



# Promoting Productive Use of Energy in Nepal



*energising  
development*



# Contents

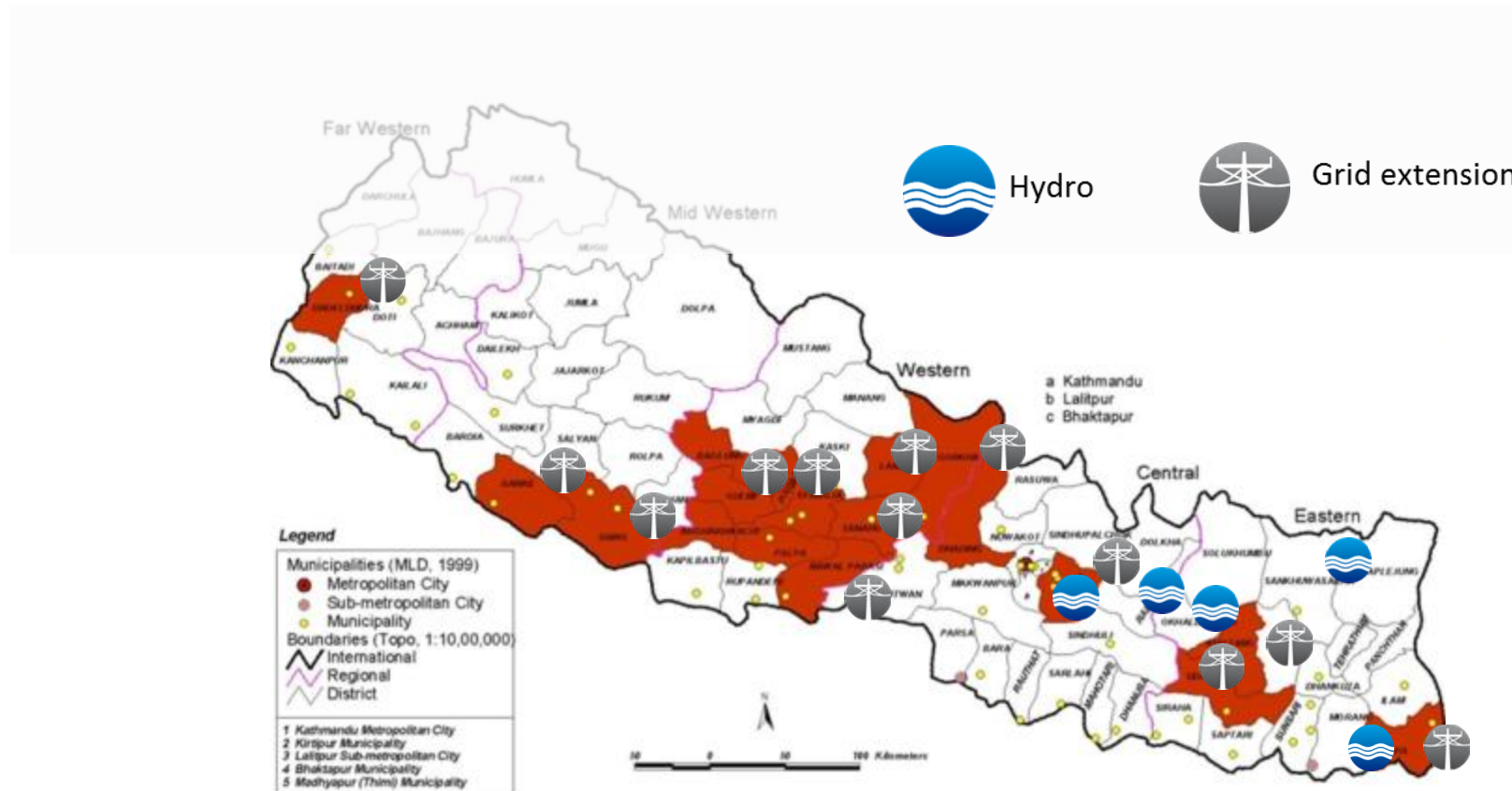
1. EnDev Nepal and Project Components
2. Relevance of PU
3. PU Approach
4. Challenges
5. Learning



