

**PAPER PRESENTED AT**  
**UK DEVELOPMENT STUDIES ASSOCIATION CONFERENCE 2013**  
**University of Birmingham, 16 November 2013**

**Energy Poverty: have we got the measure of it?**

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DSA Conference 2013

**Introduction**

At the macro-level it has long been accepted that there is a strong relationship between energy and economic growth (IDS, 2003). In the 1990s, the development discourse began to focus on the effects that economic growth has had on poverty. However, an interest in the links between energy and poverty took more time to emerge.<sup>2</sup> Indeed, energy as an enabling factor in social transformations at the micro-level has not played a major role in the development discourse. Energy, unlike other infrastructure-related sectors such as water, transport and ICT, has also not been a central topic within the social sciences, including anthropology. The recent interest in climate change has focused on energy as the problem not part of the solution, particularly for the poor.

At the micro-level, there has been a growing recognition of the role that energy can play in combating poverty through: (i) improved health; (ii) increased productivity and new opportunities for additional income; (iii) reduced labour and time spent on household activities (see for example World Bank, 1996; World Bank, 2000; UNDP, 2006). These categories are linked. There appear to be two important assumptions underlying these assertions about energy and poverty: firstly, that the rural poor form a homogeneous group; and secondly, that they will benefit equally from energy interventions. However, work on poverty has increasingly recognised that the poor are not homogeneous, not only in terms of the extent of their poverty but also their reasons for being poor. The processes through which people become poor and their routes out of poverty have a distinct gender dimension (Naryan, 1999). This means that energy interventions aimed to help the poor are likely to benefit men differently from women, in part due to their different capacities to respond, and partly because they have different needs linked to the gender division of labour.

The focus on a broader interpretation of poverty as more than a lack of income has allowed for the emergence of the concept of energy poverty. Energy poverty can be considered a dimension of poverty, nevertheless the concept is not recognized in poverty assessments. Much of the work on energy poverty has focused on how to measure the extent of this dimension of poverty. However, our work shows that this is only one aspect of informing policy making. There is a need to take into account the capacity of energy ministries and local authorities to incorporate a demand-side perspective into their planning. For local authorities assuming responsibility for energy planning is generally a new responsibility added to their remit.

This paper draws on the existing literature related to energy and poverty, as well as on project field work and PhD research in South Africa to show how energy interventions addressing energy poverty are not effective because of the lack of capacity at government sub-national level. It also describes an approach, developed as part of an EU funded project, to increasing the capacity of local

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<sup>2</sup> For example, the World Development Report 2000 took poverty as its theme, but made no mention of energy.

authorities to carry out energy planning.

## **Energy poverty**

Energy poverty began to emerge as an issue of concern in the 1990s when studies showed that nearly 90% of the global population lacked access to sufficient and sustainable supplies of energy (Barnes and Floor, 1996; Reddy, 2000). Energy is one of the most essential inputs for sustaining people's livelihoods. At the most basic level energy provides cooked food, boiled water, and warmth. Therefore a lack of energy has a negative effect on people's lives. Recent data estimate about 40% of the global population have no form of modern energy carrier for cooking and one in five has no access to electricity (UNDP/WHO, 2009 and IEA, 2010). This limited access to modern energy has two significant consequences: firstly, an inability to meet the basic necessities of life; and, secondly, an inability of many, in particular rural people, to participate in economic activities that provide a reasonable income to help them move out of poverty.

There is no internationally agreed definition of energy poverty. However, a frequently cited definition is "the absence of sufficient choice in accessing adequate, affordable, reliable, high quality, safe and environmentally benign energy services to support economic and human development" (Reddy, 2000: p 44). Energy poverty can be conceived as not having sufficient energy to cook enough food to meet daily nutritional needs and boil enough water for drinking and hygiene purposes (Clancy, 2011). Below this level, households can be considered to be in energy poverty. The minimum could be extended to include lighting, an aspect that helps move people from a situation where their lives are governed by what can be achieved in daylight. There is now evolving an extensive literature on measuring levels of access to energy to assess whether or not households are living in energy poverty (see for example: Pachauri and Spreng, 2011; Bhanot and Jha, 2012; Practical Action, 2012).

