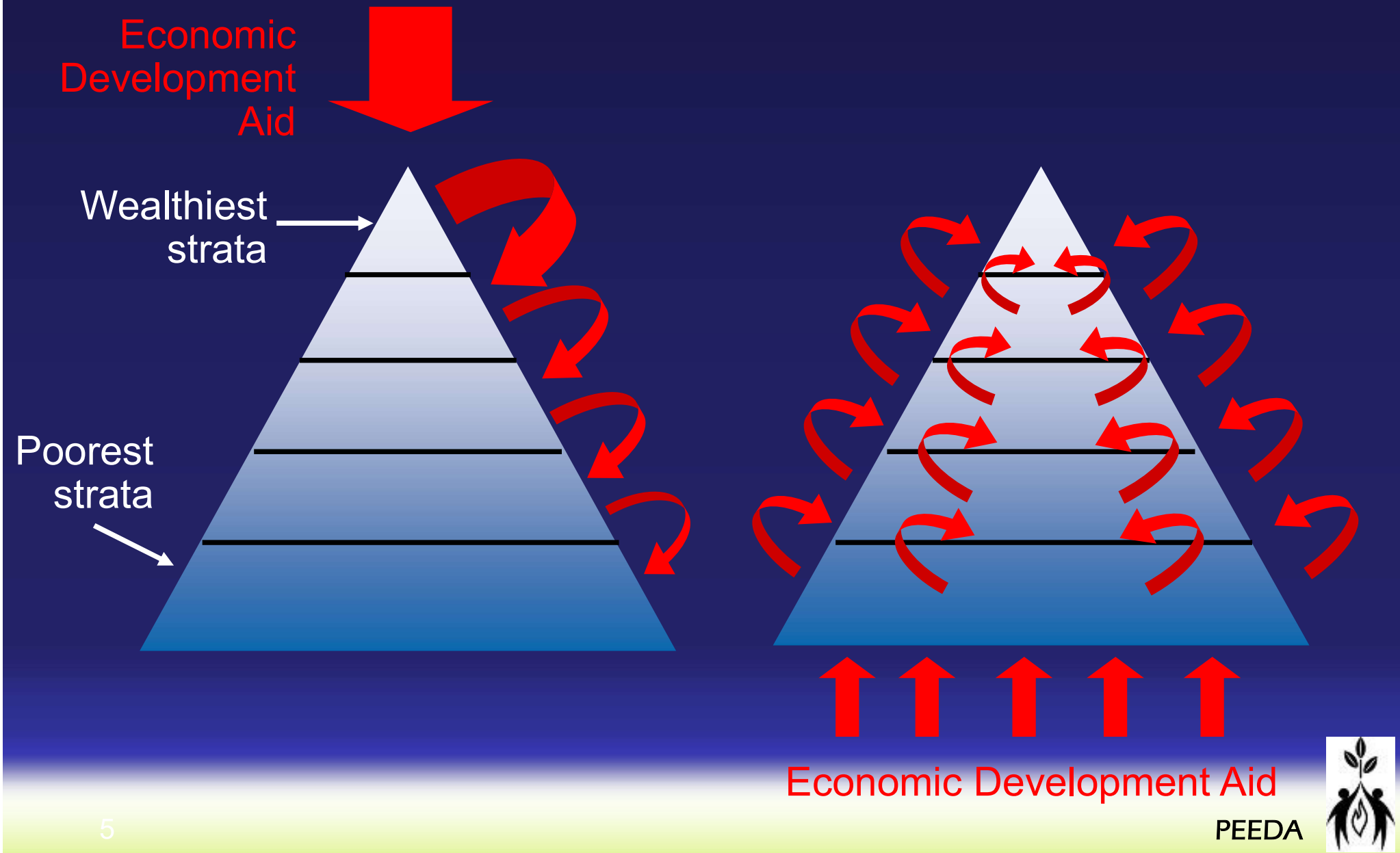
Trickle-down vs trickle-up



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