FAQs

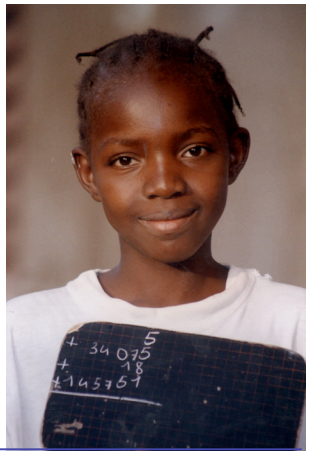
Frequently Asked Questions

HOW DO RURAL ENERGY SERVICES REDUCE POVERTY ?

FREQUENTLY ASKED QUESTIONS ABOUT THE MULTIFUNCTIONAL PLATFORM

March 2005.

"Approximately one quarter of the MDG target of a 50 percent reduction in the incidence of poverty could be achieved by introducing the multifunctional platform."



CONTENTS

A. THE ENERGY–POVERTY TRAP

1. What is the role of rural energy services in poverty reduction?

Poverty is multifaceted and circumstantial, both physical and social. But at the most fundamental level, it means being unable to achieve basic physical well-being. The most common way to measure poverty is based on the minimum caloric intake that provides humans with the energy needed for a normal life. Consumption poverty reflects the unavailability of that amount of food, and income poverty (for those who do not cultivate for themselves) reflects a lack of money to buy that amount of food.

If all of an individual's work energy goes into simply providing her/himself with calories at or below that minimum intake, s/he is blocked and finds it difficult to move out of poverty. In addition, humans need energy for other survival tasks besides just obtaining food, for example, shelter provision and social interaction.

In many rural areas of poor countries, human energy is the only energy source, sometimes supplemented by traction animals. Using human energy—largely devoted to three daily tasks (food production, food processing and cooking, and fetching water)—means that many tasks are performed more slowly than with mechanical energy, and meeting basic survival needs can occupy the whole day.

These two constraints—the available human energy and the amount of time needed for basic survival tasks—give rise to **the energy-poverty trap**. The daily necessity of performing time- and energy-intensive tasks to ensure survival can keep rural populations in a poverty equilibrium with no prospect of human development.

In these circumstances, a principal challenge for poverty reduction and human development is the provision of rural energy services. The most urgent services that mechanical and electrical energy can provide—as determined by rural populations themselves—are food processing and potable water. Energy services save both human energy and time, and create capacity for income generation, poverty reduction, and human development.

2. How are rural energy services linked to the Millennium Development Goals?

Rural energy provision breaks the energy–poverty trap. It thus contributes directly to meeting Millennium Development Goal (MDG) number 1—reducing the incidence of poverty by half by 2015 (elaborated in question 9).

Also, as is shown in question 10, rural energy provision contributes to MDG 2 (primary education), MDG 3 (women's empowerment), MDG 4 (reducing child mortality), MDG 5 (maternal health), MDG 7 (rural potable water sub-goal), and MDG 8 (rural youth employment sub-goal).

In effect, rural energy provision has a cross-cutting impact on achieving the MDGs. While energy provision itself is not listed as an MDG target, energy services are essential to progress on many MDG goals and sub-goals/targets. It therefore needs to be explicitly addressed in rural development strategies. But it may not receive

adequate attention because no single sectoral ministry has clear responsibility for its provision, and no single sectoral ministry sees or reports on its numerous benefits.

Moreover, sectoral strategies tend to focus on energy supply (that is, inputs), whereas experience shows that the most effective rural energy strategies assure access to energy services in response to the perceived needs of each rural community. The parameters of the energy–poverty trap can vary among localities, which means that the nature of the energy services needed will vary. Some communities may need more electrical power for battery charging, while others may need more mechanical power for sawmilling. Some may need more cereal processing, others more vegetable oil pressing, and others may give priority to obtaining lighting. Thus a flexible and modular approach to energy service provision is advantageous.