There is a strong co-relation between chronic poverty and lack of access to electricity and cleaning cooking solutions. While the percentage of the population in Sub-Saharan Africa without access is higher than in South Asia (about 70% compared to about 30%), the actual numbers, due to the significant difference in total population, are about the same (600 million) (Pachauri et al., 2013). Poor households use less energy per household than wealthier ones in absolute terms. Less water is boiled for drinking and other hygiene purposes, increasing the likelihood of water-borne diseases.

Nevertheless, energy poverty should not only be equated with income poverty. Research from India suggests that the extent of energy poverty can exceed that of income poverty even for richer households particularly in rural areas where a lack of infrastructure and markets makes it impossible for to gain access to electricity, clean-combusting fuels and equipment (Pachauri and Spreng ,2011).

This differentiation in quantities and qualities of energy carriers related to household economic status is an aspect of energy poverty. The energy carriers (the form in which energy is delivered to consumers) used to provide basic services are strongly related to household income. Poor rural households primarily use biomass as an energy source and they rely on their own metabolic energy to carry out all the manual activities on the farm, as well as around the household and to transport goods to market. The source of biomass is the natural resource base of forests and shrub land where dry, dead fuelwood is scavenged as well as on-farm sources for fuelwood, agricultural residues and animal dung. In many areas there is an increasing shortage in biomass supply, since the natural resource base has been degraded. As a consequence, biomass collection can take several hours per day, time that cannot be used for other livelihood activities. Although nearly all households in rural areas use some biomass, poor households rely most on this source, and tend to spend more time searching for biomass than higher income households (Reddy, 2000). Wealthier households also purchase other, higher quality, modern energy carriers, such as electricity and LPG, which will be used for a greater variety of end-uses than in poor households. In rural areas, poor households will

generally restrict purchases for energy carriers to those of lighting (candles and kerosene – with their associated fire hazards) and batteries (small ones for torches and radios and car batteries for entertainment systems). The fuel quality is low, burning with levels of smoke and particles (also known as indoor air pollution (IAP) that are recognised as having negative effects on health (see for example: Smith, 1999).

There is an assumption that the urban poor have better access to modern energy carriers than the rural poor. To a certain extent this is correct in relation to electricity, particularly in Latin America and the Caribbean, but not necessarily to cooking fuels (Clancy et al., 2008). In urban areas poor people have to purchase cooking fuels, and they spend a higher proportion of their income, than higher income households, on fuels (ESMAP, 1999). Typically, a poor urban family spends 20% of its income on fuels (Barnes, 1995). Understanding the specific problems of urban energy poverty and their solutions is important since the global trend is for increased urbanisation (UN Population Fund, 2007).

### **Why do people live in energy poverty?**

Based on an extensive review of the literature, Sinha (2012) identified three causes of energy poverty: (a) a rural subsistence economy and the cost of modern energy carriers (Reddy, 1999; Barnett, 2000; Price, 2000); (b) a weak delivery infrastructure and weak institutional mechanisms (Jaccard and Mao, 2002; Saghir, 2005; IEA, 2010); and (c) the energy–gender linkage (Cecelski, 1995;; Cecelski, 2004; Clancy et al., 20011) (this aspect is discussed in more detail below).

The lack of availability of good quality energy carriers together with their associated energy efficient technologies and the capacity to pay for them are two of the most significant factors that result in people living in energy poverty. Modern energy carriers are based around capital intensive production and distribution networks of grids and pipelines and transport systems. The cost of delivery increases with distance. Unfortunately for the rural poor they often live in the more remote areas with the sort of terrain, such as mountains, that increases the costs of putting in the distribution networks. The population density in rural areas, where people tend to live in small scattered settlements, also increases distribution cost. Supply companies do not see rural areas as a good return on investment and are reluctant to supply such areas. As a consequence, there is limited availability of modern energy carriers in rural areas.

