



# THEME EDITORIAL

## Household energy and poverty reduction

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### Energy advocacy

We live in a world where the big questions about how the world accesses the energy services it requires are left unanswered. The greenhouse gas emissions and fossil fuel dependence of the North is arguably the most 'non-sustainable' activity currently taking place by humanity, as it continues to change the ratios of gases in the planet's atmosphere. At the same time there is increased recognition of the role of improved energy services in the context of development. The major argument is that *basic* energy services should attract the focus of the world's decision makers.

### Millennium Development Goals

Addressing basic energy needs for cooking and heating is a key element in reducing 'extreme poverty and hunger' by half by 2015. Energy that enables productive end uses can be the means by which fewer people live under the crude dividing line of one dollar per day. As for the other targets, improved energy services can make both direct and indirect contributions. It is hoped that there will be universal primary education by 2015. The link between energy and education might not be immediately obvious to some, but if a daughter's time is freed from firewood collection or other 'survival activities' then there is a higher chance that she will be able to attend school. Also, the impact on decentralized electricity services to provide improved lighting for schools and households is a clear example of energy and development that is easily communicated (see front cover). The fourth development goal is to reduce child mortality by two thirds by 2015. Indoor air pollution, which is a major risk factor in acute respiratory infections, is an area

where improved household energy can have a direct impact on health. The article by Liz Bates details participatory methods for addressing this need.

### Sustaining life and livelihoods

ITDG is increasingly learning from a diverse project base, and seeking to influence policy thinking on the role of energy and sustainable development. One focus is to ensure that organizations do not follow the pattern of designing a technology then looking for a need. One aspect is ensuring that policy makers and campaigners do not confuse renewable electricity production (small amounts of watts from solar photovoltaic panels) and the technology which is needed for people to meet their basic cooking and heating energy needs. For two billion people this will continue to be met using traditional biomass. ITDG's activities within 'Sustaining Life and Livelihoods' includes working with Greenpeace (an international environmental pressure group) on a campaign which is calling for governments to commit the resources for providing modern energy services to people in developing countries.

### The World Summit on Sustainable Development

At the end of August world leaders, NGO delegates, businesses – a total of tens of thousands of participants – converged on South Africa, ten years after the Earth Summit in Rio de Janeiro. On 14th May 2002, Kofi Annan, Secretary General of the UN, named energy as one of the five key areas where action from the summit can make a difference:

*'Energy is essential for development. Yet two billion people*

*currently go without, condemning them to remain in the poverty trap. We need to make clean energy supplies accessible and affordable. We need to increase the use of renewable energy sources and improve energy efficiency.'*

*Kofi Annan*

So in Johannesburg the role of energy and poverty reduction received unprecedented attention which, it is hoped, will lead to action.

### Debate

For the recognition of these issues, and for change to take place, it is necessary that governments and international institutions understand the reality and the impacts that 'issues' such as energy have on peoples' lives. The only way for this to happen is for small NGO's and community organizations to communicate what is important about their work to people who can change current trends. This is the ambition of having such a summit.

Discussion can take place through networks where different well-informed groups contribute from a variety of perspectives. One example, concerning household energy, is with fuel substitution. Someone whose key concern is the magnitude of the indoor air pollution problem would see a move to pressure-kerosene or LPG as being progressive because these are cleaner fuels than traditional biomass. An environmentalist would draw a very different conclusion in comparing imported fossil fuel to biomass which, if sustainably managed, is a renewable source.

One initiative for linking work on the ground to the policy level dialogue is SPARKNET, an interactive network focusing on energy for low-income households in Southern and East



Africa. This covers the main themes of health, gender, forestry and policy. More information can be found on the website: [www.sparknet.info](http://www.sparknet.info). Online discussions are expected to take place during this project.

## Boiling Point

This edition of *Boiling Point* discusses how to optimise household energy's role in poverty reduction, and how positive activities might be further promoted. As shown in the quotation from the UN Secretary General, the need for the sustainable use of energy in developing countries is recognized. The key question is how to integrate this into countries' poverty reduction strategies and into development programmes.