The challenge is to link rural energy provision at the inter-sectoral micro level (which is the level of its reality and impact) to regional, sectoral, and national strategies to meet the MDGs. This will clarify the full development impact of energy services for the rural poor.

B. THE MULTIFUNCTIONAL PLATFORM : AN INNOVATIVE APPROACH TO RURAL ENERGY SERVICES

3. What is the multifunctional platform?

There are several ways to provide rural energy services. The options include electrical grid, stand-alone systems such as household solar power, and community-level mechanical/electrical power generators. The multifunctional platform (MFP) is an innovative and polyvalent form of the latter, based on a single power source. It is a decentralised and flexible way to provide mechanical and electrical power. It can be both an alternative and a complement to grid and solar energy.

The MFP responds quickly and flexibly to priority needs as identified by the villagers themselves, and liberates time for overworked rural women. It fosters positive social change and strengthens villagers' familiarity with machinery and business practices. It directly and measurably contributes to several of the MDGs.

The MFP is created around a robust 8–26 HP diesel engine (made in India or China) mounted on two rails and housed in a shed. The diesel engine itself has been widely used in West Africa for decades. The engine provides belt-driven energy, to which up to a dozen mechanical and electrical modules can be connected; this is its "multifunctionality." The modules are locally designed and built using material and parts easily available.

Modules are chosen by villagers according to their own needs. These can be grouped as (i) grinding and husking mills and vegetable oil presses for agricultural processing, (ii) welding and sawmilling equipment, (iii) electrical generators for battery charging and for village mini-distribution networks (up to 250 lightbulbs), and (iv) water pumps with the possibility of potable water distribution.

4. How is the MFP operated and used?

The MFP had its origins in the search for a way to lighten the work load and energy expenditure of rural women and girls. It was therefore seen as logical that it be owned, managed, and operated by village women's groups. Members of the group receive training on its mechanical attributes, and in basic accounting and literacy as necessary. They schedule its use and set the charges for using the various modules.

The MFP is installed, maintained, and repaired by local technicians, invariably men, who are given specific training as fitters, welders, electricians, and general mechanics.

Customer demand for different services, that is, use of the various modules (see question 3) shows seasonal patterns, and the MFP is able to respond flexibly to the varying rhythm of rural life. The diesel engine can also run on a local oilseed without any mechanical adjustment, and the vegetable oil module can crush these seeds to provide fuel on the spot (see question 15).

Typically the MFP runs about four hours per day, in an early morning period and a late afternoon period. MFPs have an average of about 200 regular clients, nearly all women, and the greatest demand is for processing agricultural produce. (The average village size in Mali with an MFP is around 1,100 persons, of whom about 200 are economically active women. In view of the average household size, this basically means universal access.)

5. What is the MFP's impact?

The reality in poor countries is that rural areas, where typically 70 to 80 percent of the population (and up to 90 percent of the poor) live, have practically no access to modern sources of energy. Contrary to common belief, rural populations do not have an abundant supply of human time and energy; rather, the opposite is true. Notably, women have no free time. The rural economy is therefore typically caught in the energy-poverty trap described in question 1: it is unable to raise living standard without access to non-human energy, but the resources needed for access to non-human energy are unavailable because of poverty.

The MFP unblocks the energy–poverty trap. It is economically successful, a force for social change and modernisation in villages, and a significant contributor to achieving the MDGs. Studies of experience to date in Mali show that the **MFP by itself could contribute about a quarter of the progress needed to cut poverty by half by 2015**. This applies even when, as in most of West Africa, 60 to 70 percent (and nearly 80 percent in rural areas) live below the poverty line. The MFP's specific demonstrated benefits on several of the MDGs are described in questions 9 and 10.

Flowing from experiments beginning in the late 1980s, and piloted in its present form in the mid-1990s, the MFP is now installed in about 450 villages in Mali, as well as in 50 or so additional villages in Burkina Faso, Guinea, Ghana, and Senegal. Most are in Mali because this is where the development of the MFP took place and its impact is already being assessed in the many studies available; the principal studies are listed in the Annex to this document.