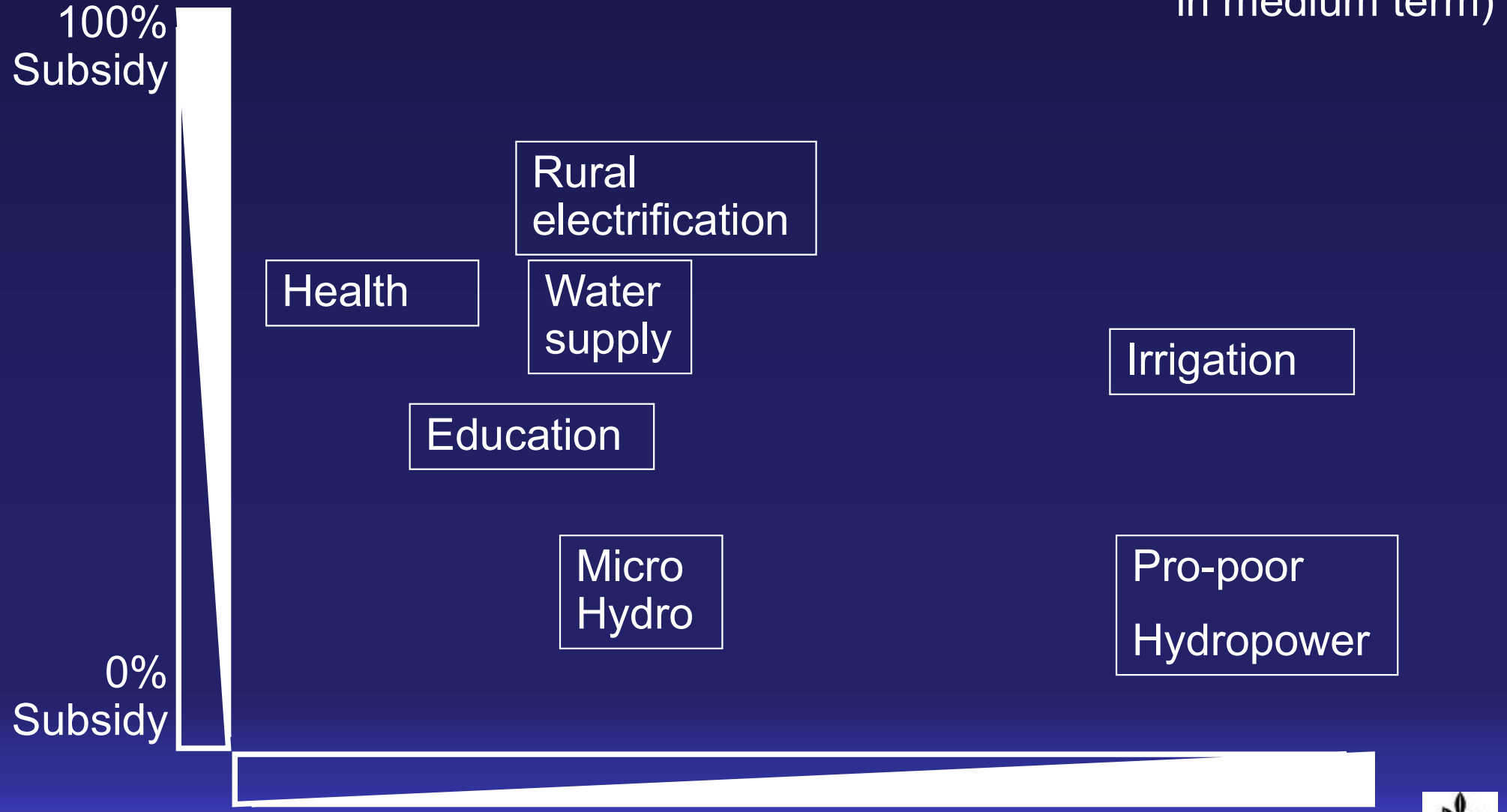
Subsidising Essential Services vs Income Generation (For Rural Poor in medium term)



