Approval by mail: Endorsement of FIP Concept Proposals - Brazil and Ghana
Burkina Faso Response to US and UK Comments
BURKINA FASO
Sustainable Management of Fuelwood Sector Project in Burkina Faso

ANSWERS TO COMMENTS FROM UK

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<td>It is positive to see the objective of developing a national fuelwood management strategy. This is an important acknowledgement of the important contribution that wood fuels make to the country’s energy mix and is a critical document that should underpin the nature of the project intervention. However, we couldn’t find any reference to the Ministry of Energy, which will be important if the strategy is to have broader support and impact.</td>
<td>Yes the Ministry of Energy will have an important role to play in the development and implementation of the national fuelwood strategy (NFS). There is, within the Ministry for Energy, a department of traditional energy which will be the key collaborator for this activity. In our vision of the NFS, the Ministry of Energy will be in charge of the demand component and the Ministry of Environment and Forests will cover the Offer component. Specifically the Ministry of Forests manages issues related to wood resources (location, planning, management, exploitation, production, etc.) while the Ministry for Energy addresses the issues of substitution and diversification of energy sources. The Ministry of Energy is so a key player for the development and implementation of the NFS, and will be the leader in reducing energy consumption and material substitution. This ministry will also intervene in the development of legislation and taxation of the sector’s products.</td>
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<td>It is also good to see a project that attempts to look at the entire value chain for charcoal and wood energy, including governance issues, rather than focusing on only one element (usually clean cook stoves). However, we would like to see a more detailed analysis of the political economy of wood energy, and to understand more thoroughly the disincentives to much of the sector engaged in</td>
<td>In Burkina Faso, the advent of Forest Management units in the 90s, has been an advance to formalize the value chain of fuelwood (production, transport and marketing). The stakeholders in the sector are organized in forest management groups (GGF) who exploit the fuelwood from forests under supervision and control of forest administration, and the wholesalers who are in charge of transport and marketing. The GGF and wholesalers have permits from the forestry administration which also is in charge of collecting taxes and enforcing existing regulations. Today, the role of wholesalers is now clarified: they just require to have the transport logistics. In the past, it was necessary not only to have the transport logistics but also to have a network of partners or employees in production to organize production and transportation. This clarification has allowed some wholesalers - carriers to benefit from financing from banks as part of their activities.</td>
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wood energy to formalize or legalese. Charcoal production and trade is in most countries categorized by informality and non-compliance with any forest management regulations. With most of the industry operating outside the law, there is little prospect of attracting investment and modernization.

However, the current reality is that the selling price of the wood from GGF to wholesalers do not reflect the real cost of the fuelwood because it doesn’t include the cost of wood production. The price paid to GGF rather corresponds to the costs of logging. On this basis, the fuelwood exploitation according to the present structure of price cannot be sustainable because it does not ensure the replacement of cut wood. The project ambition is that all fuelwood be exploited under sustainable conditions. Charcoal chain should be managed in the same sustainable way as that of forest management units.

As part of the development of national fuelwood strategy, a diagnosis of the value chain for charcoal and wood energy will be carried out as well as the legal and institutional framework to propose appropriate measures that will lay the foundations for sustainable the economy of the sector.

Any governance reforms to the sector will need to avoid the temptation to over regulate. Evidence from analysis we have carried suggests that over regulation and negative perceptions of charcoal as a dirty backward fuel, keep the wood energy sector largely informal and marginalized. Compliance with regulation is too costly and any business venture that attempts to comply is undercut by the informal sector. Arguably, a key starting point is to make it easier and more attractive for producers to comply. Further analyses of This issue Gould bé helpful.

For now, and as has been recalled in the concept note, the larger cities such as Ouagadougou and Bobo Dioulasso are supplied by the sustainable supply up to 30% and 20% respectively. Taking all developments; these figures will probably be very optimistic. Forest management units (CAF) actually have a marginal share in the supply of wood products, including wood - energy. It is the marginal nature of the total production of forest management units that inhibits its contribution in improving the governance of forest resources management. Studies conducted between 1998 and 2002 by NGOs showed the following trends:

(I) Regarding the fuelwood producers organized in GGF / UGGF to exploit forest management units, their commitment to respect standards of sustainable exploitation of forest resources is only threatened by the marginal nature of their weight in supplying of the big consumption centers of fuelwood.

(II) As regards to the wholesalers - carriers, it should be noted that these are in the informal sector, which is also combine with a facto monopoly. In time, wood producers were employees or debtors wholesalers - carriers and operate in none managed areas, this relationship always tends to persist even though there are nuances. Their overall behavior is dictated by the fact that most of their activities take place in unorganized areas. Given current situation, one cannot speak of fiscal pressure or over - regulation. According to a study that was conducted in the years 1999, wholesalers - carriers complained only of the obligation imposed upon them to paint their trucks
following the standards set by the Ministry of forests. These operators also complained of many police control points on the roads. It is clear that in recent years, this control has been greatly reduced;

(III) As for retailers, their links with the wholesale transporters are specific to the informal sector.

