



# Scaling out small-scale mechanization in the Ethiopian Highlands

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## Planned activities

1. Conduct a survey to assess adoption of small mechanization technologies by different social groups in the highlands of Ethiopia.
2. Conduct focus group discussions (FGDs) to assess the influence of mechanization on household gender roles and tasks in selected project sites.
3. Conduct on-farm trials to (a) assess crop productivity and gross margin gains derived from using direct seeding, and (b) assess soil quality.
4. Synthesize lessons learnt in implementing mechanization technologies in different regions of Ethiopia.
5. Monitor service provision activities and document number of farmers receiving mechanization services.
6. Conduct field days and farmer learning visits in different project sites.
7. Develop communication materials for different stakeholders of mechanization technologies in Ethiopia.
8. Compile a final project report.

Deliverables	Timeline	
	Until Nov 2021	Until March 2022
Mechanization technologies adoption survey report.	Adoption survey implemented from 1-20 Nov. 2021.	Draft report ready by 31 December 2021.
FGDs report.	FGDs implemented 22 Nov-4 Dec 2021.	Report ready by 31 December 2021.
Crop yield, gross margin and soil quality data.	Trials established and ongoing. Soil analysis underway by Horticoop Lab, Debre Zeit.	Data will be part of the final project report to be submitted by 30 April 2022.
Technical report on lessons learnt in mechanization promotion.	Report submitted by 31 July 2021.	-
Project progress report covering monitoring & technical backstopping.	Six monthly (April-September 2021) report submitted.	-
Field days report.	-	To be submitted as part of the next 6-monthly report.
Communication materials.		
• Technical brief: lessons learnt.	Already published. ( <a href="https://hdl.handle.net/10568/114524">https://hdl.handle.net/10568/114524</a> )	-
• Technical brief: role of mechanization in SIAF.	-	To be published by 28 February 2022.
• Two success stories.	-	To be produced by 31 March 2022.
• Information flyers for farmers & service providers.	One on where to source equipment is already drafted in English.	Translation to local languages by 28 February 2022.
• One journal paper.	Under review (Journal of Crop Improvement).	-
Final project report.	-	To be submitted by 30 April 2022.

## Key lessons

- Aligning activities with government agriculture development priorities.
- Appropriate niches for different mechanization technologies.
- Characteristics of an ideal service provider.
- Capacity development of stakeholders.
- Importance of partnerships.
- Employment creation.
- Income generation by value chain actors.
- Access to new equipment, spare parts, repair and maintenance services



Small mechanization technologies (Photo Credit: CIMMYT /Walter Mupangwa)

## Partnerships

- Government of Ethiopia: Mechanization directorate in MoANRs; Ethiopian Institute of Agriculture Research; Regional Bureaus of Agriculture.
- Private sector: Amio Engineering Pvt. Ltd.; Dagem Kennedy General Trading; Waliya Capital Goods; Nigat Mechanical Engineering; Selam Hawassa; Adane Geneti Metal Work.
- NGO: iDE-Ethiopia.

## Core partners



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