

Mechanisation and Digital Agriculture



PROGRAMME OVERVIEW

The agricultural sector of Sub-Saharan Africa is the least mechanised in the world; farmers have on average a tenth of the mechanised tools of their peers in other developing regions. This lack of mechanisation has undermined the competitiveness of African farmers, reducing their productivity and exacerbating a vicious cycle where they are unable to invest in modern machinery and in digital technology they require.

Population growth and changing lifestyles are creating a surge in demand for food, well beyond the current capacity of the sector. The rapid urbanisation of African societies adds to the urgency. As individuals increasingly move to the cities, rural labour rates are likely to rise and farms will need to do more with fewer available hands, and produce ever more food to meet the swelling demand.

Mechanisation and digital solutions offer geometric production increase, accelerated market access, informed pricing, more financing opportunities and results oriented extension services required to drive radical change of the sector. It is critical to not only identify appropriate mechanisation and digital technologies but equally to develop functional agribusiness models that can accelerate the integration of these technologies to markets to enhance their availability, access and proper application by small holder farmers for improved returns.

Agriculture is the most critical sector for Sub-Saharan Africa's development, employing more people and contributing more to gross domestic product than any other industry. The lack of mechanisation is a key bottleneck to the transformation of African agriculture, which is why AATF is working to give farmers the tools to increase their productivity, invest in their farms and access new markets.



Our contribution

AATF believes that technology can be a catalyst for the transformation of the agriculture sector in Africa, as it has been in other parts of the world. Our approach is to engage with stakeholders across agricultural value chains, including smallholder farmers, governments and the private sector at all levels. By taking a holistic view of the sector, we are able to ensure that transformation happens in an enabling policy environment, that businesses are able to bring solutions to market in a sustainable and mutually beneficial way, and that farmers are able to access those solutions.

To help unblock the mechanisation bottleneck, the Foundation identifies appropriate techniques and technologies that have been successfully employed in other regions and adapted for the local context. Using adapted and customised machinery from Asia and Latin America, we have worked with other stakeholders to bring mechanisation to more than 18,500 hectares of cassava across the continent, and catalysed the creation of credit facilities and government funding mechanisms to allow farmers to access the finance they need to invest in mechanisation.

Current projects and special initiatives

Cassava mechanisation and agro-processing

Cassava is an economically important crop in Sub-Saharan Africa, but farmers in the region on average achieve a yield of just 7-9 tonnes per hectare, around a third of that produced by their counterparts in Asia and Latin America.

The cassava mechanisation and agro-processing project (CAMAP) aims to increase the operational efficiency and improve market linkages for smallholder farmers in Nigeria, Uganda and Zambia. Through the project, more than 18,500 hectares of land has been put under mechanisation, with yield increase of more than 25 tons and in some instances reaching 40 tonnes.



QUICK FIGURES

25 tonnes

Yield increase in SSA as a result of mechanisation

18500ha

Land that has been put under mechanization in Nigeria, Uganda and Zambia