



## MALI - PILOT PROGRAMME FOR AN INTEGRATIVE ADAPTATION STRATEGY

As of: December 2021

Mali is especially vulnerable to the impacts of climate change. It is very likely that temperatures will rise sharply, while precipitation becomes less reliable and water availability is generally reduced. This has repercussions for important sectors of the economy such as agriculture and forestry, animal husbandry, energy and healthcare. At the same time, the country lacks data and resources to implement its National Climate Change Action Plan (PANC). The project, which was run jointly by GIZ and UNDP, was supporting the Malian meteorological service in its efforts to collect reliable climate data. This will improve the classification of climate change impacts and the responses adopted. The project was also supporting the Malian Climate Fund, which aims to provide long-term adaptation financing, and implementing innovative, gender-sensitive adaptation measures – focusing on water conservation, agro-pastoral practices and sustainable forest management – in the regions of Kayes and Sikasso.

### State of implementation/results

- Project completed.
- Establishment of 32 Farmer Field Schools (FFS) with the participation of 1,720 producers, including 609 women, for the current agricultural season with the provision of inputs and the supervision by agricultural agents. The FFSs are expected to improve the agricultural practices of its members and therefore increasing the yields and/or reducing climate change impacts (i.e. floods, droughts, changes in season duration) on production. In particular, the producers mentioned the following benefits: (i) improved social cohesion at the village-level, (ii) procurement of quality and locally-adapted seeds, (iii) increased yields, (iv) improved knowledge on good practices such as sowing practices (line sowing, distancing, etc.), micro-dosing fertilizers or the production of organic manure, (v)

## PROJECT DATA

### Country/Countries:

Mali

### Implementing organisation:

United Nations Development Programme (UNDP)

### Political partner(s):

- Ministry of the Environment, Sanitation and Sustainable Development - Mali

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- Agency for Environment and Sustainable Development (AEDD) - Mali
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### BMU grant:

€ 5,247,695.11

### Duration:

04/2015 till 08/2021

### Website(s):

<http://www.adaptation-undp.org/projects/programme-support-national-adaptation-strategy-climate-change-mali>





- increased revenues for producers, and (vi) improved quality of the production.
- 300 producers involved in the established FFSs were trained in Sustainable Land and Water Management. More specifically, the producers were trained in composting practices, building stone cordons, manufacturing improved fireplaces, conducting Assisted Natural Regeneration and the micro-dosing of fertilizers. These trainings aim at avoiding land degrading practices and the mismanagement of limited water resources. The adoption of these practices is expected to increase the resilience of producers to the impacts of climate change (in particular unreliable access to water resources), and maintain the adaptive benefits of well-managed land and forests (in particular against floods and droughts).
  - 600 people, including 500 women farmers, were trained in market gardening techniques, including composting for organic fertilizer, as well as building improved stoves. In addition to ensuring more climate-resilient and diversified livelihoods, these practices are expected to sustainably reduce the use of harmful chemical fertilizers and the deforestation of tree-covered areas for timber-intensive stoves.
  - Reinforcement of eleven market gardening perimeters to solve the problems linked to insufficient water access. Assessments were conducted to identify the causes of the limited access to water in project target areas, which concluded that the insufficiencies are due to (i) the low flows of the initial drillings, (ii) the limited capacities of pumping and (iii) the low capacity of water storage. Additional boreholes were drilled to increase the sources of water and address the issues linked with water flow rates. In some areas the pumping capacity (using solar panels) and storage capacity (new water towers) were increased. To avoid over-abstraction, the regional agricultural directions were involved to train beneficiaries on the sustainable use of water for agriculture. In addition, one of the consultants in charge of the studies recommended to develop a manual on the use of water resources to be followed in the areas with limited water resources.
  - Organization and formalization of five beekeepers' cooperatives representing the five





communes of intervention of the project in the region of Sikasso. The objectives of the support to the cooperatives are:

- To strengthen the capacities of the Farmer Organizations (FO) for better governance;
- To improve the production and marketing of honey and its derivatives by the FOs;
- To strengthen the entrepreneurial capacities of FOs (business management, accounting management, analysis of banking risks related to agricultural credits);
- To strengthen the technical capacities of the carpenters in the manufacture of Kenyan hives;
  - To initiate FOs to market analysis.
- 125 beekeepers under these cooperatives have benefited from a series of training sessions to better interact with potential customers and develop their business. The trainings covered: (i) the arrangements on the organization of the cooperatives, (ii) simple accounting knowledge, (iii) the manufacture of Kenyan hives, (iv) improved and resilient techniques for honey production and (v) the conduct of market research to increase the revenues of the beneficiaries. In addition to these trainings, the beneficiaries were supported with the provision of basic beekeeping equipment (suit, boots, gloves, frame, smoker) to start the activities.
- Three local product processing centers were installed and 105 women representatives were trained in the use, management and routine maintenance of the processing equipment. Supported women are equipped to process groundnuts, shea nuts and onions for their sale at a higher price in local and national markets. Women now have access to new jobs and/or more diversified livelihoods. The centers directly benefit 2,107 households and indirectly extends to the 4,720 households of the 3 communes hosting the centers.
- Training of the members of the Management Committee of the Nioro Tougouné pastoral perimeter in the management and production of fodder with the enrichment of 10 hectares out of the 25ha of the perimeter. In addition to providing more secured access to and better quality fodder for the livestock, this reduces the area of land needed for pastoralists. This can also have positive security impact considering that land disputes between farmers and pastoralists often





cause conflicts in the Sahel region.

- The training of producers in seedling production in March 2020 led to the production of 2,367 seedlings, of which 1,120 were transplanted, i.e. the equivalent of 1.02 ha of reforested area. In terms of adaptation, tree products provide a source of income (sale of timber and non-timber forest products) and a diversification of the diet (consumption of leaves and fruits). In addition, trees contribute to the mitigation of greenhouse gas emissions through carbon sequestration.