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Industries Available for Rural Poverty Alleviation

	Terai & Valleys	Mid Hills	Mountain	Remarks
Tourism	✓	✓	✓	Very localised – just around the trekking routes
Agriculture	✓	✓	✓	Nepal has one of highest population to land ratios
Irrigation	✓	✓	✓	Water is free – why should I (the farmer) pay for it?
Factories	✓	✓		Provides lots of jobs – needs right conditions
Remittances	✓	✓	✓	Develops another country's economy
Hydropower		✓	✓	Jobs during construction - After benefits to rich

Hydropower - an Economic Wealth Generating Engine – Example from Bhutan

- 1,020 MW Tala HEP
- Bhutan's strong 8.8% growth in GDP (2005).
- Higher growth from 1,095MW Punatsangchhu Project stage-I and II and Mangdechhu.
- ADB reports HEP 12% of Bhutan's GDP and 45% of Bhutan's revenues.
- Per capita gross national income rising 2.5 times from US$ 570 in 1996 to US$ 1430 in 2006

Why do we need Pro-poor Hydropower ?

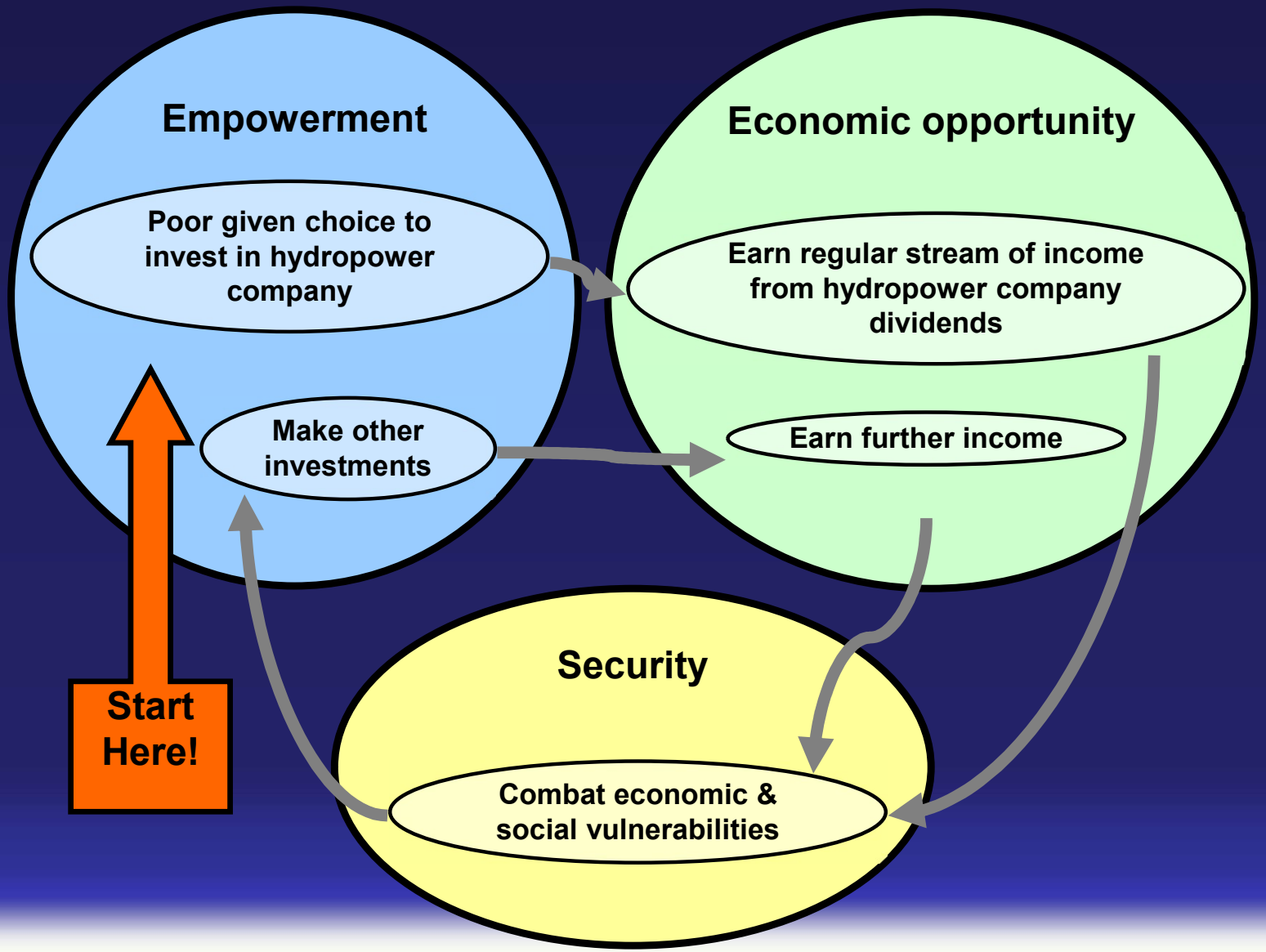
Benefits to poor:

- Jobs during construction
- Spin-off benefits: road, rural electrification, school building etc

But:

- real economic wealth generated by long term ownership of the hydropower project itself
- Hence local communities become disappointed with HEP

Dimensions of Poverty



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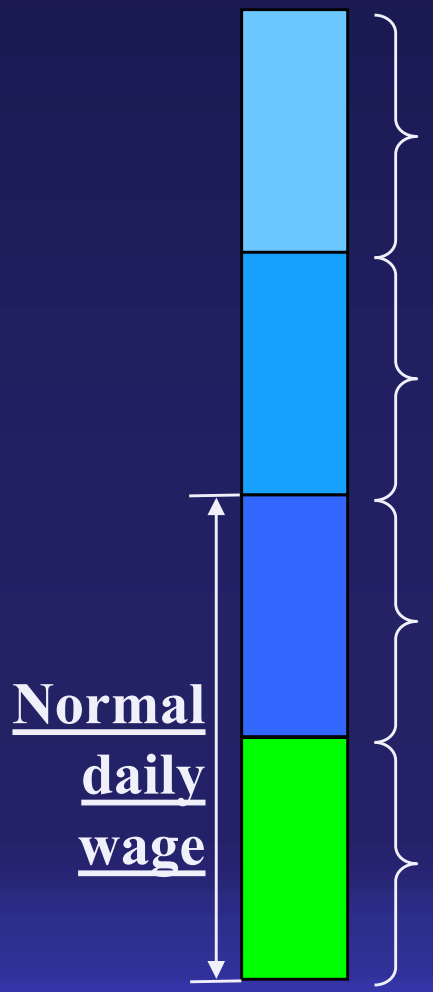
What is Pro-Poor Hydropower?

- PPHP is a concept by which the Poor of Nepal are facilitated into the profitable ownership of their water resources.
- Development of commercially profitable hydropower projects with the local poor gaining significant ownership of the projects.
- Significant means :- sizable earning when compared to other earning streams
- Can be replicated many places in Nepal and abroad

How Can Poor People Invest in Hydropower?