The challenge now is to rapidly scale up use of the MFP in order to fully benefit from its potential macro-impact on the MDGs. The first target for scaling up is Mali, while simultaneously launching it in several countries of the Economic Community of West African States (ECOWAS) and laying the foundations for its introduction in East Africa (see questions 19 and 20).

6. What is "the MFP approach"?

Energy service provision needs attention at the micro, sectoral/regional, and macro levels of development strategy (see question 2). In poverty reduction strategy papers (PRSPs) and other instruments, and at national, regional, and sectoral levels, energy services need to become an identifiable vector for development and for achieving the MDGs. Thus it is important to integrate energy service provision into regional, sectoral, and cross-sectoral strategies, and to explicitly recognise it in PRSPs and in MDG monitoring.

This three-layered approach—micro, sectoral/regional, and macro—is now being piloted as the conceptual underpinning for scaling up rural energy service provision, that is, through using the MFP. Furthermore, the current process of MFP diffusion and scaling up will increasingly involve NGOs and the private sector.

Energy from the MFP—compared to alternative sources—is accessible to poor villagers who are often beyond the reach of conventional energy programs. It particularly benefits women and girls. Compared to energy from alternative sources, the MFP gives a broad range of benefits (see questions 7, 8, 9, and 10). Not only is there a direct impact on the poverty levels of the rural poor; there are also significant, and often measurable, impacts on health, education, gender equity, and potable water supply, as well as on agricultural production, rudimentary industrialisation, and rural–urban migration.

7. Why adopt an old-fashioned technology when modern options are available?

Compared to other options, the MFP frequently presents a particularly appropriate fit with the conditions of the rural poor. The technology is robust and its elements and spare parts are widely available. Because of its modular design, it is easy to operate, maintain, and upgrade. It is generally affordable both as an investment and to its clients. It creates expanding business opportunities that can be taken up by the rural poor.

This is not to say that it is the single solution: all options should remain open and be assessed on their merits. For example, both electric grid expansion and solar power need to be part of the energy policy menu, in order to most effectively address the development needs of multiple economic and social groups. And single-purpose machines, for example, motorised grinding mills, will certainly continue to be used.

Studies in Mali show that solar power, in providing similar services, costs about twice as much as the MFP and presents few economies of scale—but technological and production advances may change this. In addition to its initial expense, solar power suffers from low torque provision and cannot therefore provide the same range of

services as the MFP (effective agricultural processing, for example). But it is a simple and proven way to provide power to individual households, schools, clinics, etc.

At a similar level of service as the MFP, rural electrification is about half as expensive again as solar power, although it has rapidly rising economies of scale. But it can be difficult to justify the cost-effectiveness of extending rural electrification to resource-poor dispersed communities.

The MFP represents a technological "ladder climbing" approach to rural energy rather than a "leapfrogging" approach. The MFP's modest capital cost avoids technological lock-in and leaves much flexibility to adopt more modern approaches, higher up the technological ladder, as and when feasible. It is a particularly effective, even if transitional, response to the rural energy deficit in many of the poorest countries in the next few decades.

Where rural electrification is relatively advanced, as in Senegal and Ghana, a mixed approach—with the MFP, solar power, and rural electrification each serving different types of customers—is *prima facie* interesting and can be piloted. Such efforts are under way in Senegal.

8. What is the dynamising role of the MFP?

The MFP has one extremely important advantage: by virtue of its technical characteristics and its manner of use, it is a force for social change and changing mentalities. The MFP requires organisation, structured group collaboration, new socioeconomic roles and relationships, minimal literacy, and arithmetical skills, and it promotes familiarity with mechanics and repair/maintenance—all essential in the "modern world." The MFP, through its diverse and positive impacts, provides the incentive to develop these modern skills.

