

A report commissioned by



BURKINA FASO: WILLINGNESS TO PAY FOR SOLAR LANTERNS

EXECUTIVE SUMMARY

December 2013

SUMMARY AND RECOMMENDATIONS FOR THE WIDESPREAD DISTRIBUTION OF SOLAR LANTERNS

1.1 Summary of the study

1.1.1 Target populations' willingness and ability to pay

Solar lanterns are poised to replace the lighting equipment currently used in Burkina Faso. Some models offer an “additional” service: the ability to recharge mobile phones.

Surveys show that current spending on lighting in rural areas averages around CFAF 2,300 (€3.51) per month.

The extra savings generated by the ability to recharge mobile phones at home and the additional income generating activities likely to result from the use of quality products point to a payment ability of approximately CFAF 3,700 per month (€5.64).

1.1.2 What possible role for mobile telephone service?

Collaboration between mobile phone carriers and the Lighting Africa program could prove to be a win-win initiative and a major driver of the large-scale distribution of solar lanterns.

The decline in average per-subscriber income noted by telephone carriers in recent years (which stabilized at around \$5, or CFAF 2,500 (€3.81), in the last two years) has convinced carriers to refocus their commercial approach on the share of monthly subscriber income spent on telecommunications. This strategy is all the more important because it allows carriers to discover other income-generating opportunities and create new services geared to expressed needs.

Beyond this change of approach, carriers are looking to identify household expenditure items that are “transferable” to “communication expenditures.” In other words, how can existing expenditures be eliminated to allow subscribers to increase their spending on mobile telephone products?

It is in this context that mobile carriers see potential in solar lanterns. The widespread distribution of these products would enable them to:

- “capture” a share of expenditures previously allocated to traditional lighting and the recharging of telephones;
- increase the number of subscribers connected to the mobile phone network thanks to the availability of mobile recharging solutions, even in the remotest areas;
- keep more than 5 million mobile phones connected in non-electrified areas.

1.1.3 Complementarity with an electricity subscription

In rural areas: as a supplement to their electricity subscription, households use certain alternative sources of power, mostly battery-powered lanterns, to ensure minimal lighting during power outages. Recharging mobile phones is a priority for rural households, making any prospect of facilitating such recharging extremely attractive.

In urban areas, electric customers purchase solar lanterns to maintain a minimum level of lighting, a convenience that is difficult to do without when it is available on a daily basis. Domestic surveys of national network customers show enthusiasm for this type of product among customers in all subscription categories (3A, 5A, 15A, etc.). Buying a solar lantern is not an economic decision, but one influenced far more by the desire to have a supplementary source of lighting.

1.2 Recommendations for large-scale distribution

What is the best way to meet the challenge of making solar lanterns available throughout the country? Several possible approaches are proposed below. It should be noted that the establishment of a dedicated supply chain was studied in depth in the parallel study on that subject (“Burkina Faso: Mapping the Supply Chain for Solar Lighting Products”).

1.2.1 Facilitate access to financing

There is no denying that the cost of lanterns is an obstacle for people living at the “base of the pyramid,” the primary focus of the Lighting Africa program.

The involvement of microfinance institutions is an interesting option, as shown by trials under way in other countries, such as Ghana. However, this would require:

- Facilitating access to MFI services: shorten the prior savings period required before a loan is granted, streamline administrative formalities (most currently require the following: Urban Residence Permit, ID photos, registration fees, certificate of non-involvement with other MFIs, etc.);
- Reducing the current interest rates: 24 percent per year on average (constant) in Burkina Faso, compared to, for example, 18 percent (decreasing gradually) in Togo, and consider more attractive rates for lending products with a strong social and/or environmental impact;
- Studying the possibility of proposing a “targeted” saving system: for the purchase of a specific product, and possibly remunerating such savings (ABF pays 5 percent per annum on targeted savings);
- Making MFIs aware of the necessity of granting loans: return to the original mission of microfinance, which is to serve the poorest and exert a positive social and environmental impact; and
- Helping MFIs with logistics: selection of products, knowledge of the product (objective presentation of the product by suppliers with support from the Lighting Africa program

from the outset in order to create a lasting relationship between the supplier and the MFI and ensure the long-term viability of the program).

The involvement of MFIs is not the only option, however. First, for geographical reasons: although the network of Caisses Populaires du Burkina Faso is present in 43 of 45 regions, much of the population has no access to MFIs. The MFI penetration rate in Burkina Faso is estimated at approximately 20 percent, with some regions such as the East still grossly underserved (5 percent). For cultural reasons as well, as the people are generally not familiar with administrative agencies, much less banking and financial institutions. Moreover, there is no hiding the fact that because of the barriers to accessing many MFIs, current customers will benefit the most, while very few new customers, few young people, and few rural residents will benefit at all.

These factors should be taken into account. As in the model proposed by Nafa Naana, the involvement of groups (of producers, women, etc.) and local associations (of districts, parents of students, etc.) can ensure distribution in the “last mile,” by offering local populations the possibility of paying over time (without the necessity of dealing with the MFIs’ complex procedures), while at the same time centralizing the promotion and distribution of products. Finally, distribution through MFIs poses the risk that the beneficiaries of MFIs will be pressured into buying the proposed product or risk being denied credit later on.

1.2.2 Promote the emergence of a market

Give distributors sufficient margins

The distributors’ margin should be large enough to ensure the viability of the sector, somewhere in the vicinity of 25 percent to 50 percent, based on the economic model of organization (Marketing Innovative Devices for the BoP, Hystra, March 2013).

For example, one company allows margins of 13 to 23 percent, compared to 8 to 12.5 percent for another. Although the low-margin approach keeps the price low for end consumers, it leaves little room for the establishment of innovative “last mile” distribution.

Excessively small margins will necessarily result in a low level of penetration in rural areas.

Fulfill the conditions necessary for the emergence of a sustainable market

The aim of the following recommendations is to expedite the emergence of, and ensure the viability of, a dedicated market:

- Local after-sale service: because it is still in the very early development stage, this service, which will rely on the support of existing organizations, has yet to be established. For example, a partnership between distributors and local enterprises could be considered, with a view to creating jobs and know-how at the national level, to avoid returning defective products to the manufacturer;
- Enhancing the awareness of target groups: facilitate consumer access to a range of affordable, reliable and high quality lighting products and services. Increasing consumer

awareness is crucial, as “solar lanterns” are at present practically unknown to people at the “Base of the Pyramid.” Clearly, a large-scale communication strategy carried out in cooperation with distributors in Burkina Faso will be a determining factor. The guarantee concept should be better explained in the future;

- Sales outlets in both urban and rural areas: sustainably facilitate consumer access to a range of lighting products and services by promoting sales through groups or launch operations, via franchised shopkeepers, for example.
- Policy and regulation: governmental action and institutional anchoring are essential in a large-scale rollout, as this will contribute to obligatory recycling, protect the sector against poor quality products, etc. The recent decision to exempt solar products from taxes starting in early January 2013 (see appendix) is a first step in the development of an emerging solar lantern sector;

Catalyze the private sector to manufacture, market, and distribute quality products at affordable prices. It will also be very important in Burkina Faso to work with the private sector to develop entrepreneurial skills through business development services (BDS). The Chamber of Commerce and Industry of Burkina Faso (CCI-BF) should play a major role in this endeavor.