- Too high initial investment for poor people
- In all projects there is a local labour component (10-20% of total cost)
- The poor can invest their labour
- The poor will be offered a levering grant and a soft loan to increase their share

Mechanism for the Local Poor earning shares (per one days labour)



Loan facility to purchase 1-3 shares or debentures

Grant of 1-2 shares

(more applicable for pure approach)

Salary sacrifice of the value of 1 share

Salary received by the local poor

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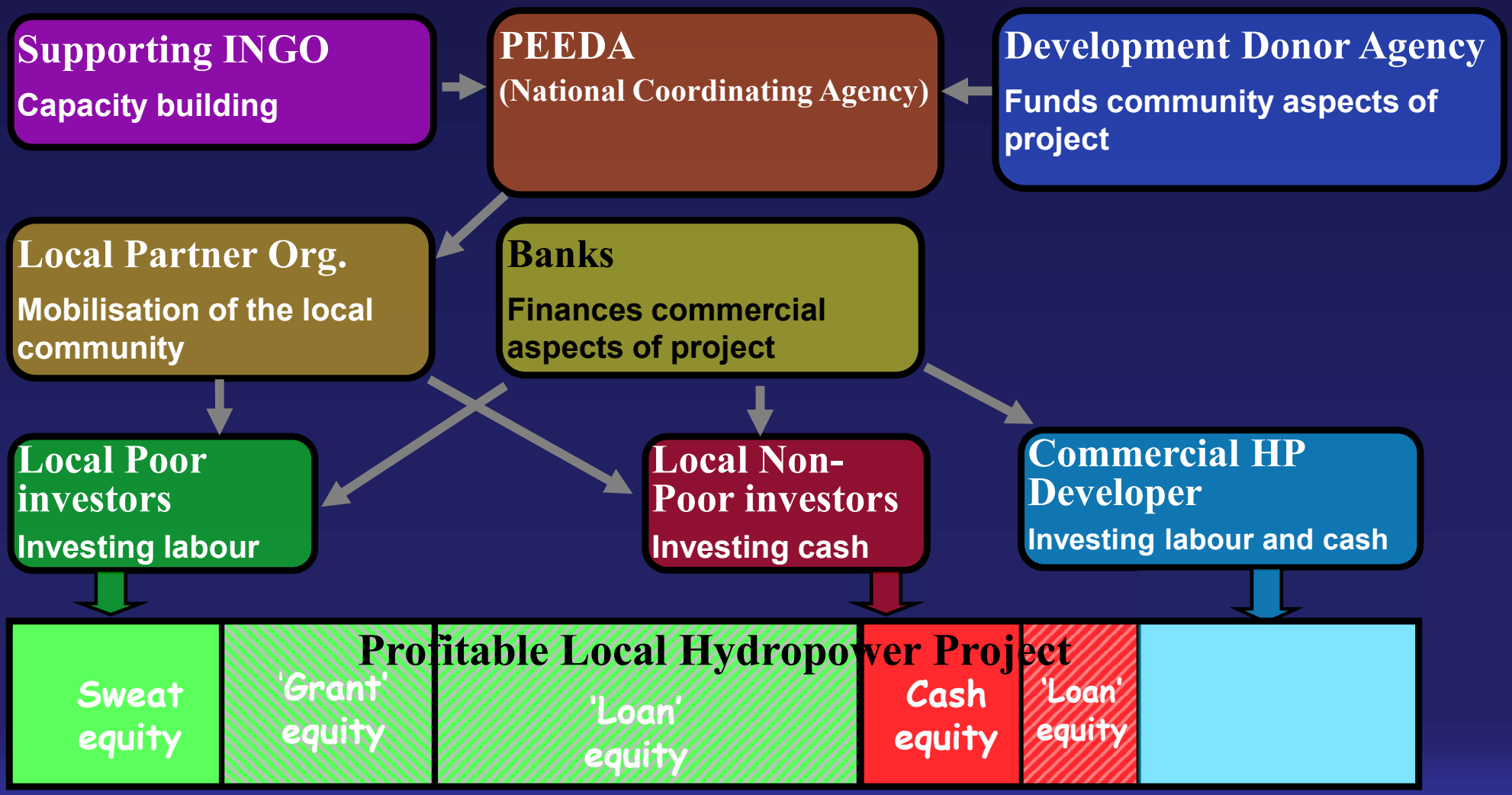
'Pure' Approach - Organisational Aspects



