REPORT NO.: RES29851

DOCUMENT OF THE WORLD BANK

RESTRUCTURING PAPER
ON A
PROPOSED PROJECT RESTRUCTURING
OF
SECOND SUSTAINABLE AND PARTICIPATORY ENERGY MANAGEMENT (PROGEDE II)
APPROVED ON JUNE 24, 2010
TO
GOVERNMENT OF SENEGAL

ENERGY & EXTRACTIVES
AFRICA

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Country Director: Louise J. Cord
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Practice Manager/Manager: Charles Joseph Cormier
Task Team Leader: Awa Seck
I. BASIC DATA

Product Information

<table>
<thead>
<tr>
<th>Project Information</th>
<th>Financing Instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project ID</td>
<td>P120629</td>
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<tr>
<td>Financing Instrument</td>
<td>Investment Project Financing</td>
</tr>
<tr>
<td>Original EA Category</td>
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<td>Approval Date</td>
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<td>24-Jun-2010</td>
<td>31-Oct-2017</td>
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Organizations

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<tr>
<th>Borrower</th>
<th>Responsible Agency</th>
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<tr>
<td>Government of Senegal</td>
<td>Direction des Eaux et Forêts,Direction des Eaux et Forêts</td>
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Project Development Objective (PDO)

Original PDO

The project development objective is to increase the availability of diversified household fuels in a sustainable way, and to increase the income of affected communities while preserving the forest ecosystems. This will be met by: (i) Increasing wood-fuels production; (ii) Increasing alternative household fuels for cooking purposes (iii) Reducing deforestation in target zones; (iv) Reducing net CO2 emissions through the regeneration and protection of forests put under sustainable management; (v) Increasing income of participating villages, and local communities, with special attention to women, both from charcoal production and other income generating activities; (vi) completing the reform of the charcoal value chain; and (vii) improving the training, information, and participation of women in alleconomic activities and improving their participation in decision-making institutions and processes.

Summary Status of Financing

<table>
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<tr>
<th>Ln/Cr/Tf</th>
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<th>Signing</th>
<th>Effectiveness</th>
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Policy Waiver(s)

Does this restructuring trigger the need for any policy waiver(s)?

No

II. SUMMARY OF PROJECT STATUS AND PROPOSED CHANGES

The project development objective is to increase the availability of diversified household fuels in a sustainable and gender equitable way, and to increase the income of affected communities while preserving the forest ecosystems. This will be met by: (i) increasing wood-fuels production; (ii) increasing alternative household fuels for cooking purposes; (iii) reducing deforestation in target zones; (iv) reducing net CO2 emissions through the regeneration and protection of forests put under sustainable management; (v) increasing income of participating villages, and local communities, with special attention to women, both from charcoal production and other income generating activities; (vi) completing the reform of the charcoal value chain; and (vii) improving the training, information, and participation of women in all economic activities and improving their participation in decision-making institutions and processes.

The Project is funded by an IDA credit in the amount of SDR 9.9 million (US$15 million equivalent) and parallel grant financing from the Nordic Development Fund (NDF) in the amount of Euro 3 million (US$4.37 million equivalent). The Project was approved on June 24, 2010, declared effective on December 28, 2010, and is due to close on October 31, 2017.

Progress towards achievement of the PDO and implementation progress are rated Satisfactory, and 91.75% of IDA funds was disbursed as of the end of September 30, 2017. The PDO and the Implementation Progress has been rated satisfactory over the last 12 months. The project is in compliance with all legal covenants, and there are no outstanding interim unaudited financial reports or audits. Overall, the project has made significant achievements towards the sustainable management of forests and cooking fuels in institutional and technical terms, with real socio-economic impacts.

The Project is comprised of four components:

- Component 1 (IDA US$1.46 million): Institutional Reform of the Charcoal Value Chain;
- Component 2 (IDA US$8.74 million, NDF US$2.03 million): Sustainable Wood Fuels Supply Management;

PROJECT STATUS

The targets of 4 out of 5 PDO level indicators have been fully achieved and exceeded (increase sustainable wood-fuels production, reduce deforestation in target zones, reduce net CO2 emissions and contribute to the increase of income of participating villages, with special attention to women). The only PDO indicator lagging is to increase alternative household fuels (about 45% progress towards the final target). This delay in progress is due to the delay of NDF grant effectiveness, thus a delay in implementation of activities.

At the intermediate level, six out of 9 indicators have been fully achieved and exceeded (increase in annual share of charcoal sold at market prices by local communities, increase charcoal production in forest put under sustainable management, extension of community based sustainable forest management in the regions of Kedougou, Kolda,
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Sedhiou and Tambacounda, restoration of degraded land in the regions of Kaolack and Tambacounda, extension of biodiversity management in Matam area, and increase in direct beneficiary numbers from sustainable forest management). The remaining three indicators are close to being achieved (installation of biodigestors in target areas, dissemination of improved stoves and increase in the quantity of CO2 sequestration).

The project has contributed to the increase of wood fuel produced in a sustainable way in Senegal. From 2009 to 2017 total charcoal produced in a sustainable way at the national level is 380,365 tons out of which 300,600 tons produced from the project areas of intervention (from 4 regions), thus 79% of total national production.