C. THE MULTIFUNCTIONAL PLATFORM AND THE MDGs

9. How does the MFP promote the MDG of reducing poverty by half by 2015?

Based on studies of the approximately 450 MFPs so far installed in Malian villages, the economic impact of national coverage—serving some 5,000 villages—would be to meet **about one quarter of the MDG target of a 50 percent reduction in the incidence of poverty.** Basically the MFP more or less eliminates the poverty gap for its clients, who nationally represent some 11–15 percent of the population below the poverty line. The MFP is an effective vehicle for poverty reduction.

At an individual level, the additional income for economically active women in Malian villages with an MFP is estimated at about $44 per year—in a country where the average annual rural income is estimated at about $122, GDP per capita is around $300, and nearly 80 percent of the rural population lives below the poverty line.

The expansion of MFPs to 5,000 villages in Mali would probably cost about $80–$90 million, a figure subject to further refinement through studies now under way. This covers all elements, including capacity building, specific training, organisational

support, and the platforms themselves (the last being jointly financed by villagers and public/private funds). If village-level electrical and water distribution were included for all 5,000 villages, this would add some $180 million to the cost .

An MFP is a profitable rural business, generating enough revenue to cover its running costs and thus avoiding dependence on the continual availability of public financing. Preliminary estimates suggest that the direct gains to its primary users will be close to $50 million per year if 5,000 villages are covered, which compares very favourably with the initial cost of $80–$90 million.

The MFP is income-generating in several ways. Most directly, the women's group operating the MFP earns cash income from clients. Its builders and materials suppliers; the male mechanics maintaining and repairing the MFP; and the welders, electricians, and woodworkers using it, all earn cash. Local entrepreneurs, shopkeepers, and traders all profit from this strengthened monetisation of the rural economy.

Most importantly, the MFP liberates village women—and especially girl children—from the daily time-consuming toil of pounding cereals and fetching water. This creates new discretionary time (from 2 to 6 hours per day, see question 10) and allows them to pursue new income-generating activities such as market gardening and trading agricultural produce processed by the MFP.

Better health status directly affects poverty reduction, and the discretionary time provided by the MFP means that women can pay more attention to their own and their children's health needs. Evidence for this comes from attendance records and morbidity statistics at ante-natal clinics and health centres. And there is clear evidence of gains in agricultural productivity in villages with the MFP (from a combination of the services it offers), leading to better nutrition and sometimes leading to cash exports to towns and deficit regions, with poverty-reducing impacts.

In a number of villages, profits from the MFP have been used to pay for improvements in schooling, health services, and water supplies, which in turn reduces the burden on government to provide these.

10. What about the other MDGs?

There are identifiable impacts on MDGs 1 through 8. Beside poverty reduction (MDG 1), the MFP most obviously promotes better educational achievement (MDG 2), improved gender equity (MDG 3), improved health status (MDG 4 and MDG 5), rural potable water supplies (MDG 7), and rural youth employment (MDG 8).

The **educational impacts** are increased female enrolment (for example, up from 56 percent to 74 percent of boys' enrolment in primary school in Mali), better results through evening study where local lighting is installed, and improved education because teachers are more willing to live in "modern" villages.

The **gender impact** is strong. The increase in women's discretionary time (ranging from 2 to 6 hours per day, largely depending on whether a water pump is connected) has already been mentioned. This has health, social, and economic benefits. Specifically concerning the women's group that manages and operates

the MFP, studies show that their influence and social status increase noticeably not only as a result of their visibility, authority, and dynamising role, but also as a result of the cash income they earn from an asset that they own. The minimal literacy and arithmetic skills they acquire as part of their training empowers them further. In turn, the social dynamics of the village tend to evolve toward greater gender equity.

The **health impacts** of the MFP are improved nutrition, less gastro-intestinal disease especially in children, improved frequentation of health facilities and a greater ability to pay for treatment, and less physical exhaustion (women and girl children particularly). Many West African under-5 and maternal mortality rates are way above the developing-country averages, and therefore such MDG impacts are particularly important.

The provision of **potable water** is assured when the village chooses to invest in an MFP water pump module, and is further strengthened when a modest water distribution system is added.