The capacity of rural households to pay for energy carriers and the associated energy conversion equipment is limited. This situation results in continued “low productivity, low quality of outputs, and an inability to release labour for economic activity. In turn, this leads to low returns on investment and labour inputs, again limiting the capacity to acquire modern energy services and appliances” (Ramani and Heijndermans, 2003: 19). As a consequence poor households become trapped in a vicious circle of energy poverty. However, savings on energy expenditures can help move households out of poverty. A survey in Sri Lanka in the late 1990s found that savings of Rs100 on kerosene would move 22 per cent of the poor households surveyed above the poverty line. Such savings were estimated to be 12 per cent of the monthly income (University of Reading, 1999).

### **An end to energy poverty**

Ending energy poverty requires enabling access to modern cleaner energy carriers, such as electricity, LPG and biogas, or more efficient conversion devices for biomass, such as improved cook stoves. These modern energy carriers are regarded as an essential input for economic development, since they substitute for human and animal energy and hence increase output, reduce time poverty, provide healthier working conditions, as well as providing new services, such as refrigeration, not only for the household but also the community (Barnett, 1999). However, energy alone is not sufficient to bring development since other complementary inputs, such as roads and finance, are also required. Indeed, it may be more efficient to “bundle” energy provision with the provision of

other services, such as water, sanitation and education. For example in Peru it was found that adding a fourth service for rural households has an effect seven times greater than the addition of the second service (Barnett, 2000).

At the household level, people do not want energy carriers as such but the services, such as heat and light, which these energy carriers can provide. Again at the household level, in order to be able to obtain the desired energy services, complementary inputs in the form of conversion technologies are needed. Access to energy services provided by modern energy carriers can bring about an improvement in the living conditions of the user. For example, access to electricity can provide better quality lighting as well as providing new services such as telecommunications. For poor people, these new or improved services contribute to poverty alleviation although it may be difficult to actually attribute such effects solely to energy since there is a range of factors, such as macro-economic policy, which affect measurable poverty (IDS, 2003). However, if people are to move out of poverty, they need to be able to use modern energy carriers to raise incomes through increased farm output and improvements in quality, as well as diversification in the types of income generating activities, both on- and off-farm. Therefore, by addressing energy poverty, overall poverty can be reduced. The impact on poverty of improved energy services is determined by the choice of end-use to which energy is put (Pachauri and Spreng, 2004).

However, energy poverty receives little attention when addressing poverty issues in general. Energy has been by and large not recognised as a major factor in addressing poverty as can be seen by the failure to specifically mention energy in the Millennium Development Goals (MDGs). The International Energy Agency (IEA) estimated that in order to meet the MDGs by 2015 over 550 million people needed access to electricity (OECD/IEA, 2010). However, energy poverty has now become a part of the global policy agenda with the launch of a new global initiative by the United Nations Secretary-General in 2011: Sustainable Energy for All (SE4All).

### **The Gender Dimension of Energy Poverty**

The gender dimension of energy is based on the gendered division of labour within households which generally allocates to women the responsibility for household energy provision (Moser, 1993). They are often supported in this work by girls and sometimes boys, who can be kept out of school to help with the search for biomass thereby damaging their own future livelihood choices (Vogt, 2007) (Agrawal, 1997). Providing energy to meet household needs can mean spending many hours collecting fuelwood. For example, Malmberg Calvo quotes figures of more than 800 hours a year in Zambia and about 300 hours in Gambia and Tanzania (Malmberg Calvo (1994) quoted in Rossi and Lambrou (2008): 10) The loads carried can weigh 20 kg or more and do cumulative damage to women's spines and internal organs (see for example (Cecelski, 1995), (Amacher et al., 1993), (Wickramasinghe, 2001) (Cooke et al., 2008)). Men do get involved in fuelwood collection although the trigger for their involvement appears to be dependent on local circumstances, such as fuelwood scarcity (Cooke et al., 2008) or need for income in which case they collect the firewood primarily for selling on.

