



# MECHANIZED

## Transforming Africa's Agriculture Value Chains



Between 2005 and 2014, Burkina Faso observed an average agricultural machinery growth rate slightly above three percent and an agricultural output growth rate of three percent. The African Union's Biennial Review Report of 2018 showed that Burkina Faso is currently not on track to meet the Malabo commitment #3.1, "Access to Agriculture inputs and technologies", with a score of 5.21 out of a minimum score of 5.53. The overall commitment category score is 10. However, strong institutional and programmatic commitments by the government are in place to enhance mechanization along the agriculture value chain.

### INSTITUTIONAL COMMITMENTS

The Ministry of Agriculture and Hydraulic Facilities leads on agricultural mechanization in terms of program design and implementation. It has a mechanization division within the General Directorate of Plant Productions (DGPV). The mechanization division aims to elaborate and coordinate the implementation of agricultural mechanization policy and to propose measures to ensure their development. In 2014, the government set up the National Society of Lands and Rural Equipment Development (SONATER) to execute the mechanization activities defined by the Ministry of Agriculture by restructuring the institution's Water and Rural Equipment Fund created in 2006. In addition, there is an Agricultural Equipment Maintenance and Repair Service under the Ministry of Agriculture, which groups maintenance and repair workshops for agricultural equipment. The workshops provide maintenance and repair paid services to owners of agricultural equipment, such as tractors and motor pumps, and trains beneficiaries under government programs to use agricultural equipment.<sup>1</sup> Furthermore, The Matourkou Polyvalent Learning Center (CAPM), an agriculture college that is part of the Ministry of Agriculture, offers mechanization education and training in machine use.<sup>2</sup>

Research into mechanization is primarily conducted at the Institute for the Environment and Agricultural Research (INERA), established in 1988. In addition to its headquarters in Ouagadougou, INERA has a center for environmental and agricultural research and training, located in Kamboinsé, and five regional directorates of environmental and agricultural research in the five agroecological zones of the country. Burkina Faso also has an Institute for Research in Applied Science and Technology (IRSAT) created in 1997, whose main activities are related to food technologies. IRSAT's mission is to help define, develop, and implement the national research and development policy. It carries out research programs in the fields of natural substances, energy, food technology and mechanization. Its mechanization department is responsible for the R&D of mechanization tools and technologies to advance agricultural production and the processing of agricultural products.<sup>3</sup>

### POLICY AND PROGRAMMATIC COMMITMENTS

Between 2008 and 2015, SONATER implemented the Agricultural Mechanization and Hydraulic Sector Support Development Project (PDMA-SSH). The project's primary objective was to contribute to the increase, diversification, and intensification of agro-sylvo-pastoral production. PDMA-SSH has equipped producers across the country with 831 tractors, 1,200 motor pumps, 120 seeders, 132 corn shellers, 95 electric pumps and 10 irrigation pivots. The equipment has been subsidized by the government at a rate of 50 percent. The beneficiaries included public and private employees, small-scale farmers, farmers' organizations, cotton companies, rice cooperatives, agricultural services companies, and NGOs. Spare parts were also acquired and made available to beneficiaries in the specialized workshops of SONATER. In addition, 432 tractor drivers and 60 mechanics were trained through this project. In 2016, SONATER started the process of acquiring 500 tractors, 100 tillers and 600 water pumps that were delivered during the year 2017.<sup>4</sup>

In addition, between 2011 and 2015, the government implemented the Program for Strengthening Agricultural Mechanization, called "Operation 100000 charrues". As Burkina Faso's agriculture is dominated by poorly equipped small producers unable to sow large areas or produce high-quality agricultural products, the government supported producers to acquire 100,000 plows over five years. The plows were produced locally.<sup>5</sup> The government subsidy of the cost of acquisition was 90 percent for women and 85 percent for men.



There is also evidence that in Burkina Faso the mechanization of processing is taking place. A women's group in Yona, set up in 2012 under the name of "Gnogondèmè", received financing from *Fondation SEMAFO* for the construction of a processing plant to produce shea products. The center is equipped with all the necessary tools and technologies for the production of soap and shea butter and is powered entirely through solar energy. Women received training on how to operate and maintain the machines and as a group were able to increase production capacity to seven tons of shea butter and one ton of shea nut cakes in one year (2015-2016) generating US\$64,000. Due to the rise in production capacity, additional employment opportunities were generated with more than 1,200 women collecting raw materials in 13 villages.<sup>6</sup> Furthermore, in 2011, the Agricultural Productivity and Food Security Improvement Project (PAPSA) supported the construction of 10 milk collection centers, which allowed the collection of 125,000 liters of fresh milk for the milk processing units. This enabled

the breeders to generate a turnover of a total of US\$60,000. To increase food availability, the project also provided 20 cassava processing units to 46 women's groups to produce *attiéké*, *gari*, and *tapioka*. These units processed more than 1,000 tons of *attiéké* for a turnover of US\$86,000.<sup>7</sup>

Burkina Faso has shown strong ambitions in accelerating its agricultural mechanization through institutional and programmatic commitments. The government has placed an emphasis on facilitating access to mechanization for production and processing, capacity strengthening and training activities, and creating business opportunities for youth to boost value addition at post-harvest stages. However, in addition to increasing public-private partnership and creating more opportunities for young people in the mechanization of food value chains, much effort is needed, particularly at the processing stage, to meet continental and international targets on agricultural transformation.

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