Rural youth employment is promoted when the number of local technicians—fitters, welders, electricians, and general mechanics—supporting the installation and maintenance of the MFP, or hiring its modules, expands along with the adoption of the MFP.

D. PRACTICAL QUESTIONS

11. If I am in an African government wanting to introduce the MFP, how do I start?

A member state of the Economic Community of West African States would go to the Energy Division of the ECOWAS Secretariat for practical guidance. At this time, other states would go through the New Partnership for Africa's Development (NEPAD), where the political responsibility for the MFP is assigned. NEPAD has clustered responsibilities, and the MFP falls under the NEPAD Ministry in Senegal. For now, the regional UNDP energy/poverty project in Dakar provides technical backstopping and support for the introduction of the MFP. It can also serve as an interlocutor for aid donors.

12. What evidence is there of a demand for MFPs, and what is the lead time?

It is a fundamental principle that access to the MFP is demand driven. This occurs by word-of-mouth, by exposure when visiting other villages, through networks of rural associations, and from seeing MFP demonstration models at the MFP support project's decentralised offices.

A request has to come from a women's group or association, and this is followed by a pre-feasibility study. If this is positive, and 96 percent are, there follows a full participatory assessment and feasibility study. This focuses on village leaders and women's groups, while also bringing the entire village population into the deliberations. It includes reaching agreement on which modules are initially needed. Discussion also covers the changes in village life that are likely to follow the MFP's installation.

The village typically takes from one to three months to reach a decision. Then the village's financial contribution must be assured (see question 16). The women's MFP management group must be constituted and trained, installation must be programmed, and equipment ordered. The lead time from request to autonomous operation is two to three years.

Demand in Mali at any given time has usually exceeded the capacity of the present MFP support project's ability to respond immediately, even though the project is decentralised to five locations. The fact that private entrepreneurs are reported to have set up MFPs outside the project context (a couple of dozen such cases have been noted in Mali) testifies both to the demand for and the profitability of the MFP.

In view of the present project's capacity constraint, scaling-up in Mali therefore requires innovative solutions to expand the MFP's support system. Such solutions should also be applicable to other countries. This issue is discussed in question 23.

13. Are MFPs operationally self-sustaining?

MFPs are financially self-sustaining on an operating basis, with a positive cash flow from the first day. The village's investment contribution to the capital cost of the platform is depreciated, and the women's group is expected to accumulate surpluses to this end (so far limited to replacing modules). Not surprisingly, such depreciation reserves are frequently overlooked and the consequences become part of the MFP's iterative learning function. Note, however, that the initial contribution was mobilised from villagers, so after the positive impacts become evident it may be expected that a new subscription, if needed, would be successful.

The 70 percent or so of initial capital provided through the MFP support project is written off; it can be considered that it is more than repaid through the many indirect benefits of the MFP.

14. What about repair and maintenance?

Local artisans are trained/upgraded to install, maintain, and repair the MFPs. Initially they receive support from the MFP project, including an approximately 50 percent subsidy for the necessary tools. They enter into private contracts for their services with the women's MFP management groups. With training and support from the MFP support project they organise themselves into artisan's networks and establish spare parts stocks. The system functions.

15. What about environmental considerations?

The principal positive environmental aspect of the MFP is its ability to use, interchangeably with diesel, biofuels such as oil extracted from the jatropha plant (*pourghère* in French) or palm oil. A module attached to the MFP can crush the oilseeds and extract the oil, which can be immediately used. Producing about 20 litres of oil requires about 1 litre of engine fuel. So if enough biofuel is grown, the village can be self-sufficient in MFP fuel. Note that more modern, complex, and less robust diesel engines cannot use such biofuels, or can use them only after relatively sophisticated technical adjustments.

Studies are continuing to better understand the incentives for using biofuel rather than diesel, and the attractiveness of diesel may fall as prices rise or fuel subsidies are cut. But even if all platforms in Africa in 2015 ran on diesel, the global impact of this fossil fuel consumption would be infinitesimal and would need to be set against the many positive impacts of the MFPs.