Women are also responsible for household tasks that ensure the survival of the family, such as preparing food and providing water. Cooking with fuelwood results in women and young children being exposed to high levels of Indoor Air Pollution (IAP) for between three and seven hours per day (WHO, 2005). This type of exposure has been attributed to the higher levels of lung and eye diseases suffered by women as compared to men in developing countries (Smith, 1999). Cooking with solid fuel is responsible for 1.6 million deaths due to pneumonia, chronic respiratory disease and lung cancer. The World Health Organisation considers that 59% of all IAP-attributable deaths are females and 56% of all indoor air pollution-attributable deaths occur in children under five years of age. However, while for one of the common impacts of IAP, chronic obstructive pulmonary disease

(COPD), the incidence rate for men is lower than for women, the percentage of deaths is actually higher for men due to the higher mortality rates of male COPD sufferers (World Bank, 2012).

As well as fuelwood collection, fetching water and grain preparation are particularly demanding on women both physically and in terms of time spent on such activities (Cecelski, 1995); (SANDEE, 2007). Village transport surveys in Ghana, Tanzania, and Zambia showed that women spend nearly triple the amount of time transporting goods compared with men. Women carry about four times as much in volume as men, primarily water, firewood, and crops for grinding, on their heads (Blackden and Wodon, 2006). This shows the need for attention to addressing energy poverty beyond electricity and cooking fuels.

Time poverty has been increasingly recognised as a dimension of poverty (see Social Development Department, 2005; Blackden and Wodon, 2006). A person who is time poor is not able to allocate sufficient time for important activities, and is therefore forced to make difficult trade-offs (Bardasi and Wodon, 2006). Women are particularly time poor and the associated drudgery of their tasks mainly fulfilled through their own physical labour has implications for their health. Time poverty also reduces opportunities for income generation that access to modern energy can bring. Women are more likely than men to be affected by this constraint.

There is evidence to show that fuelwood collection might not always be the most onerous task for women. Tinker (cited in Cecelski, 2005) claims that even in supposedly degraded areas, other household tasks may be more time consuming than fuelwood collection, and energy efficient stoves might not be women's priority. A study in the resource-deficit Chiduku Communal Area in eastern Zimbabwe in the early 1990s (where there was no electricity and kerosene was expensive) showed that women spent 4.1 hours a week on fuelwood collection and 10.3 hours on water collection. Women provide 91% of the household's total effort in providing both of these household needs (Mehretu and Mutambira, 1992). Similar findings are reported in both urban and rural areas of Benin, Ghana, and Madagascar (Charmes, 2006).

Gender issues influence the energy carriers used in a household, who uses them and how they are used. Women have in general less influence over decisions and exercise less control over their own lives and resources, both at the household and community levels, than men (Moser, 1993). Women and men often have different priorities that translate into different patterns of household expenditures and investments. For instance, resources controlled by women tend to be invested more heavily in children (at the margin) than resources controlled by men (World Bank, 2001: 70). As a consequence women's capacity to control processes and resource allocation on many issues including energy is limited. Men and women often use, are impacted by, or benefit from energy services differently. The same energy service may have different social or economic outcomes for men and for women. For example, men may choose to locate a light outside the house for security reasons (such as protecting livestock from theft) while women may choose to locate the light in the kitchen (Cecelski, 2000). Women and men have different perceptions about the benefits of energy, for example, a research study on the gender related impact of micro-hydro in Sri Lanka, found that men in the area under study saw the benefits of electricity in terms of leisure, quality of life, and education for their children; while women saw electricity as providing the means for reducing their workload, improving health, and reducing expenditure (Dhanapala (1995) quoted in Barnet, 2000).

