

Follow up to the presentation and expert meeting of 13 February 2008, SDC, Delhi
The role of energy on rural non-farm income generation

Dear all,

Thank you very much for your presence and participation in the meeting two weeks ago. This was a unique group of experts working in the field of rural energy for development. We were able to touch upon many topics based on our common knowledge of issues at hand. However, naturally there remains much to be discussed. It would be wonderful to follow up on the discussion with you all, as the shared experience and insights could really contribute to moving energy project implementation and energy policy forward for the rural areas of India.

Below I have compiled a list of the main points which emerged at the expert meeting, based on the note cards, my presentation and the discussion, with an indication of which related questions are still open for discussion. The points are numbered, which should help to focus the discussions. In italics the points for which I felt there is already a large degree of consensus, so I would suggest the other points have a higher priority. If you have new points that you feel are important for the discussion on rural non-farm income generation related to energy uses, please add new numbers or insert as sub-question (for example on loans there are already sub-items 2A,-2D). My suggestion would be that the discussion is based on actual experiences from our own work fields (rather than literature or “common knowledge”).

I hope that you are as interested to participate in such a follow-up discussion and learn from one-another's experiences as I am! It would be great if everyone could formulate a response based on their own expertise on at least 2 points within the coming month. If the discussion really gets moving maybe we could set up an internet discussion forum and/or arrange a virtual discussion meeting to work towards some conclusions in a compact session. That may be a next step, but first let's share our experiences!

Best regards,

Annemarije Kooijman

a.l.kooijman@utwente.nl

The role of energy in rural non-farm income generation

Follow-up to the presentation and expert meeting 13 February 2008, SDC, Delhi

List of participants:

Sunil Dhinghra
Dhairya Dholakia
Soma Dutta
Yaka Greiler
N.R. Jagannath
Veena Joshi
Dinnesh Kaagathi
V.V.N. Kishore
Annemarije Kooijman
Sameer Maithel
Prodyut Mukherjee
Shrashant Patara
Shirish Sinha
S.N. Srinavas
Krishna Rao

The topics in this discussion document are structured according to the following headers:

- Improving modern energy uptake by innovative project design:
- Improving opportunities for income generation through community energy provision
- Limitations of benefits of energy for income generation
- Suggestions for follow up research/ to be discussed

Improving modern energy uptake by innovative project design:

1. For non-farm enterprise development in low-income areas access to distant markets is essential. Energy projects can support income generation or marketing activities within the duration of the project. Evidence from the study shows that only rarely do local rural people have the human assets and social skills to continue and upgrade links to distant markets (including those entrepreneurs with bachelor or higher level education). Discussion: How to extend activities to sustained high-level market support outside energy project duration?
2. Will improved access to credit increase investments in productive uses of energy? In the fieldwork in HP, Darjeeling and Uttarakhand I encountered a negative attitude towards loans for investing in productive assets among the smallest enterprises. From the study in HP and Darjeeling the largest enterprises in the sample generally did make use of loans for enterprise establishment, in order of 1-10 lakh Rs. The smallest took loans out of need for enterprise operation, and loans for buildings, but generally preferred to borrow from friends or family or save until investment can be paid upfront. The main barrier to taking loans was the perception that investments would not pay themselves back.
Discussion 2A: People ARE willing to take loans if there is easy access to credit.
Discussion 2B: Do you consider the attitude to taking and repaying loans a cultural phenomenon?

Discussion 2 C: Should loans be stimulated if the feasibility of paying back is unclear? (for THIS entrepreneur with actual human assets and social networks etc.)

An innovative concept where the entrepreneur does not carry the risk is where a third party (NGO) invests in an enterprise, entrepreneur just operates the unit
Discussion 2D Potential to upscale this concept to substantial percentage of total rural enterprises? Who would be the third parties? Or to use the concept as awareness raising of feasibility of investment, as a first step to loans on commercial basis.

