

1. PROJECT OVERVIEW:

ABOUT THE COMPANY

AGROWS- Insumos Agrícolas, Lda, hereinafter referred to as AGROWS, is a Private Limited Company (Commercial) created in 2020 with legal entity number 101328457 and NUIT 401231188, having as its object the Provision of Services, Production and Marketing in the Agrarian Sector, headquartered in Mozambique, Maputo Province, Boane District, Mulotana Billy neighborhood, block 42 number 11, legally represented by its Chief Executive Officer (CEO), Prof. Doctor Eng. Joaquim Vicente Uate.

ABOUT THE COOPERATION PARTNERS

Currently, AGROWS has a partnership with AQUILA UNIVERSITY (UNAQ), a Mozambican higher education institution, created by Decree no 76/2018, of 26 November, with the Rectory at *Campus dos Pavões*, in Chali neighborhood,, KaTembe Municipal District, City of Maputo, represented by its Chancellor, Prof. Doctor Teodoro Andrade Waty.

ABOUT THE PROJECT

Project Title: Production and Commercialization of National Maize Hybrid Seeds

Improved seed is one of the easiest and safest ways to increase national agricultural income. The improved varieties of seeds contribute directly to the improvement of agricultural productivity. This includes gains in average agronomic yields, and often in the stability of agricultural production in the event of droughts. Genetically improved varieties respond better to agricultural inputs, increasing returns to complementary investments effectively.

Através de programas de melhoramento específicos para a cultura do milho, são desenvolvidas diversas variedades de milho pelo Instituto de Investigação Agrária de Moçambique (IIAM), desde as variedades de polinização aberta até as híbridas, as quais passam por processos de avaliação e seleção para diversos caracteres, sempre em destaque a adaptabilidade e estabilidade, em ensaios nacionais. Todavia, por falta de investimento na multiplicação de sementes nacionais, esses germoplasmas permanecem no anonimato, embora com potenciais de produtividade devidamente comprovadas.

Through specific programs for maize breeding, there are several varieties of maize obtained by the Institute of Agricultural Research of Mozambique (IIAM), such as the open pollination (OPVs) varieties and hybrids, which are evaluated and selected for different agronomic characters, always highlighted adaptability and stability, in national trials. However, due to lack of investment in the multiplication of national seeds, the most of these germplasms remain anonymous, although with proven potential to produce in national agrosystems.

In a strategy aiming high productivity in the fields of maize producers, coupled with the guarantee of regular seed purchase, that is, the buyer needs a new seed in each production cycle, AGROWS, under license of IIAM, in the field in partnership with UNAQ, aims the multiplication and commercialization of hybrid seeds varieties of maize, which easily fall into the category of "Classic private goods".

The costs of implementing certified seed production projects are typically much higher than alternative investments in other agricultural sectors, because, seed multiplication programs, usually, depends on irrigation systems to guarantee productivity and seed quality.

Thanks to the new environmental awareness, observing that there are increasingly less water resources and with the increase in energy costs, in recent years the use of localized drip irrigation has also been developed for the cultivation of maize seeds. The advantages of using drip in maize seeds are diverse and of great importance, including: (a) rapid increase in productivity in the order of 30 to 40%; (b) better quality of the seed thanks to the reduction of periods of water and nutritional stress that translates into the reduction of mycotoxin attacks; (c) water savings in the order of 30%, due to the system's relative indifference to losses caused by wind and evapotranspiration; (d) Drip pressure less than or equal to 1.0 Bar, guaranteeing an energy saving around 60%.