While both men and women benefit from access to energy in terms of reducing poverty and hunger through increased food production, employment and clean water, women and girls are likely to show additional benefits due to time saving, particularly in terms of water and fuelwood collection, and improved health, particularly through the use of cleaner energy carriers (Ramani and Heijndermans, 2003).

## Energy sector policy dynamics

Currently, the main global initiative by the development sector to address energy poverty is *Sustainable Energy For All* (SE4All) which focus on energy access, renewable energy and energy efficiency (United Nations, 2010; United Nations, 2012). However, there are many other processes in the energy sector and elsewhere in the economy which will have an impact on energy access, including: energy sector reform, tariff policy and the removal of subsidies, policies to address climate change, the promotion of energy efficiency, and efforts to encourage private sector financing of energy related infrastructure. Understanding the effect of these processes will have on energy access by the poor are important for ensuring that targets are met. In this paper we focus on one of these dynamics: decentralisation.

Decentralisation has been a key issue in development policy for nearly three decades (Jütting et al., 2005). Decentralisation has been advocated as a mechanism to meet a variety of objectives including good governance and improved service delivery (Heymans et al., 2004). Political, fiscal and administrative responsibilities of public functions, such as service delivery and infrastructure planning are transferred to the sub-national level under the broad framework of national decentralization policies (UNDP, 2009). These responsibilities are to be taken over by local actors, including local governments, communities and private service providers.

Decentralisation can take different forms (Evans and Manning, 2004). The central government can assign responsibilities for certain services to its regional branch offices (*de-concentration*). For energy this would generally not be an option since it is not usual for ministries of energy to have representation at lower administrative levels. Alternatively the central government can transfer responsibility for decision-making and administration of certain public functions to local governments or semi-autonomous organizations that are not wholly controlled by the central government, but are ultimately accountable to it (*delegation*). A third form is when the central government transfers authority for decision-making, finance and management to quasi-autonomous units of local government (*devolution*). Here accountability for performance lies with the local government constituencies.

For local governments (the focus of this paper), energy is not generally a sector that they have had previous experience as a deliverer of services. A report by UNDP (2009) found that national policies often neglect decentralised organisations and local actors in energy delivery and, as a result, energy delivery is inefficient. This situation will not help address energy poverty. For local governments to effectively contribute to ending energy poverty, they need to understand the energy situation in their jurisdictions and the factors limiting access to energy services as well as devising ways for achieving desired levels of people's access to the services (Nankya, 2009).

A review of decentralisation policies in Least Developed Countries and Sub-Saharan Africa found that, as of 2008/9, only a very small number of countries mentioned energy as part of their decentralisation policies<sup>3</sup>: Madagascar, Nepal, Sudan, and South Africa (from which we draw our field data) (UNDP, 2009). Decentralised energy policies appear to focus on supply side issues, primarily electricity, rather than on the demand side which would be more effective in addressing energy poverty.

The University of Twente has more than 30 years of experience in capacity building for rural energy planning in the South. It is our experience that a disconnect often exists between central energy policy, planning and implementation and local development planning. A case study of Kiboga local

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<sup>3</sup> The review acknowledges methodological shortcomings in that it is based on on-line sources which may not always reflect up-to-date government policies.

government district in Uganda found that the Development Plan (2007/08-2009/10) for the district neither had any policy nor a strategy nor any budget for promoting sustainable forms of energy services and people's access to them, other than to promote wood fuel production (Nankya, 2009). There was also no staff member responsible for energy.