Struggles Implementing the 'Pure' Approach

Finding an economic site in the 1MW region

- good sites - licenses all taken
- conflict with irrigation
- un-economic when add access road or transmission line costs
- time taken for regulatory approvals and PPA
- no inflation in NEA buying rate
- construction costs increasing above inflation

Status on PPHP

- PEEDA is now looking into implementing a “dilute” PPHP approach
- PEEDA has submitted a funding application to The Norwegian Embassy in Kathmandu for PPHP Phase 2
- PEEDA has signed an MoU with BPC/ NHL to implement PPHP in the 20MW Nyadi HP in Lamjung District

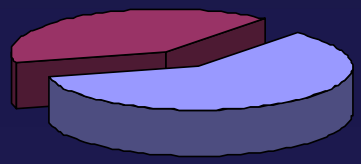
General Modalities of PPHP

1. ‘Pure’ Approach

- Developing a separate small hydropower (~1 MW)
- The poor (labour investors) will have the majority ownership.

2. ‘Dilute’ Approach

- Using the labour-for-shares model
- Facilitating poor into getting a certain share ownership of a bigger hydropower project
- Being developed by a commercial developer



Ownership by poor 60%

Pure Approach

A **BIG** piece of a small cake

60% of 1 MW = 600kW

or…

A small piece of a **BIG** cake

3% of 20 MW = 600kW

Ownership by poor

3%

Dilute Approach

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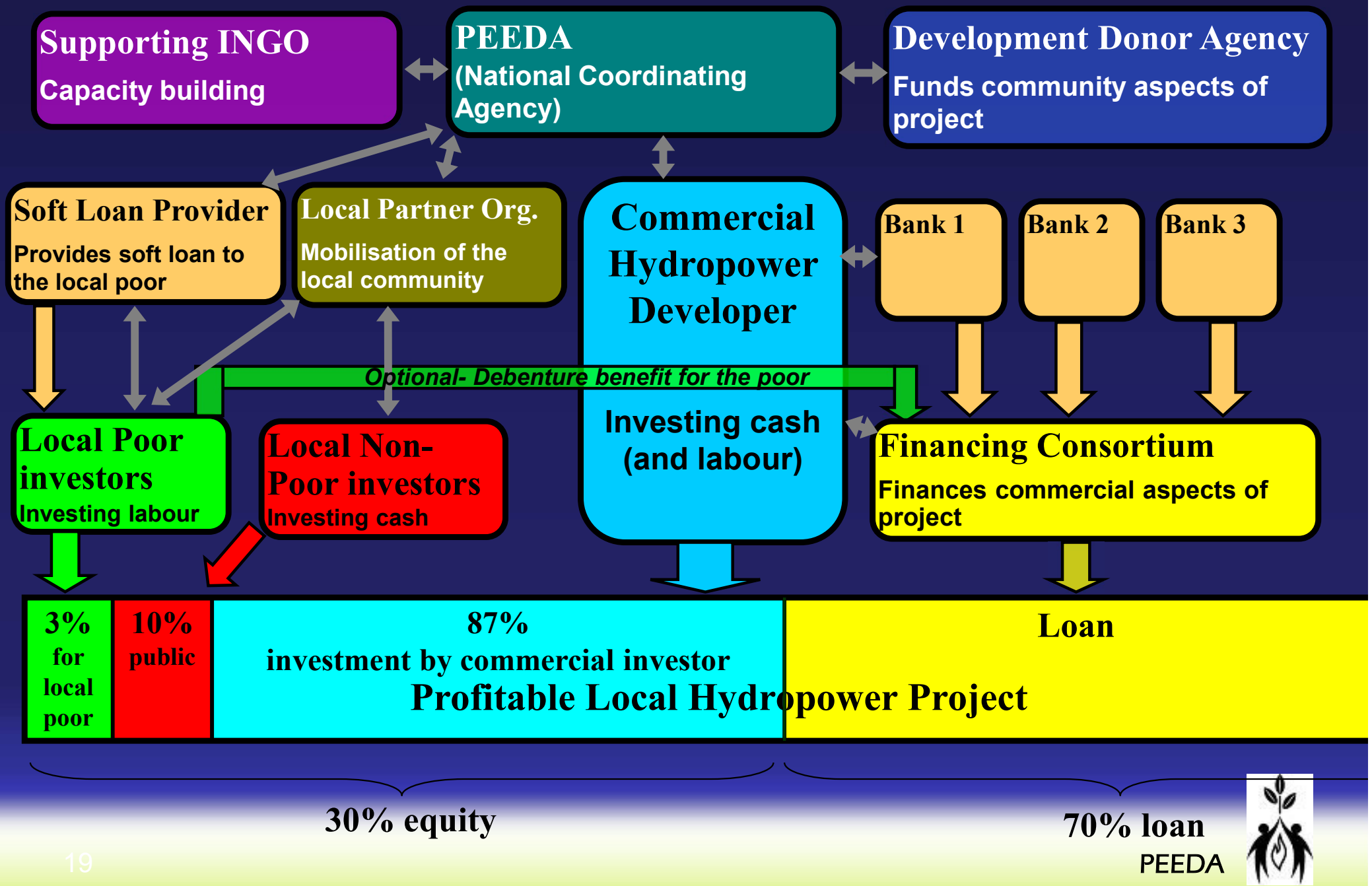
Model 2- "Dilute" Approach



