



ASSESSING THE STATE OF SUDAN'S FORESTS



© EnvatoElements

In Sudan, forests are considered among the most important natural resources. Their crucial role in supporting agriculture through ameliorating the otherwise harsh conditions of a desert climate, combating soil erosion and conserving water is well recognized by both government circles and rural societies. Their environmental role in making the first and last defense line against the southward creep of the desert, protecting the Nile watershed system and contributing to carbon sequestration give their importance a regional and global dimension. Forests in Sudan are under threat from natural and anthropogenic factors, including drought, charcoal production, timber for construction, over-exploitation for agriculture and other socio-economic factors such as local population unrest in some of the regions of the country.

To protect Sudan's natural wealth and at the same time fulfill national and international commitments, the country is taking significant steps to implement actions to reduce emissions from deforestation and forest degradation while fostering conservation (REDD+).

Under the project "Support for the design of the MRV System in the framework of REDD+ Readiness in the Sudan" and with financial support of the Forest Carbon Partnership Facility (FCPF), Food and Agriculture Organization of the United Nations (FAO) has been supporting the Government of Sudan, particularly the Forests National Corporation (FNC) of the Ministry of Agriculture and Forestry, in the development of a robust National Forest Monitoring System (NFMS) to obtain up-to-date, reliable, transparent and accessible information about the state of the country's forests and guide decision and policymaking for sustainable management of Sudan's forest resources.

National forest inventory (NFI)

The project supported Sudan in developing its first NFI in 20 years to monitor forest cover within the country. The activities included the most in-depth survey carried out on Sudan's woodland and trees to date. The NFI provided an extensive and unique record of key information about forests and woodlands.

Satellite land monitoring system (SLMS)

The use of satellite images for monitoring forest dynamics is of utmost importance for planning and managing forests in a sustainable manner. Moreover, better access to precise and timely data supports Sudan in combating deforestation and forest degradation helps the country meet national and international climate targets.

Greenhouse gas inventory and forest reference levels

Through the project, Sudan has significantly improved its greenhouse gas (GHG) reporting system. Now the country can more accurately estimate the levels of GHG emissions and compare REDD+ results against the reference level, essential steps to support Sudan's climate actions.

Strengthening forest monitoring systems

Accurate information is crucial for the sustainable management of natural resources. The establishment of the national Measurement, Reporting and Verification (MRV) and National Forest Monitoring Systems (NFMS) will help Sudan conserve its natural resources, facilitate sustainable land use management, providing benefits to the millions of people that depend on the forest for their livelihoods and wellbeing. It will also enhance the country's ability to mitigate and adapt to the impacts of climate change, contributing to the achievement of Sudan's broader development goals.



Managing wildfires

Remote sensing (RS) technologies allow Sudan to review and analyse fire sources, drivers and risk factors - all crucial for identifying risk reduction activities. In addition, RS supports the assessment of the available fuel load for fire as well as the production of vulnerability maps. The collected information has provided the basis for integrated fire management activities involving various government agencies as well as local communities.



Involving academia

The project had placed a strong emphasis on involving academia in its NFI activities. Fellows from the University of Khartoum and the University of Kordofan got directly involved in practical work, ensuring quality control of NFI measurements in all of the regions of Sudan. Their participation strengthened the capacity of a new generation of foresters, as they work side-by-side with international forestry experts.



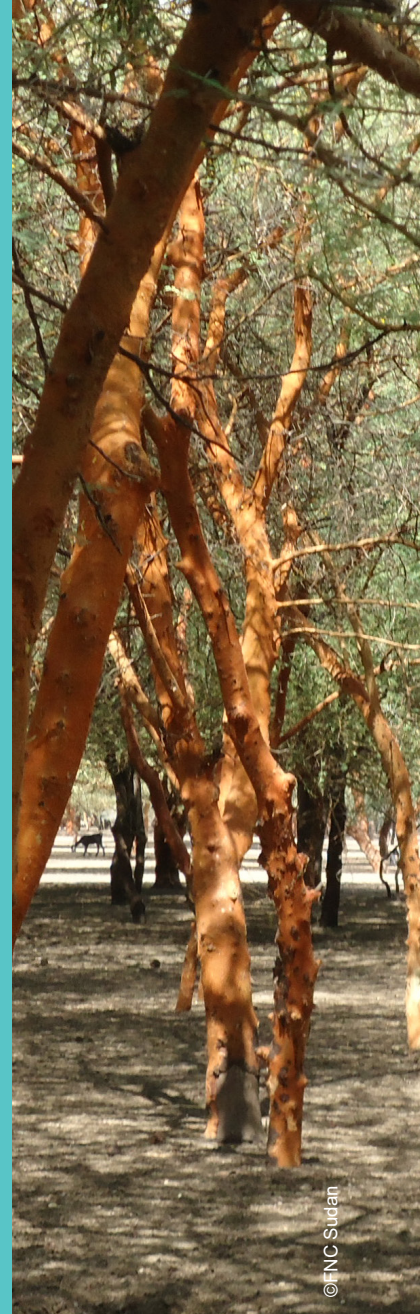
Innovating

The use of FAO's innovative, easy-to-use and open-source forest and land monitoring tools, such as Open Foris and SEPAL will enable Sudan meet its needs for data and information systems that enable accurate, efficient, transparent and cost-effective forest measurement and reporting.



Mapping forest change

The project supported Sudan in the preparation of activity data for the reference time period of (2010 – 2018) at national scale in order to allow effective and focused decision making about rehabilitation activities and development planning, especially for the country's environment and agricultural sector.



© FNC Sudan



Forestry Division - Natural Resources and Sustainable Production

E-mail: NFM@fao.org

Web: www.fao.org/redd

FAO Office in Sudan

E-mail: FAO-SD@fao.org

Web: www.fao.org/sudan



Some rights reserved. This work is available under a [CC BY-NC-SA 3.0 IGO](https://creativecommons.org/licenses/by-nc-sa/3.0/) licence