Use of LPG as fuel is also possible, and is under study.

The jatropha plant is excellent for dune fixation and can therefore serve a useful secondary function where needed. In addition, after the seeds have been harvested, biofuel stems and leaves have other traditional uses.

16. What are the initial costs?

The feasibility study proposes how much the villagers will contribute, once the modules have been decided on. The MFP project finances the rest, as a subsidy.

The villagers' share is usually around 30 percent of the $7,000 cost of the machinery, modules, and installation. Feasibility studies cost an additional $1,500 or so, and the necessary literacy and business training may cost a further $2,000; both these costs are fully subsidised. Thus the total cost is around $10,000.

If a well, a pump, and water distribution are included, the additional cost per village will be in the range of $15,000–$20,000, depending on local conditions. A generator and a local electrical grid will add another $15,000–$20,000. New financing schemes for these additional investments may need to be developed, and they will almost certainly be based on contributions from both public and private sector participants.

17. How does the MFP affect village life?

As mentioned in the answer to question 8, introduction of the MFP is a pro-active event and significantly affects the social fabric and dynamic of village life. It also stimulates familiarity with some practical elements of modernity, and there are strong benefits from an MDG perspective. **In other words, the MFP promotes positive transformational change.**

The MFP also has the effect of reducing gender disparities in asset ownership, because ownership and operational management are vested in a women's group (question 10 on gender impact).

Naturally there may be resistance to the introduction of the MFP, particularly if certain individuals foresee that they will be "losers" in this process of change. The consultations undertaken during the feasibility study are inclusive and non-directive. In this way, all views can be heard and the likelihood that the community buys into the process can be strengthened. Those few cases of a likely negative outcome—about 4% of all feasibility studies—are identified at this stage.

The failures that have occurred *after* installation (fewer than 10 percent of MFPs installed) have not been due to technical or economic problems; rather, they have been the result of inadequate training or unforeseen conflicts.

18. How do male village elders react to the MFP?

Basic social organisation with respect to the authority of village elders does not change. The wisdom that has placed them there generally results in positive attitudes toward the MFP.

A village elder in Mali described the consequence of the introduction of the MFP with one word: "frutigi"! This means marital harmony. A recurring theme is that meals are prepared on time and of better quality. This is a consequence of the MFP's labour-saving impact on women, and women expanding their vegetable gardens as a result.

E. SCALING UP THE MULTIFUNCTIONAL PLATFORM

19. What are the plans for scaling up in Mali, and how much will it cost?

To promote nationwide adoption of the MFP, the Mali government, under a Presidential Initiative, adopted the slogan "One Village, One Platform" at the Third United Nations Conference on Least Developed Countries, held in Brussels in May 2001.

To yield a macro-impact on the MDGs, scaling-up must be substantial, not incremental. This means moving from about 450 MFPs in Mali today, to 5,000 MFPs within 10 years. A detailed plan will be ready in mid-2005.

The projected financing need—including villagers' contributions—for the additional 4,500 or so MFPs is expected to be around $80–$90 million (without water and electricity distribution). The costs incurred by the Mali project per MFP installed fell significantly as the number rose from 50 to 450, and as it rises to 5,000, even greater economies of scale should be realised; however, no estimates of such savings are included for the time being.

20. What are the plans for scaling up in Africa, and how much will it cost?

Plans and targets for diffusing the MFP are country-specific, to be developed by each government—as has been done in Mali. As of early 2005, UNDP-supported MFP projects in Senegal, Burkina Faso, and Ghana have helped to initiate national consultations on appropriate MFP policies. It is expected that eleven western and eastern African countries, in addition to Mali, will aim to provide MFPs to about 10 percent of their population, or some 11 million people, in the coming years (and certainly by 2015). Some have already included the poverty–rural energy–gender nexus in their PRSPs, and some national budgets already provide support for the adoption of MFPs. Following a pilot phase of two to three years in each country, full project-supported implementation is expected to run for about five years before spread of the MFP becomes self-sustaining.