### **Decentralisation of Energy Service Provision: the case of South Africa<sup>4</sup>**

In 2003 the Department of Minerals and Energy<sup>5</sup>, South Africa, as part of the broader Free Basic Services Policy, introduced the Free Basic Electricity Programme (FBE) to alleviate energy poverty in low-income remote rural and urban households. Under this scheme, low-income households are entitled to 50kWh of electricity per month free of charge. This quantity of electricity is considered adequate for meeting the needs for lighting, media access and limited water-heating and basic ironing (or basic cooking) for a poor household (DME, 2003). Households have certainly taken advantage of this electricity for lighting and appliances. It has also allowed households to make savings reduce expenditure on paraffin and switch expenditure to other household priorities such as food (ERC 2003). So a good example of how reducing energy poverty can help address other dimensions of poverty.

However, a serious flaw with FBE is that to qualify a prerequisite is having access to electricity yet many of the poorest and most marginalised in the country are unelectrified, hence could not have access to this basic quantity of electricity! The government responded to criticism of its policy and developed the Free Basic Alternative Energy (FBAE) policy in 2005 (Mlambo-Ngcuka 2005), and started implementing it in 2007. The aim was to provide alternative forms of energy to unelectrified households, such as gas, coal or paraffin. There is, however, confusion about the policy among both beneficiaries and those who are supposed to distribute it. Firstly, households are often unaware of the policy, and therefore cannot proactively claim their entitlements. Secondly, municipalities often do not have enough capacity and knowledge of how to facilitate the process.

Through the Department of Cooperative Governance and Traditional Affairs (CoGTA), it is the responsibility of local government (municipal districts and municipalities) to implement the FBAE including:

- identifying areas far from the grid;
- select suitable energy carriers to be funded and 'delivered' to indigent households whilst taking care that these are safe, accessible, affordable and sustainable;
- organise awareness raising campaigns for beneficiaries.

FBAE is added as part of the municipality's Integrated Development Plan (IDP) which provides a development framework for a five-year period. National government has general guidelines for FBE/FBAE, but leaves the development of administrative systems and procedures to CoGTA, which in turn leaves its (targeting) details to the provinces and municipalities.

To implement FBAE municipalities have to identify those households which qualify. There is no formal standard procedure for determining which households qualify and each municipality has its own criteria (Borchers and Dobbins, 2007). Funds for FBAE policy implementation are not ring-fenced which makes the programme vulnerable in stretched budgets.

In her field work Mohlakoana found that the register of those entitled to qualify was incomplete. In part this can be attributed to the work load of municipality staff. FBAE is another task added to others so there is not enough time to collect the necessary information. Staff also feel they have little

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<sup>4</sup> This section is based on Matinga (2010) and Mohlakoana (forthcoming 2014). The findings are based on field work in the OR Tambo District Municipality.

<sup>5</sup> Now known as the Department of Energy

control over the implementation policy since the rules are formulated by the national and provincial governments. They also felt that they did not have enough information about the programme. The DOE, where the technical knowledge about alternative energy resides, has very limited presence in rural areas. In some districts there are integrated energy centres (IEC)<sup>6</sup> which would be able to share knowledge with municipality staff.

However, the implementation appears not to be proceeding smoothly with, to date, only 40 municipalities out of 226 able to implement the FBAE. Matinga has criticised the programme's lack of success which she attributes to: (i) a lack of understanding of who the target user is. The envisaged 'poor household' is based on a one-dimensional view of poverty, and an assumption that the poor have meagre and low-threshold aspirations (for example setting the entitlement at 50 kWh/month); and (ii) poor planning, emerging in part from a focus on rolling out programmes and attaining quantitative coverage, rather than addressing the depth of the problem and assessing the potential benefits (Matinga, 2010).

