The challenge

In Mozambique, poverty primarily unfolds in rural areas, where agriculture is the lifeline. Smallholder farmers are the backbone of the farming sector, constituting about 98 percent of all farmers, contributing to 95 percent of agricultural production. However, limited access to yield-enhancing agricultural inputs, inadequate climate-resilient technologies, and restricted financial resources and support services hinder their productivity.

The project's focal area, the southern region, faces heightened climatic risks. Challenges include inadequate maintenance of irrigation systems, limited access to finance, absence of cold storage facilities, and inefficient organization within the value chain, all of which hinder horticulture production. Cassava cultivation is also prevalent in this region, as it is drought-tolerant and contributes significantly to improved food security. Nevertheless, its potential is constrained by its perishability and the absence of processing facilities, hindering production and market growth.

Addressing the challenges faced by smallholder farmers, improving horticulture production, and unlocking the potential of cassava and livestock farming are key steps toward alleviating poverty and enhancing food security in the southern region and beyond.
The innovation:  
An approach combining value-chain development and climate resilience

PROSUL successfully introduced and promoted numerous innovations across various value chains and project components. Notably, it prioritized both value-chain development and climate resilience. Key interventions included adopting protected environment technology for vegetable production, the propagation of improved cassava varieties, and initiatives to intensify cassava production. Additionally, the project focused on building climate-resilient infrastructure, such as rehabilitating irrigation systems and constructing multifunctional boreholes, cattle fairs, and crush pens.

The project was an early adopter of climate-smart technologies, addressing horticulture, red meat, and cassava production systems. It actively contributed to reducing harmful agricultural practices and the pressure on natural resources, offering training on Environmental and Social Management Plans (ESMPs) and climate-resilient technologies to over 322 project participants. This effort emphasized inclusivity, with 50% of beneficiaries being women. The project also produced zoning maps and established nine Natural Resource Management Committees (NRMCs).

The multifunctional boreholes introduced by the project represent an example of its climate change adaptation focus, now being replicated in various regions by partner organizations. In total, 52 multifunctional boreholes were constructed, exceeding the initial target of 50. These boreholes significantly improved access to water for rural households and livestock. Notably, they reduced the distance people traveled to fetch water, granting women an additional leisure hour during the day.

The ASAP fund was pivotal in expanding these climate-smart technologies and interventions to ten additional districts, ensuring improved water access and agricultural production despite challenging drought conditions.

Moreover, PROSUL significantly invested in capacity building, benefiting farmers, associations, and government institutions alike. Farmer Field Schools (FFSs), group strengthening, and the formation of functional committees and groups played pivotal roles. The project also extended its support to government staff, enhancing their capacity to supervise and manage infrastructure.

This intervention was particularly crucial in semi-arid districts affected by El Nino and droughts, such as Chigubo, where water was previously transported by trucks. Still, now, with project support, communities have access to clean water and engage in vegetable production. PROSUL also contributed to lower cattle mortality rates in beneficiary communities.

- Leaders in the Massingir district

Lessons learned:

- The decentralization of PROSUL management and implementation to the PMT has contributed to more efficiency and effectiveness in the Project implementation as well as the capacity building of local institutions.

- The presence of the private sector specialized in the transformation of fresh cassava tubers as well as the efforts aiming at strengthening the small processing industry has contributed to the intensification of cassava production, changing the smallholder farmers’ mindset, who are nowadays looking at cassava as cash crop instead of farming it for subsistence purposes.

- An appropriate combination of interventions related to the introduction of livestock production resilient technologies including animal supplementation as well as the development of water infrastructures, significantly contributes to strengthening the climate resilience of rural communities.

- The value chain platforms have proved to be fundamental in terms of bringing together the different actors and stakeholders along the chain, contributing to a better understanding of problems and solutions. However, they face challenges related to progressively work and address specific aspects and interests of the different actors in a profound manner as well as their continuation beyond the project period.

"Before PROSUL, water availability and quality were the main causes of cattle death. Now that water access and quality have improved, cattle herd sizes have increased. We had to travel 46 km to get 25 liters (L) of water at the Oliphant River. Trucks coming to the village were charging MZN 15 per 25L water container. Now, we pay only MZN 2 per 25L container at the multifunctional borehole. Women and youth no longer have to travel long distances to fetch water. They can access at any time up to 200 L per day."

- Leaders in the Massingir district
Results and impacts

PROSUL enhanced participants’ production levels and productivity, increased their engagement in markets, expanded their sources of income, and bolstered food security. The widespread adoption of good agricultural practices primarily facilitated these achievements.

The impact on crop yields was remarkable, with substantial increases across various crops, including cassava, tomatoes, cabbage, and green beans. Cassava productivity surged from 6 to 25 tons per hectare, while other crops showed similar improvements. Livestock farmers also benefited, with the average live weight of sold cattle increasing significantly. These advancements led to additional income for households, improved food security, and enhanced dietary diversity.

The project played a pivotal role in policy development and institutional support, contributing to the formulation of key policies and strategic documents, such as the MADER gender strategy, the regulatory framework for cassava starch and seed-stem certification. PROSUL's involvement extended to the implementation of national strategies, including the National Strategy for Climate Adaptation covering the period 2013-2020, the Financial Inclusion Strategy spanning the period 2016 through 2022, The National Policy of Water and the Implementation of the Safe Land (Terra Segura) Programme, covering the period 2015 to 2019.

The National Institute for Disaster Reduction and Management and some NGOs are replicating multifunctional boreholes in other semi-arid zones. In addition, technical specifications for multifunctional boreholes were shared with neighboring countries - such as Angola, Malawi and Rwanda - facilitating knowledge transfer and replication.