3. To identify the windows of opportunity for energy, the focus should be on production/market economies. For discussion: your insights on the economic situation in the areas in India that are currently unelectrified (or de-electrified), compared to those in the presented study. The presented study looked at productive uses of energy in rural settings. The economic situation in the clusters of villages differs, varying from just above subsistence level in remote villages to areas where many farmers sell cash crops, and areas 30 minutes by public transport from rural towns. The connection to the “market” was found to be different per sector.
4. Programme of electrification to be linked with other development schemes of government. Discussion: any experiences? Which departments and which other stakeholders should be involved? Experiences?
5. *Energy services should help make rural producers competitive*
6. *Creation of sustainable livelihoods based on electricity seems to be bigger challenge- skills, local market, access*
7. *The quality of electricity supply is essential for willingness to pay for energy services. In some areas people are even willing to be un-electrified/ de-electrified.*
8. *Energy: next generation light (LED and solar) will reduce power requirements.*
9. *For community energy supply ownership is essential (especially considering motivation, rather than legal ownership)*

Improving opportunities for income generation through community energy provision

10. *Modern energy services may not necessarily result in higher production but may result in savings within enterprise.*

11. *Energy can contribute to creating demand for products and services from enterprises by decreasing energy expenditure, thereby increasing expendable income in a community.*

10 and 11 consensus.

Discussion: Conditions for conventional energy cost and use under which modern or improved energy services is lower cost than conventional.

Eg kerosene at government fair price shop costs 12 Rs/l, but 22 Rs on the black market. How does lighting from grid or offgrid renewables compare with current expenditure on kerosene? (Rather than comparison at the “new” energy service level with higher lumens, more hours).

Limitations of benefits of energy for income generation

12. If only 4-14% of households are involved in non-farm entrepreneurship, can this be expected to be sufficient basis for setting up energy infrastructure? Is this percentage of involvement in non-farm activities similar in other areas in India?

13. Energy supply projects for rural areas that are involved in income generating activities tend to focus on non-farm income generation. Should the focus shift to agriculture and agro-processing? In the expert meeting it was stated that energy for agriculture is a politically defined area and thereby high risk for energy project implementation. Also energy cannot be a pulling factor developing agriculture, as is illustrated by the closure in 2007 of the only cooling facilities in Almora district (which was also catering to Bageshwar district) due to lack of demand for cooling services).
14. The opportunities for non-farm income generation with local customers depend on levels of expendable income within the community. Discussion: there seem to be two options A=wait, B= look for other markets.
 - 14A: An increase in income through other sources such as cash crops, or government jobs, then focus rural development activities on non-farm income generation opportunities?
 - 14B The local markets is the only option for services such as barbers, and targeting distant markets would require an enormous (infeasible?) change for other sectors such as blacksmiths and tailors.
15. *The connectivity, especially roads, is essential for income generating opportunities, more than electricity*
16. Time may be an important factor: don't expect first generation energy uses to use it for productive uses. Discussion: can such a time factor be decreased by awareness raising or other activities?
17. Is it necessary to focus on monetary benefits of energy uptake? Even within enterprises, non-monetary benefits such as reduced drudgery and improved comfort may be a much higher need and contribution to wellbeing than an increase in financial assets.

Suggestions for follow up research/ to be discussed

18. The findings may be different in non-hill areas.
19. Are the perceptions of women on energy uses different to that of men? In the researched areas there were very few females involved in non-farm income generation, and the females that were, were doing mainly low-investment home-based activities such as weaving and tailoring, sectors which typically experience low impact from modern energy access. The sectors in which women are involved and the benefits may be different in other parts of the country.
20. Focus on enterprises where energy has lead/is likely to lead to value addition. How to measure value addition to products and services? Especially as a similar investment in a similar energy appliance can result in varying degrees of value addition depending on both the USE of the appliance and on the PRICE paid for products and services which is largely dependent on other factors besides production technology.
21. Due to fast development of retailing and logistics industry, the rural economy is bound to change. Constraints due to energy may become important constraints for location choice? Also many sectors of small scale production may become unsustainable in rural areas as the market outreach increases. Instead local rural enterprise will consist more of services and retail in future.
22. Further study into impacts could include impacts on income for enterprise workers. Also impacts of shifting opportunities for income generation between groups in society (eg from females to males, from poor to middle class).