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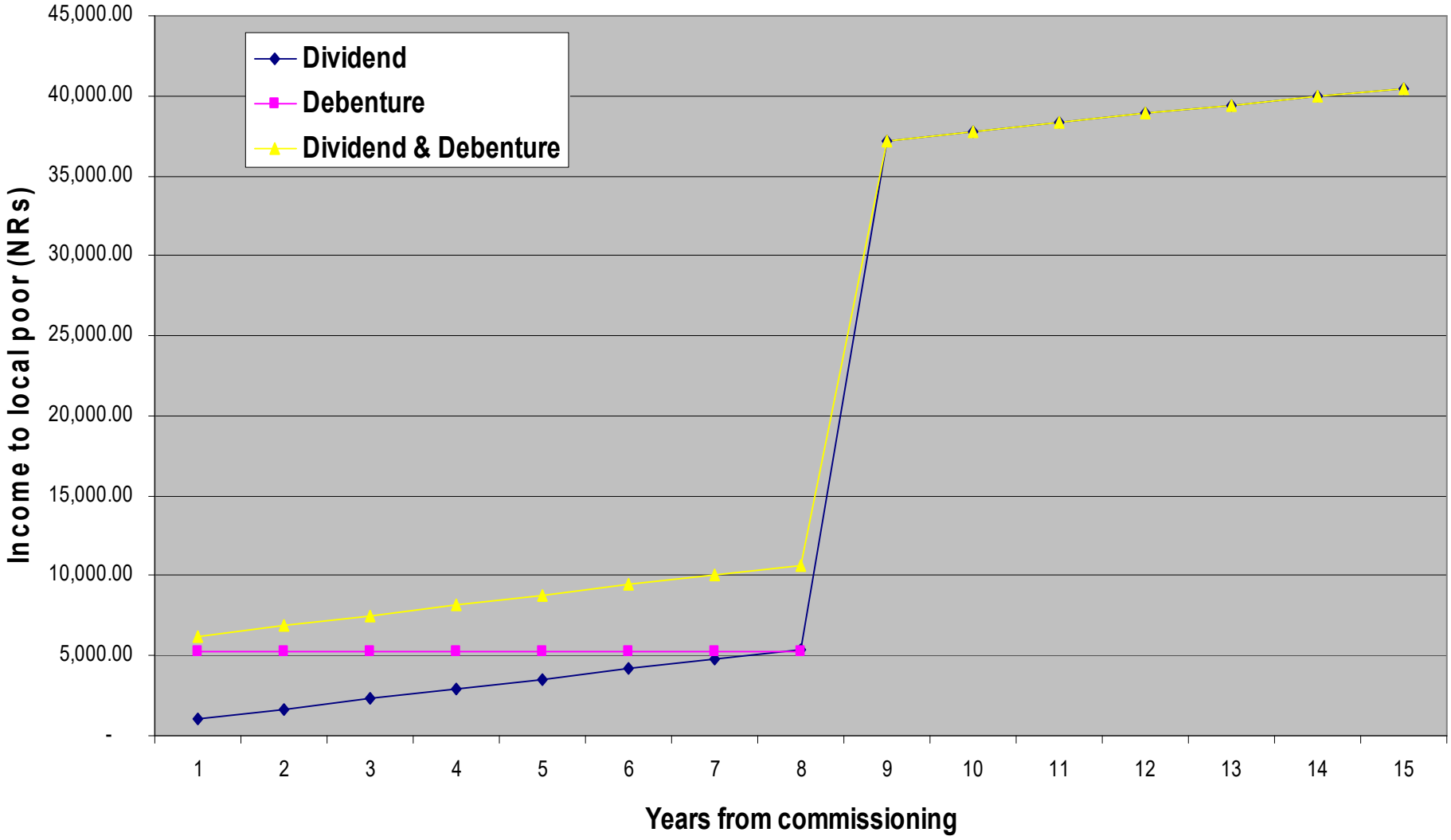
Poor earning per HH with and without debentures



