

Promoting Productive Use of Energy in the Framework of Energy Access Programmes

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Definition of Productive Use of Energy (PUE)

“Agricultural, commercial and industrial activities involving energy services as a direct input to the production of goods or provision of services”

- Productive vs. consumptive and community uses
- Focus on income-generation / enhanced productivity



Rationale for PUE Promotion

- PUE / higher electricity consumption **increases the viability** of electric systems, especially where higher consumption has no major effect on investment costs
- PUE has the *potential* to **increase the impact** of electrification through increased income, employment etc.
 - However, PUE can be a zero-sum game, when it leads only to a redistribution of wealth within the same community
 - Value-adding productive uses should be prioritised



Typical Features of PUE Promotion Projects

- Identify PUE opportunities in the target area
- Raise awareness about PUE opportunities
- Provide Business Development Services (BDS) for start-ups and established businesses
- Facilitate access to efficient and high-quality end-use equipment through
 - Advice
 - Demonstration
 - Improved access to long-term credit



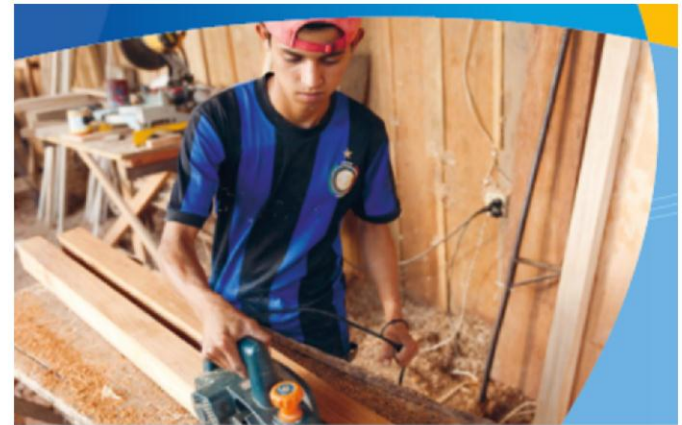
Example: Support to Business Plan Development (GIZ-EnDev Nepal)





PRODUSE Manual

- Manual on PUE promotion for electrification practitioners
- Developed by GIZ and EUEI Partnership Dialogue Facility (EUEI PDF)
- Pragmatic guidelines on how to design and implement PUE promotion programmes
- Nine modules incl. tools for different phase of the project cycle



Productive Use of Energy – PRODUSE
A Manual for Electrification Practitioners



PHASE I. Feasibility and initial planning

Module 1:

Decide whether to engage in productive use promotion

Module 2:

Set the cornerstones of the productive use programme

PHASE II. Analysis and programme design

Module 3:

Analyse local economic structures and potentials for productive uses

Module 4:

Plan productive use promotion activities

PHASE IV: Monitoring and Evaluation

Module 6:

Ensure monitoring and evaluation (M&E)

PHASE III. Implementation

Module 5.1:

Foster energy services

Module 5.2:

Raise awareness of productive electricity uses

Module 5.3:

Provide technical assistance to MSMEs

Module 5.4:

Facilitate access to financing



Project Examples on www.produse.org

ABOUT

PRODUSE MANUAL

PRODUSE STUDY

METHODOLOGY

ENERGY SOURCES

PROJECTS

PICTURE GALLERY

LINKS

Productive Use of Energy **PRODUSE**

Projects

This map includes examples of productive use promotion projects and programmes implemented by different organisations. If you know a good project that should appear here, please let us know.





Productive Use of Energy (PRODUSE) Study

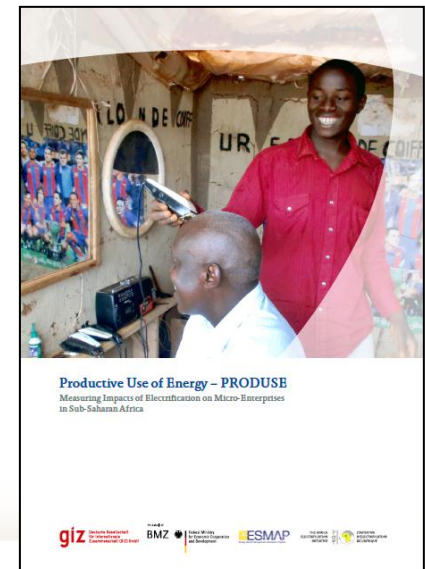
Conducted jointly by GIZ and ESMAP

Rigorous evaluation of impact of electricity on performance of microenterprises in three African countries

➤ use of control groups, advanced statistical methods

Results:

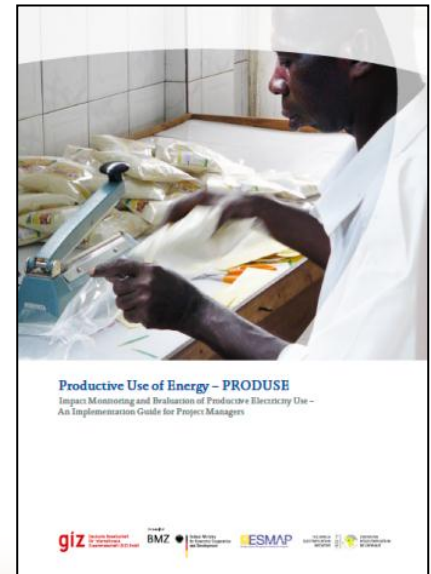
- In the three case studies electricity usage did hardly translate into higher firm profits in existing businesses
- But: Creation of new, electricity-reliant firms that perform well





PRODUSE Impact Evaluation Methodology

- Methodology for rigorous evaluation of impact of electricity access on enterprise performance
- Suitable for cross-sectional (control group) and over-time comparison
- To be applied in the context of electrification projects at fairly low cost
- PRODUSE Impact M&E Guide, questionnaire and other tools available at www.produce.org/methodology

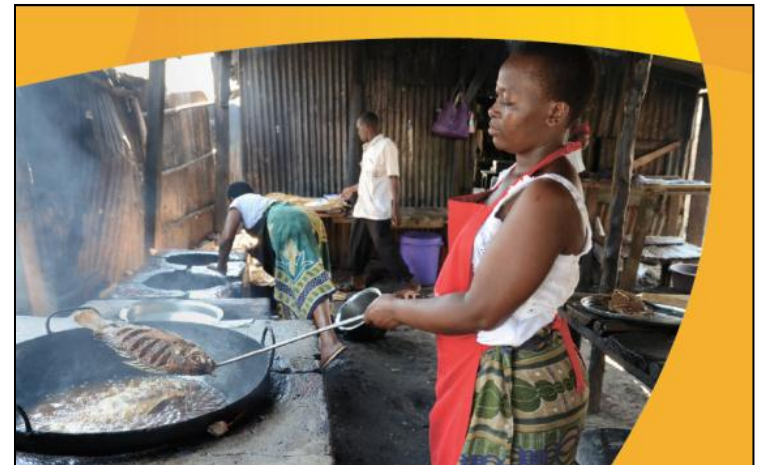




Productive Use of Thermal Energy

An Overview of Technology Options and Approaches for Promotion

- Covers efficient biomass and solar thermal technologies for cooking, baking, drying, smoking etc.
- Main publication plus eight factsheets



Productive Use of Thermal Energy

An Overview of Technology Options and Approaches for Promotion

More information:

www.produse.org

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