### **Building capacity to address energy poverty**

In the context of policy dynamics, it appears that decentralised energy policies focus on supply side issues, primarily electricity, rather than on the demand side which would be more effective in addressing energy poverty. Based on our field work and capacity building programme, we consider that this lack of attention to adequately addressing energy poverty can be explained by those tasked with implementing decentralised policies not being fully equipped with either the mandate or the knowledge and skills related to energy. Indeed the role of sub-national institutions in local energy planning appears to be not fully elaborated in official documents (UNDP, 2007). This situation of lack of clarity in 'who is responsible for what' creates a missed opportunity. The lowest level of government (eg the district level in many Anglophone sub-Saharan African countries) can be the first integrating unit in terms of development planning and therefore offers an opportunity to link energy and other sectors to enable reaching development goals, such as the MDGs. Yet this level of government often has no historical remit for energy – although energy plays an important part in many of the social welfare functions they do have a responsibility for (eg health and education) - so is not in a strong position to address energy poverty. It is our experience that policy decisions related to energy (and gender mainstreaming) which are passed down to lower administrative levels are not implemented effectively and efficiently in part because staff often do not know how to implement policies – they lack the tools to do so.

It is against that background, that University of Twente, together with the International NGO Practical Action, developed planning toolkits to enable government officials to link energy planning and district plans for achieving national MDG targets<sup>7</sup>. The project was funded as part of the EU's COOPENER Programme. The toolkits were tested and applied in Malawi, Mozambique, Zambia and Zimbabwe (two pilot districts in each country)<sup>8</sup>.

The aim was to support the integration of energy budgets into other sector budgets for example health and education through the development of Local Government Energy Poverty Strategy documents. Training of district extension and planning personnel (extension workers, NGO staff, local planners, regulators, energy agency personnel and other stakeholders) was given on energy planning and development linked to the use of the tool kits. The intention was also to create a critical mass of key resource persons with knowledge and skills on energy and development. One of the common

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<sup>6</sup> In our District there was no IEC.

<sup>7</sup> The material could in effect be used with any development objectives.

<sup>8</sup> The toolkits are in the public domain and can be found on:

<http://www.hedon.info/E-MINDSET%3AProjectReports&highlight=E-MINDSET>



features of the training sessions was the limited knowledge participants had about the role of energy in development. However, once provided with a basic introduction to energy participants were able to begin to make links with their own work.

## Conclusions

In this paper we have described aspects of the concept of energy poverty which is increasingly recognised as a dimension of poverty. Addressing energy poverty can also help address other dimensions of poverty. We have also drawn attention to the gender dimension of energy poverty which in much of the literature on energy poverty tends to be reduced to the single issue of cooking and the impacts of IAP on women. This is not to down play the significance of the health impacts on women and other family members but to draw attention not only to frequent misunderstanding that 'gender = women' but also to the fact that the benefits of energy access are gendered and so is the decision making about access. Both women and men benefit from moving out of energy poverty, but in different ways, but it is men who decide about access to purchased fuels and technologies.

The global initiative of the UN Secretary General currently underway (SE4ALL) aims to address energy poverty by ensuring energy access for all by 2030. The literature concentrates on how to measure energy poverty (see for example Pachauri and Spreng, 2004; Nussbaumer et al., 2011) and what could be acceptable levels of energy access (see for example: Practical Action, 2012). While we recognise the need for such measurements, we consider that this becomes an exercise in perusing targets without recognising the reality of how those targets are to be reached. This type of approach runs the risk of repeating the experience of South Africa of going for quantitative coverage, rather than understanding the nature and depth of the problem, particularly the gender dimension, and assessing the potential benefits of improved energy access. In other words: not doing effective and efficient local energy planning.

Enabling energy access (taken as a proxy for moving people out of energy poverty) is also taking place concurrently with other changes in the energy sector which can in themselves be counter to improving energy access for the poor. For example, energy sector reform can include tariff reform and removal of subsidies which increases the cost of energy carriers and hence makes the access barrier higher for the poor.

Local energy planning both to address energy poverty and meet development objectives where energy plays a facilitating role (eg health centres) requires coordination with, and support from, national governments. It is our experience that lower levels of government are neither well equipped in terms of knowledge and skills to deliver energy access nor do they often have sufficient decision making authority to respond to their local realities. We propose that training and the provision of appropriate planning tools are part of the solution.

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