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Advantages of Debentures from soft-loan

- Income is generated between the margin between the soft-loan rate and the finance consortium loan interest rate
- Income is very low without debenture income during the hydropower project loan re-payment period
- Soft loans are available to the poor – why not use them!

Model 1: 'Pure' Approach

- National coordinating agency (e.g. PEEDA) will take care of the aspects
  - technical (e.g. survey, design, construction)
  - legal (license etc)
  - business (PPA, financing), etc.
  - community mobilisation
- There will be more opportunities for the poor to get empowered as they control the commercial hydropower company
- More resources, capacity and effort needed to overcome the barriers on licence, PPA and financing issues

Model 2: 'Dilute' Approach

- Developer will take care of the aspects
  - technical (e.g. survey, design, construction)
  - legal (license etc)
  - business (PPA, financing), etc.
- Coordinating Agency (e.g. PEEDA) will focus mainly on the community involvement
- The commercial developer will "dictate" the progress
- The larger developers in better position for lobbying (licence, PPA, financing)
- More chances of wider replication in Nepal but the concept first needs to be tested

Challenges – 'Dilute' Approach

- Poor may have only a tiny share-ownership
- Commercial developers dominate the company
- Interests of the poor is less likely to be addressed
- Less opportunities for the poor to be empowered as they do not control the company
- Greater environmental impacts from a big project – yet benefits to the local poor relatively small

Benefits from PPHP

- Benefits to the Local Poor:
  - Regular income for the future
  - Other spin-off benefits:
    - Community mobilised – also for other development
    - Community empowered (women, peace-making etc)
    - Skills training leads to long term employment opportunities
- Benefits to the Hydropower Developer:
  - Good working relationship with the community
  - Community now has an incentive to keep the hydropower project running
  - Contributing to the goal of poverty reduction
  - Satisfaction in benefiting (not exploiting) the local poor

General Challenges of PPHP

- How to change traditional mindset of rural people so they can understand share ownership and long-term investment?
- How the poor will spend the income and how PPHP will be integrated with their overall development?
- How to increase the skills of the poor to be able to contribute skilled labour?
- How to build the capacity of the poor to invest cash and labour in the company?
- How the poor will manage the debentures and/or dividends?