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Sustainable mechanization as a means to empower women processors in Benin



What is sustainable agricultural mechanization (SAM)?

Mechanization covers all levels of farming and processing technologies, from simple and basic hand tools to more sophisticated and motorized equipment. It eases and reduces hard labour, relieves labour shortages, improves productivity and timeliness of agricultural operations, improves the efficient use of resources, enhances market access and contributes to mitigating climate related hazards. Sustainable mechanization considers technological, economic, social, environmental and cultural aspects when contributing to the development of the food and agricultural sector.

Source: www.fao.org/sustainable-agricultural-mechanization

Small-scale subsistence farming, reliant on simple manual tools and equipment is still dominant in

Benin. Consenquently, institutional capacities for the dissemination and uptake of sustainable mechanization need to be strengthened. Women are very active as producers and processors, but manual operations, unsupported by suitable equipment take up much of their time and limit their income generation opportunities, as active market actors, entrepreneurs and service providers in mechanization. Household dynamics are still very gender biased, affecting equal access to key resources and benefits. Only 11.96 percent of women have regular access to extension services, which, from the mechanization perspective are essential for training on equipment maintenance and repair.

Sources: MAEP Bénin. 2021, Stratégie nationale de mécanisation agricole au Benin 2022-2026); ADB. 202, Profil genre pays – Benin.

What are the key mechanization constraints women face?

- Equipment is often not adapted to female ergonomics, increasing hardship and risk of injuries;
- Limited participation to local institutions (groups/ cooperatives) providing access to resources and services;
- Discriminatory social norms that relegate women to low skilled and time-consuming tasks;
- Limited access to information, demonstrations and training on the safe operation and maintenance of powered machines;
- Lack of financial services and collateral to access equipment;
- Difficulty in communicating with mechanization dealers, sale and extension agents.

Source: FAO, 2022. Women farmers access to sustainable mechanization.

The Benin project 'Promotion of sustainable agricultural mechanization to increase the efficiency, resilience and incomes of smallholders' (December 2021 – March 2023)

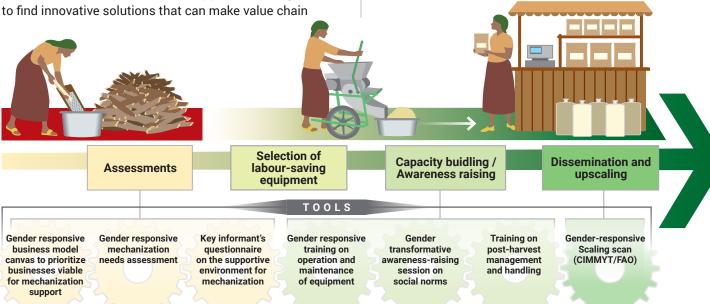
In 2020, the government of Benin developed the National Strategy for Agricultural Mechanization (SNMA) – with FAO's financial and technical assistance – presenting a clear vision and priorities for agricultural mechanization. As a first step towards operationalizing the strategy, FAO implemented this project, focused on women's empowerment and income generation through mechanization (benefiting 15 rice, cassava

and soja processing cooperatives in Glazoué, Savalou and Tchaourou), with the support of GIZ (ProCIVA project). The project was formulated as part of the collaboration between FAO and the GIZ Green Innovation Centres of Africa and Asia. Its implementation benefited from the experience and tools of key partners, such as the scaling scan by CIMMYT and the post-harvest approaches of GIZ.

The integrated gender and mechanization approach

The approach implemented in Benin illustrated below was first tested in Nepal and aims to promote women's income generation and employment along value chains through access to labour-saving equipment adapted to their needs. The strength of the integrated approach is to be multistakeholder, evidence-based and demand driven, combining assessment tools with technical support at country level to find innovative solutions that can make value chain

operations more efficient, profitable, and less demanding from a drudgery perspective. The modular nature of the approach allows it to be tailored to a wide spectrum of contexts and priorities. Foreseen collaboration with rural institutions and rural finance experts can easily lead to the integration of additional tools and interventions.



Gender responsive approaches and tools recognize and address the specific barriers, needs, priorities of men and women based on the social construction of gender roles.

Gender transformative approaches and tools seek to examine, challenge and transform the underlying causes of gender inequalities such as gendered power relations, discriminatory gender norms, attitudes, behaviours, and practices.

Results

The project contributed to the implementation of the Framework for Sustainable Agricultural Mechanization in Africa (F-SAMA). It strengthened the partnership amongst public and private actors, such as research institutions, extension and advisory service providers, equipment manufacturers and farmers - and built their capacities to interact and rely on each other to promote women's adoption of high-quality equipment. The women processors gained autonomy and respect; reduced their work burden; were enabled to organize themselves more efficiently and to increase their clients because of the higher quality of their produce; and enhanced their business prospectives as service providers.

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