

Integration of sorghum cultivation into the production systems of Central America

Sustainably intensify production in the Central American Dry Corridor by incorporating adapted sorghum and forage cereal genotypes to enhance the agricultural system productivity, resilience, and sustainability.



80 %

Regionally consumed staple foods produced by local farmers



58 %

Area classified as a high/severe drought risk zone



2500

Small and medium-scale farmers directly benefited



200

Trained students, technicians, and professionals



6

Learning plots for field experiments



20 %

Expected increase in grain production



1

Online platform with cultivar selection recommendation



2

Workshops with producers, students, technicians and professionals



Sustainable intensification of production

Initiative

The project focuses on the sustainable intensification of cropping systems in the Central America Dry Corridor by incorporating adapted sorghum and forage cereal cultivars to increase productivity, sustainability, and resilience in the production systems of the region. Farmers will be able to integrate sorghum and other forage cereals into their production systems. These crops are typically characterized

by exhibiting high plasticity in response to water availability, with varieties and agronomic management tailored to the target environments. Consequently, this will enable farmers to diversify their production systems, typically based on subsistence agriculture, and sustainably increase their productivity. The project is funded by the Government of New Zealand.

Regional alliance to sustainably intensify production

Tech solution

The project fosters regional cooperation to sustainably intensify production systems in the target region. To achieve this, an initial baseline will be established, and target environments will be characterized by analyzing climatic and edaphic variables alongside farmers' agronomic practices. This approach will help identify representative environments for cultivar evaluation. Once these environments are defined, superior genotypes will be selected based on

their performance within specific conditions and across all evaluated environments. Field experiment data and environmental characterization insights will be made accessible via a user-friendly online platform, offering cultivar recommendations and yield estimates for each environment. Additionally, knowledge-sharing and dissemination materials will ensure that the project's findings reach farmers, technicians, professionals, and students.

MORE INFO



Impacts and Results

The project aims to establish a sorghum cultivar evaluation network, initially establishing a technological baseline for each participating location. It seeks to characterize the soil, climate, and agronomic conditions of the evaluation environments, as well as the cultivars tested in different conditions and their interactions. All collected and processed data will

be used to develop an online support platform providing cultivar recommendations and yield estimates for each environment. The results and knowledge gained regarding environmental characterization and cultivar performance will also be disseminated with key stakeholders, including farmers, students, technicians, and professionals.

Main Donors



Organizations