# EnDev Nepal and Project Components

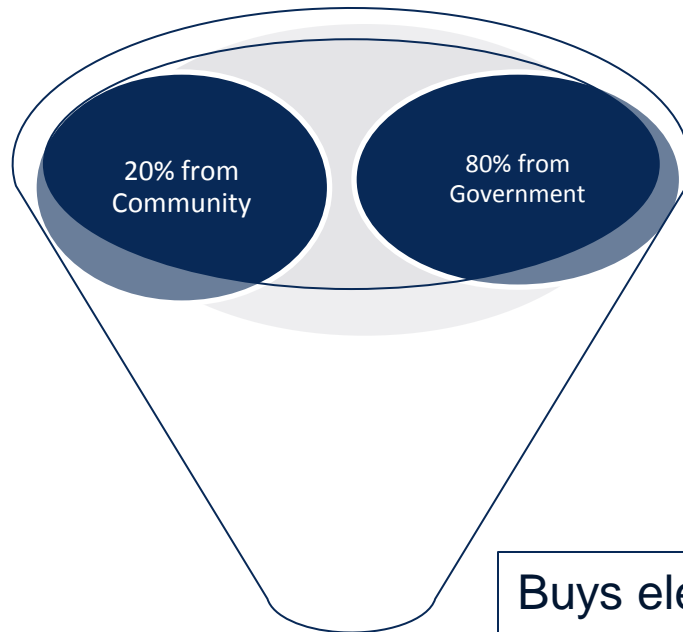
Duration: 05/2009 – 12/2015

Objective: To provide sustainable access to modern energy services for 240,637 people (~43,000 HH)





# Electricity Access through Community Based Grid Extension



**CREEs or local  
micro utilities**

Buys electricity in bulk, payment of bulk power to utility

Sells electricity in retail to its customers, collect revenue from villagers

Responsible for distribution system operation and management



## Relevance of PU promotion

- Slow demand growth is a challenge for the sustainable operation of the micro utilities.
  - unable to address big repair, maintenance
  - large turnover of qualified staff
- Economic development potentials are often not fully taken advantage of after electrification
- Thus, PUE has the potential to increase the impact of electrification through increased income of micro utilities and employment opportunities in the community

Source: [http://endev.energypedia.info/img\\_auth.php/b/bf/EnDev\\_Nepal\\_CREE\\_Sustainability\\_Study\\_050911.pdf](http://endev.energypedia.info/img_auth.php/b/bf/EnDev_Nepal_CREE_Sustainability_Study_050911.pdf)

# Approach of PU promotion



## Who are the Business Service Providers?

Local business counsellors/ mentors/facilitators who have business affinity and are trained on business service

# PU promotion sequence

Steps	PU promotion through CREEs (supported by EnDev)	Actions	PU promotion through ESPs (supported by HELVETAS)
Preparation	AWARENESS	CREEs suggest potential ESPs →	TRAINING OF ESPs
	BUSINESS IMPROVEMENT PLAN (BIP) OF CREEs	← Support in developing BIP of the CREEs, knowledge on PU opportunities	AREA POTENTIAL SURVEY
Planning	PU FACILITATION	→ Cost sharing arrangements & support ← Business clients ; business coaching	BUSINESS ORIENTATION
Provision	INCENTIVE PACKAGE	← Business services for start-ups or expansions → Technical advise and support to complement BDS	BUSINESS OPERATION OF ESPs