During the development the national fuelwood strategy NFS, issues of the contribution of sustainable managed forests, wood costs, consumer profile, etc. will be investigated in order to update the information essential to understanding the operation of the sector. It is expected from the strategy, the formulation of reform proposals adapted to the realities of Burkina Faso after consultation with all stakeholders.

| As a general comment, in many regions, plantations for the sole purpose of wood fuel production have failed as farmers have realized that better incomes are to be had from construction poles and timber. Is there experience of successful woodlot plantation for the purpose of fuelwood supply either amongst small holders or the larger private sector to draw on? | It should be noted that the sahelian climate of Burkina Faso is not very favorable to the production of timber service. So most of the plantations are more oriented towards the production of wood energy. Furthermore most of the planned plantations will be performed in gazetted forests owned by the state which aim produce fuelwood. In terms of plantations for fuelwood production experience, Burkina Faso has promoted successfully since the 1990's the creation of village afforestation for production of wood energy.

Generally, plantations for the exclusive production of wood - fire by the private sector failed because other more profitable opportunities are offered. The reasons of this lack of motivation are multiple, ranging from the use of non-adapted species that are offered to producers because of their fast-growing nature, tree management practices outside forests, land productivity, resistance to plant local species, low knowledge of local species, etc. Research activities to be supported by the ongoing FIP projects and the results of the results of the National Forests Inventory 2, will improve understanding of the problem and the adoption of some sustainable solutions. To minimize the risk, the proposed project will combine wood energy plantations with fruit tree plantations outside of gazetted forests to increase incomes and food security.

<p>| Similarly, is their evidence from the existing project supported by SNV on bio-digesters that this | Two aspects of financial sustainability have been reviewed in the early stage of the proposal: the financial profitability for the households as well as the sustainability of the bio-digester business for small building enterprises. The early conclusions |</p>
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<th>Component of the project will be effective and financially sustainable/able to compete with informal charcoal production?</th>
<th>show the sustainability for both aspects, even if further work is still currently ongoing with SNV to refine the conclusions.</th>
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<td>At household level: One of the main selling points for biodigesters in Burkina Faso, according to work carried out by SNV and Hivos, is the high-quality compost/organic fertilizer that the bio digester produces. This compost can be used to improve the quality of the soil and help retain moisture, which is especially important in arid/semi-arid conditions. Farmers using compost have reportedly been able to increase yields of their crops on average by 25%. A bio digester is a large investment for a household and will not compete with commercial charcoal head-to-head, as many households put special value to the compost in their decision-making, in addition to other benefits as reduced indoor air pollution and ease of use of a gas stove, which are not selling points for charcoal. Therefore the challenge is less the sustainability of the investment (cash back is estimated less than 2 years) but is more the affordability of the purchase as it requires a significant upfront investment. The spread of the technology is slowed down because of challenging access to finance for the rural household. That is the reason why a micro-credit/guarantee component is needed in addition to the subsidy for biogas already provided by the Government of Burkina Faso.</td>
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<td>At the small enterprise level, the Bio-digester business is already profitable. However, the project needs to ensure that the newly-established &quot;Bio digester Construction Enterprises&quot; will expand their business and their customer base until they can expect with confidence a sufficient number of operations to justify their investment in such a specialized business. That is the role of carbon finance to ensure the National Biogas Program continues to operate and provide support to those enterprises until their business model and market knowledge are robust enough.</td>
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<td>With respect to the emphasis on improving charcoal making techniques, is there experience of positive uptake of new kiln technologies? Experience elsewhere suggests that fixed kiln technologies are only feasible where Carbonization, is widely practiced through the use of traditional grinding wheels which pits among others characterized by very low efficiency. Since 2005, Burkina Faso attempts to popularize the &quot;Casamance wheel&quot; that meets a lot of resistance. The real problem is that without adoption of more efficient technologies than those currently used, the future of carbonization as an economic activity is challenged. This is why it is essential today to find and implement more efficient technologies. The project will work to remove the constraints of the extension of the Casamance wheel while identifying in parallel other improved technologies that will be in a second time adapted to the...</td>
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extensive supplies are easily available without the need for transport. Or is it the intention of the project to support minor improvements related to traditional mobile kiln technology?

