

Harnessing appropriate-scale farm mechanization In Zimbabwe (HAFIZ)



Key details

Location

Zimbabwe

Duration

Start Jan 2022

End Feb 2024

Budget

AUD 690,000

Commissioned organisation

International Maize and Wheat Improvement Center

Partners

International Maize and Wheat Improvement Center (CIMMYT)

Project Leader

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ACIAR Research Program Manager

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Program

Crops

Project code

CROP/2021/166

Overview

This project aimed to support investments by the Government and the private sector in appropriate-scale farm mechanisation in Zimbabwe, particularly around mechanised *Pfumvudza*, and transfer learnings to South Africa.

Overall, the project aimed to improve access to mechanisation and reduce labour drudgery while stimulating the adoption of climate-smart/sustainable intensification technologies. The project will also improve the understanding of private sector companies involved in appropriate-scale farm mechanisation of the local markets in which they operate.

Manufacturing knowledge of two-wheel and small four-wheel tractor-operated implements for mechanised *Pfumvudza* will increase, and private sector companies will have increased access to information through the development and strengthening of regional and national communities of practitioners on appropriate-scale farm mechanisation. The project strengthens the capacity of the existing knowledge networks around appropriate-scale mechanisation in Zimbabwe through the results generated and through the regular multi-stakeholder roundtables.



Project outcomes

- Increased and more spatially-targeted Government spending in appropriate-scale farm mechanisation in Zimbabwe (and South Africa)
- Increased sales of appropriate-scale farm mechanisation equipment in Zimbabwe (and South Africa) thanks to more targeted marketing by the private sector (both in terms of geographies and clients)
- In Zimbabwe, local manufacturing and commercialisation of two-wheel tractor-operated basin diggers and bed planters.

experts and users in the field. The same process is currently under way for the development of a bed planter prototype.

A multi-stakeholder round table meeting took place on 16 March 2022, and project members from the Ministry of Lands, Agriculture, Fisheries, Water and Rural Development took part in five advocacy meetings and events.



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Summary of outcomes to date

2021-22

The project was launched on 8 February 2022 through a hybrid – in-presence and virtual – meeting. An inception meeting was also held in Pietermaritzburg on the 20 June 2022 to kick-start project activities in South Africa (to start on 1 July 2022 as per project document).

Product niches for different pieces of equipment have been delineated based on expert knowledge and spatial layers relevant to the ex-ante spatial targeting of mechanization in Zimbabwe collated. A draft analysis for the country has been completed and is currently being validated with spatially-explicit sales data of different pieces of equipment from Kurima Machinery & Technology, as well as a large dataset from the Department of Research and Specialist Services.

An analysis of the profile of customers from Kurima Machinery & Technology was completed, based on a telephone interview. Tools for adoption and impact studies have been developed and field work is planned for July-August 2022.

A prototype basin digger has been developed based on a need assessment conducted with mechanization