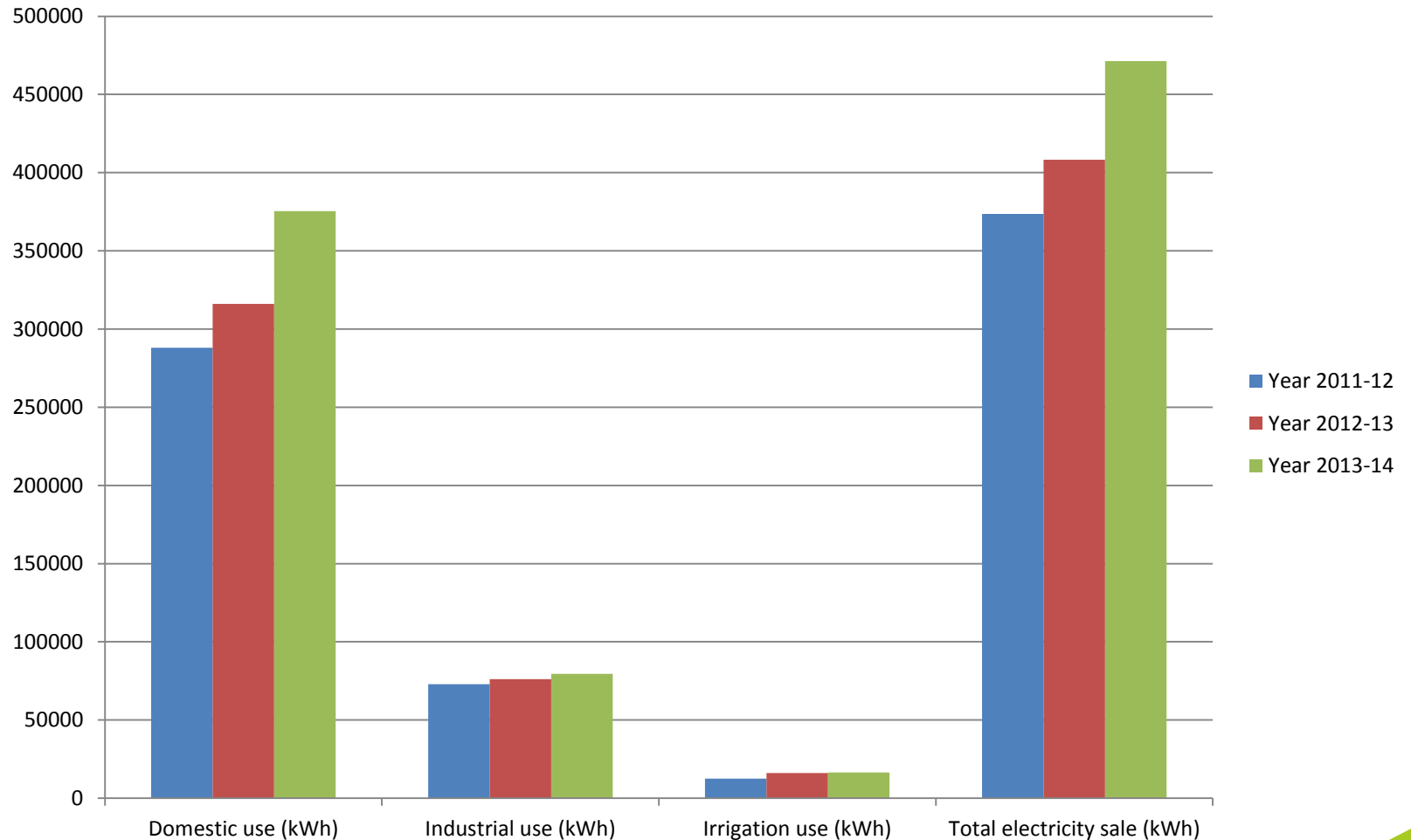
# Achievement

- **Business Development Services available in Community**
  - local entrepreneurs enabled to take **informed decisions on investment** through business service providers
  - Support in **Value Chain linkages**
  - Around **300** potential enterprises identified, **200** enterprises established
- **Ownership of Productive Use approach at local level**
  - PU mainstreamed in annual plan of micro utilities
  - Integration of Business Service Providers in Productive Use team of micro utilities
  - Transparent incentive packages offered to startup businesses
- **Knowledge Product**
  - PU Manual



