

Mechanisation Service

Harvesting more efficiently and more effectively thanks to professional support from farmers' organisations

Project context

In Burkina Faso, rice cultivation plays a crucial role in the livelihoods of many rural communities. However, the traditional practice of harvesting rice by hand poses significant challenges, including labor intensity, inefficiency, and considerable post-harvest losses, which are estimated at 15%. These losses not only impact farmers' incomes but also hinder the country's food security and agricultural productivity. Recognizing these challenges, the Union des Coopératives Rizicoles "Faso djigui" in Bama (UCR-B) sought innovative solutions to modernise their harvesting systems.

To tackle the issue, UCR-B partnered with the GIZ Project Green Innovation Centres for the Agriculture and Food Sector (GIC) and the Andreas Hermes Akademie (AHA) to create a mechanised harvesting service. The initiative aimed to offer members an efficient, paid service, generate additional revenue for the union, reduce post-harvest losses, and improve agricultural logistics, ultimately boosting farmers' incomes and promoting sustainability.

In 2019, the GIC introduced the Crop TIGER 40 combine harvester as the centerpiece of this initiative, marking a pivotal step toward transforming rice harvesting practices in Burkina Faso.

The AHA approach

To introduce this service, it was essential for UCR-B not only to offer technical training, but also to ensure a process of organisational change in grassroots farmers' organisations, which is where AHA played their part. Cooperation between the partners was based on three pillars:

- Organisational development to integrate the agricultural mechanisation service into farmers' organisations
- Drawing up a business model suited to offering a paid service
- Operators possessing technical skills to ensure efficient use and maintenance of the machine

Implementation (in brief)

The project was divided into three stages:

- **Initial assessment:** this phase focused on assessing the environment and context for implementing agricultural mechanisation services. It included analysing the feasibility of cooperation between AHA, UCR-B and GIC.
- **Creating a mechanisation department:** between March and August 2021, three workshops gave rise to the establishment of this department.
- **Developing a business plan:** using the AHA tool "House of Mechanisation Service", this stage unpacked the essential aspects of the service, adjusting plans as the project evolved.

The methodical approach adopted consisted in organising workshops combining hybrid and face-to-face sessions which brought together members of UCR-B, AHA and GIC. These workshops formed an essential platform for coordination, strategic development and in-depth reflection aimed at achieving the set objectives. A team from UCR-B was tasked with monitoring progress and adjusting strategies according to the needs of grassroots farmers' organisations. For example, given the difficulties encountered by local technicians in using the combine harvester, four training sessions were deemed essential over the course of the two-year project.



Project success factors

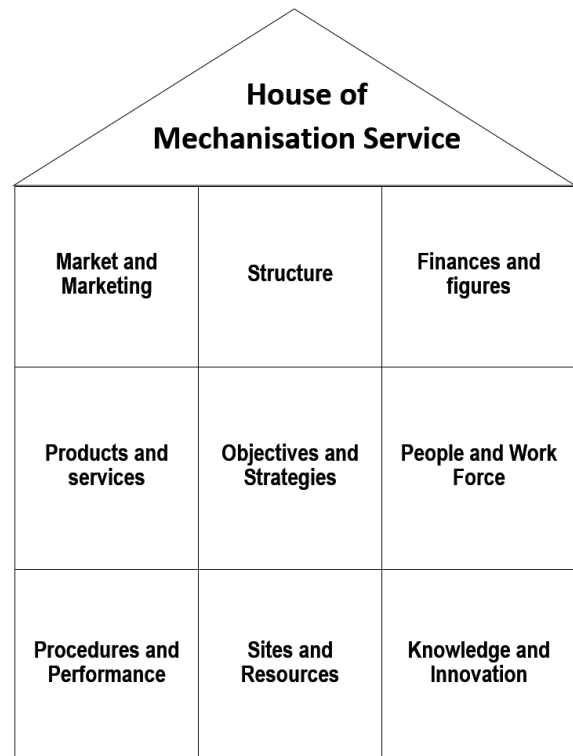
Technical and agroecological - as well as organisational - factors influenced successful adoption of the combine harvester.

Technical and agroecological factors:

- Awareness-raising and commitment on the part of local farmers: adapting their practices to mechanised harvesting, including efficient drying of plots and strict adherence to the cultural calendar.
- Technical training: operators and technical personnel were trained to ensure effective use and maintenance of the equipment.

Organisational factors involving UCR-B:

- Effective coordination between UCR-B, farmers and local stakeholders to ensure transparent management
- Strengthening mutual trust between UCR-B and their members
- Efficient management of the mechanisation department
- Developing and ongoing evaluation of the business model



Project results and potential impact

The union's adoption of the combine harvester spurred significant organisational and operational changes, including the establishment of a dedicated department for mechanised agricultural services with clearly defined roles and responsibilities. This development not only streamlined operations but also laid the groundwork for future advancements in mechanisation within the union.

The use of the combine harvester during the harvesting season from November to December 2021 yielded remarkable results: post-harvest losses were dramatically reduced from 15% to just 3%, while the harvested area expanded from 1.5 to an impressive 42.2 hectares. These achievements highlight the union's ability to adapt and innovate, driven by the commitment and flexibility of UCR-B participants in creating effective organisational structures, bolstered by targeted technical training.

Beyond these immediate outcomes, the project serves as a blueprint for other agricultural cooperatives and communities grappling with similar challenges. By demonstrating how the integration of technology with strategic organisational development can revolutionise agricultural practices, it underscores the transformative potential of such initiatives.

This success story offers hope and inspiration, showcasing a pathway toward sustainable innovation in small-scale agriculture. It reminds us that with the right tools, knowledge, and determination, rural communities can not only overcome challenges but thrive, setting the stage for a more resilient agricultural future.

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