In this edition there are details of new technology possibilities, such as the plant oil stove developed by Hohenheim University, which offers carbon neutral energy compared with kerosene pressure stoves which it could replace (Figure 1). There has been some introduction to the sustainable livelihoods framework in *Boiling Point* (Andrew Barnett BP46), and it is interesting to note the increasing use of this analysis by projects for project design, as a framework for social research and for monitoring. Exam-

ples are given in Alison Bannister's article using this livelihoods framework for investigating the links between energy and poverty. Rona Wilkinson presents the findings of an impact study of energy infrastructure projects on poverty using sustainable livelihoods analysis. This level of social/cultural awareness is critical because of the danger of assuming the benefits of a technology-based intervention. Didier Bazile also presents an impact assessment on poverty, based on monitoring work in Madagascar. Auke Koopmans' article details experience gained in strengthening community based organizations and NGOs in household energy and reducing indoor air pollution.

The managing director of Grameen Shakti, Bangladesh, Dipal C. Barua, has described the solar home system programme in Bangladesh (Figure 2). As there are over 8000 units installed, there is a context for the possible large scale dissemination of this improved energy service in that country. Also on solar technology, Erica de Lange and Marlett Wentzel have written about solar stoves in South Africa. Their monitoring has focused specifically on the reduction in fuel use and the impact on poverty. There is an intro-

duction into rice-husk stoves in Estela Assureira's article on the usefulness of rice-husks in Peru.

One of the largest stoves programmes, based in India, was started in the mid 1980s. To date more than 32 million improved stoves have been installed, with a 50% subsidy. Though the 'scaling-up' has been on a large scale there have been some problems, with 40% of the stoves not being used and the subsidy causing various distortions. These are detailed together with the lessons learnt in Bhaskar Sinha's article.

In conclusion there is scope for widespread understanding of the complexity of working to improve the access of the one third of humanity who rely on traditional energy. But it is vital that dialogues such as the World Summit on Sustainable Development take place with the issues properly known. For this, links must be created between smoke-filled kitchen spaces and air-conditioned UN meeting rooms.

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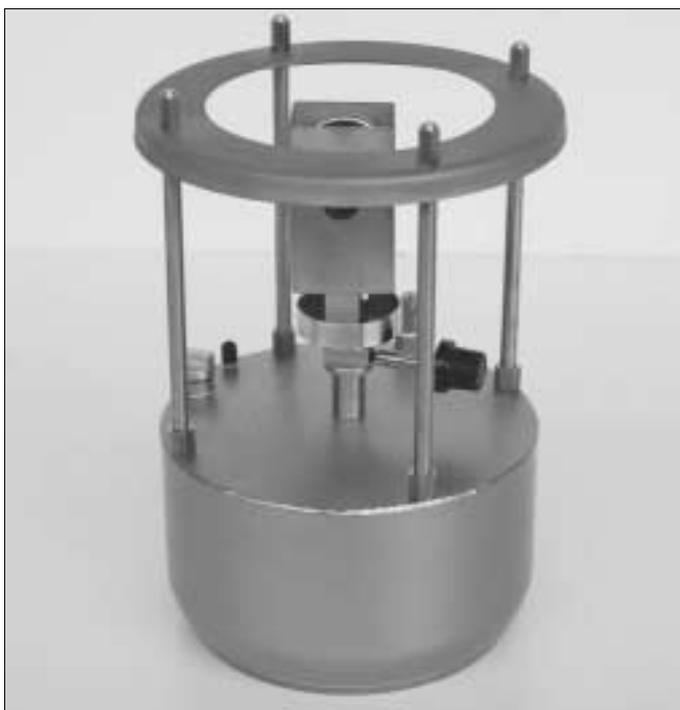


Figure 1 Plant oil stove developed by Hohenheim University



Figure 2 Solar energy system used for illuminating a small business