# Experiences with Productive Use - CREE

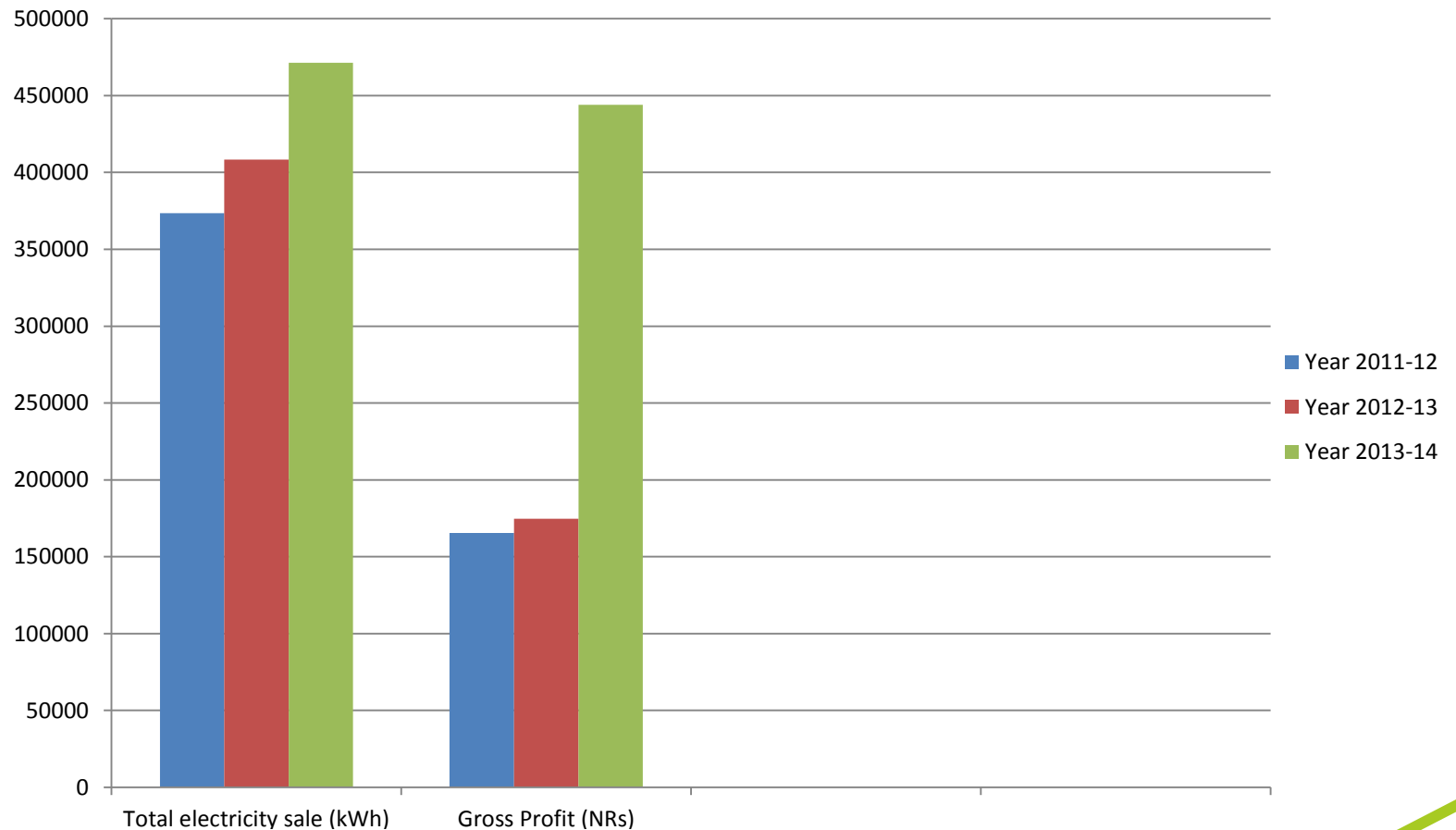
Domestic consumption increment is high compared to others due to increase in home based businesses





## ...contd.

Gross profit increment is high compared to increment in total electricity sale because of tariff structure, which allows micro utilities to earn more from customers using more than 20 kWh per month



# Experience with Productive Use promotion - Entrepreneur

- **Provides opportunities for women** - Mrs. Poonam Bhujel is the pioneer in her village, running medium sized poultry farming with 200 chickens.
- **Attracts young people to stay back in the village** – Mr. Kailash Manandhar is back from Qatar and joins father's carpentry business. He has received business counseling services and now ready to start poultry business also.



## Challenges

- Payment for services of Business Service Providers face difficulties in the culture of rural community
- Business Service Providers and PU team are operational but the continuation of their service needs to be ensured
- Other projects with different approach nearby discourage potential entrepreneurs
- The EnDev supported communities are comparatively poor, mostly located in hilly regions, with difficult access to road and market





## Learning

- The approach takes time
- Business Advisory services can be tied in with product supply contracting or other advisory services afterwards
- Business service providers could cooperate with local finance institutions since their service of writing good business plans are crucial in a loan application.
- A single prescription for PU promotion do not work everywhere and it depends very much upon local conditions such as legal status of these utilities, their priorities, etc
- The share of Productive Use of electricity of home based businesses connected to single phase energy meter in Nepal is difficult to count and monitor

# Thank you for your attention.

Funded by:



Ministry of Foreign Affairs of the Netherlands



Coordinated by:



Netherlands Enterprise Agency



Contact:

Pooja Sharma

[pooja.sharma@giz.de](mailto:pooja.sharma@giz.de)

[www.endev.info/content/Nepal](http://www.endev.info/content/Nepal)



**energising**  
**development**