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<th>We would appreciate further clarification on who will be engaged in the plantation activities on forest reserves, and the restoration activities in conservation forests. Is it envisaged that private individual smallholders will be involved? Or will it be larger scale private sector investors, the state, or community groups?</th>
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<td>Planting works and forest restoration activities will be exclusively carried out by communities living near the gazetted forests, organized in forest management groups (GGF), on the basis of a contract to be signed with the project. The communities groups will realize the work of planting and forests maintenance under the supervision of the regional technical services.</td>
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conditions of Burkina Faso. The option of the project is to work on improving the traditional mobile units of charcoal production, given the limited availability of wood in the country.
**BURKINA FASO**  
*Sustainable Management of Fuelwood Sector Project in Burkina Faso*

**ANSWERS TO COMMENTS FROM US**

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| While the project concept has much potential, it requires a more considered, detailed, and step-by-step analysis of the barriers to improved practices at each step in the value chain, as well as how such barriers may be overcome in a sustainable and financially-feasible way. | **1. FUELWOOD VALUE CHAIN**

As for fuelwood, the main barriers facing the project will include: the price of wood, operating techniques, the availability of the resource, the non-compliance, taxation, productivity purveyor’s species, forestry of woody species, etc.

**Fuelwood price:** In general way, the price of wood production is not included in the transactions surrounding the fuelwood trade. Everything happens as if the resource is free, and the price components of wood integrate only the efforts to exploitation, transport and processing. In 1992, a study conducted in the supply areas of Ouagadougou showed that if one should give a real price to the wood, the purchase price of the cubic meter of fuelwood would be at least 9,000 FCFA, whereas the purchase price from forest management units, at the moment, was only 1610 FCFA. Since then, the purchase prices of wood paid to GGF evolves and increased to 2,200 F CFA in 1998 and 3400 CFA francs in 2013. With this slow evolution of this price, wood producers cannot make consistent revenues at the moment and so their activity is not a profitable business, at least not financially.

**Resource availability:** Burkina Faso is, in general, deficient in wood. This deficit manifests itself with much more acute around major urban centers, characterized by increasing demand. Despite the plantations made about 14 000 ha a year, the situation continues to worsen. That why the project approach is act on multiple factors to increase the supply of wood starting from supporting reforestation by communities and private sector, identification of fast-growing species, using of improved farming techniques and planting, improving the management of trees outside forests, improving the performance of certain techniques such as direct seeding, etc.

**The non-compliance to the regulation** causes negative ecological impact of logging on forest stands and on the sustainability of forests management initiatives such as forest management units (CAF). This is why it is essential to continue fostering the population awareness and also strengthening the control actions of forests exploitation. |
The taxation of logging includes various taxes and fees. The experience of establishing a Forest Management Fund for each forest helped secure management of the Forest management units (CAF). Beyond the CAF, a well-established taxation can greatly reduce the fraudulent use and its negative impacts on sustainable forest management initiatives. A study to be conducted on forest taxation will identify and/or strengthen certain mechanisms that it is effectively a tool promoting a sustainable management of forest resources.

Insufficient knowledge of local forestry species: Overall Burkina forestry staff has still limited knowledge on local species despite the many progress. This situation handicaps the technical advice that the forest agents have to provide to the communities. The knowledge gap covers the breeding techniques to genetic improvement techniques and the most appropriate silvicultural treatments. Many hopes are borne from the expected results of the research activities that will be implemented under the FIP.

2. CHARCOAL VALUE CHAIN

As regards the production and marketing of charcoal, the basic barriers are: the poor performance of the technology, The lack of implementation of sustainable harvesting techniques, non adequate taxation, lack of master plans for charcoal supply, disorganization of production and marketing activities, the origin of personnel employed for carbonization and the scarcity of wood resources.

The poor performance of the technologies used: At present, the technology widely used is traditional pit that has very low performance. Generally one uses 5 kg of wood to produce 1 kg of charcoal. This practice therefore appears to be a waste of resources for a country with limited resources such as Burkina Faso. That is why the project will support identification and promoting more performant technologies and adapted to the ecological conditions of Burkina Faso.

The non-implementation of sustainable exploitation techniques: the sites of charcoal production are currently managed outside all norms of a sustainable management. The diagnosis, to be conducted, aims to assess the extent of negative impacts of current used charcoal production techniques and to propose appropriated measures to improve their environmental performance. These measures may result in an increase in the price of charcoal which is the normal because today charcoal is not sold as a product
manufactured from wood but as a by-product of wood. The extension of the obligation to apply the rules of sustainable use of wood will help the charcoal producers to face the real impacts of their activities.

**The lack of supply master plans:** the cities of Ouagadougou and Bobo Dioulasso, which are the largest charcoal consumers, have not yet wood and charcoal supply master plans. These plans are essential tools which will enable the development of an appropriate national fuelwood strategy planned by the project.

**The origin of the producers on carbonization sites:** the carbonization sites are manned by people from outside of the territories in which the wood is cut and charred. The production of charcoal is not sustainable. This created the conditions for an exploitation that does not benefit to the communities of surrounding villages who are the owners of forest resources. The project planned to organize local communities of the forests to integrate them in the value chain of the charcoal.

The different barriers to a sustainable development of the fuelwood value chain will be identified and analyzed in detail during the project preparation phase for an appropriate design of the project activities and to refine the project' implementation strategy.