This is congruent with the NEPAD infrastructure initiative and its energy targets. The MFP is a clear response to ECOWAS' rural energy policy, and there will be close collaboration with the Economic Commission for Africa's African Centre for Gender and Development. Such a tempo of MFP diffusion will result in less intensive coverage—within the 2015 time horizon—than in Mali, where the MFP has been

under way for a decade already. So within the 2015 timeframe, there will be a proportionately lower impact on MDG 1 in these countries than in Mali (see question 5). But subsequent intensification of MFP coverage, and therefore its poverty impact, can be expected.

Some $8.2 million will be needed for laying the groundwork in all eleven countries through pilot installations, training, and organisational support. Extrapolating from Mali, the total investment cost—from all sources, including villagers themselves—could be in the region of $200 million in total, but this is no more than a guesstimate for now.

F. SOME POLICY ISSUES

21. How can optimal rural energy policies be developed?

First, African governments, recognising that non-human energy is essential for their rural populations to break out of the energy–poverty trap, need to examine their options for rural energy provision. Energy services that provide power for a whole range of livelihood activities are particularly important for the poor, freeing up women's time and generating income through enhanced agricultural productivity and the formation of micro-enterprises. Experience with the MFP in West Africa to date provides a range of evidence for this (see questions 9 and 10 for details).

While energy is not an explicit goal or subject to explicit indicators in the MDGs, historical evidence shows a two-way mutually reinforcing relationship between economic growth and energy use. Rural growth and prosperity are impossible without increasing energy availability beyond human-based energy. The Energy Development Index (EDI) developed by the International Energy Agency does indeed show a strong correlation with the Human Development Index (HDI). Studies show that access to rural energy services can result in a dramatic improvement in the HDI, particularly in countries with an HDI of less than 0.5 and a GDP of less than $500 per capita. At low energy consumption levels, increases in supply show the sharpest impact on the HDI.

Second, low-HDI African countries ought to fully assess the potential contribution of rural energy services when elaborating national policies such as PRSPs, and in their sectoral and regional strategies for energy, agriculture and rural development, health, education, gender equity, potable water, and rural employment (see 9 and 10 for details). In addition to supporting poverty reduction and human development, rural energy availability reduces the urban–rural drift and also increases overall food production, thus making available village surpluses.

So overall, when assessing priorities in their allocation of resources and effort, poor countries need to seriously look at the feasibility of various rural energy options in support of their MDG goals.

22. How can the international community help?

African governments must, of course, make their own determinations of priorities and choices, and therefore both they and donors need to be fully briefed on the nature and many benefits of various rural energy options, of which the MFP is one.

Clearly the international community's development assistance should look favourably on supporting rural energy provision, as, for example, does the European Commission's Energy Initiative. And rural energy provision clearly qualifies for financial support from national resources released by debt forgiveness and HIPC programs, as is already the case in Mali and Burkina Faso.

23. What is the potential for public–private partnership?

The multifunctional platform has proven to be a viable business that deepens and expands the village economy. While to date its diffusion has been aid-supported, evidence is emerging that the MFP is an interesting investment opportunity for rural entrepreneurs (see question 12). It is likely that the MFP will have considerable potential as a purely private-sector initiative, but for the next few years, aid will continue to be needed for its proper implantation in different countries.

So for now, villagers setting up an MFP are the most important private party, as partners to national governments and donors who support MFP projects.

Several other partnerships will clearly be needed in the course of scaling up the use of the MFP. For example, NGO and private contractor involvement in feasibility studies, training, and follow-up will intensify because it will be impossible for MFP project personnel to meet the quantitative shift in demand foreseen in the coming years (see questions 19 and 20).

Also, rural microfinance systems, and financial intermediaries such as revolving funds (and their backers such as the Shell Foundation), can assist and advise villagers in raising their initial capital. In addition to helping bring MFP services to villages, such operations support the expansion of a monetised rural economy and the modernisation of rural life.

ANNEX : SOURCE DOCUMENTS

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