- Southern zone (Kolda and Sedhiou Regions): 140,906 tons
- Eastern zones (Tambacounda Region): 154,823 tons
- Central zone (Kaffrine Region): 3,712
Total: 300,600 tons

With regards to climate change related aspects, deforestation is decreasing, net CO2 emissions are decreasing, and the quantity of CO2 sequestration is increasing in project target zones. For example, net CO2 emissions reduction is estimated at 2,825,000 Teq CO2 on March 31, 2017 from a baseline of 0 Teq in 2009, thus an implementation rate of 99%; and quantity of CO2 sequestration has increased from 0 Teq (baseline) in 2009 to 1,620,000 Teq CO2 on March 31, 2017, thus an implementation rate of 90%. Biodiversity management has been extended from 52,000 ha to 236,000 in March 2017, versus an end target of 92,000 ha, thus an implementation rate of 256%.

This project has demonstrated that participatory sustainable forest management has become a real wealth creation tool in rural areas: total revenue (from charcoal sale and other income-generating activities) has increased from US$18 million in December 2009 (baseline), to US$40 million on March 31, 2017 versus an end target of US$34 million, thus an implementation rate of 118%. Over 3,200 women who have been trained in tree cutting and charcoal production techniques and have become charcoal producers, are now making substantial revenues and improving their family living conditions.

Regarding the reform of the charcoal value chain, the project has supported the revision of the 1998 Forestry Code involving all relevant government institutions and stakeholders. The revised Forestry Code will help sustain the achievement made by the project in terms of institutional and technical aspects of participatory sustainable forest management.

PROPOSED CHANGES

The current project closing date is October 31, 2017. It is proposed to further extend the closing date by 8 months, from October 31, 2017 to June 30, 2018. If approved, this will be the 2nd closing date extension for the project. The closing date of the project was first extended by 11 months in August 2016 (from the original closing date of November 30, 2016 to October 31, 2017). While the project implementation progress and progress towards the PDO are already satisfactory, the proposed closing date extension will provide more time to implement activities required to fully achieve all the indicators. It will also support activities that will further enhance the sustainability of the results achieved through the project, thereby reducing the risk to the development outcome of the project.

(i) Development of master plans for the supply of domestic fuels to the main urban centers. These master plans will enable better planning of the domestic fuel sub-sector, and enhance knowledge regarding household fuel supply and demand, to support the preparation of strategies required to meet demand-supply dynamics in the selected
urban centers (Thiès, Saint Louis and Kaolack). The activity was delayed due to long procurement process. The procurement process is now completed, and a successful bidder has been selected. Upon the approval of the closing date extension, the bidder will be notified to start the work.

(ii) Finalization of the design and implementation of the information system for sustainable management of forest resources and domestic fuels. The information system will enable, among others, the improvement of forests management, control of domestic fuel flows, monitoring of carbon dynamics and monitoring of supply to major fuel consumption centers. The high turnover of the Information System Expert position contributed to the delay of this activity. Three months ago, a local consultant was hired to follow up on, and monitor the design of the remaining modules. The extension will provide enough time to finalize the design of the system.

(iii) Training of Trainers for local participatory forest management. Local forest management committees and other actors (248 participants) have been trained on the new administrative and financial management manual for participatory forest management, which is an essential operational tool for the proper application of the principles and rules that must now guide forest management. However, some of them still need to strengthen their skills on the use of some tools (financial, administrative, budgetary aspects, etc.). During the extension period, 30 trainers (10 per project zone for each of the three zones (Southern zone, Eastern zone, Central zone) will be trained on the use of the manual of administrative and financial procedures for participatory forest management, to create a core set of trainers to train actors as needed to sustain the training and capacity building in forest management beyond the life of the project. The completion of these activities will further enhance the sustainability of the results achieved in wood-fuel production.

(iv) Demarcation of managed forests: One of the key factors of sustainability of the project is the demarcation of managed forests. Demarcation of managed forests is important because it helps materialize the limits of managed forests and ensure the integrity of ecosystems. This activity was delayed because the firm that got the contract did not follow the technical specifications and was asked to stop the work. This competitive tender process will be relaunched and the Project implementation unit will monitor the activity very closely to ensure that the accurate technical specifications are utilized and implemented.

(v) Construction of a charcoal packaging building. To bring charcoal product closer to consumers (near Dakar) and to offer them a quality product in clean, modern packaging, the project has conducted a feasibility study which recommended the construction of a single large building for charcoal processing. In addition, it will increase income for forestry operators and charcoal producers. This activity was delayed due to the delay in finding a plot for the construction which is now resolved (forestry operators have now found a plot, a successful bidder has been selected, and will be notified to start the work as soon as closing date extension is granted).

III. DETAILED CHANGES

LOAN CLOSING DATE(S)

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<tr>
<th>Ln/Cr/Tf</th>
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The table above provides details on the closing dates for a project. Each row represents a different ID number, followed by the effective date, closing dates, and the date for withdrawal applications.