

**Republic of
Mozambique**



**Ministry of
Science and Technology**

WORLD SOYBEAN RESEARCH CONFERENCE

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Contribution of Science and Technology for Human Nutrition in Mozambique

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Contents



1. The vision of GoM on S&T
2. Main MCT Programmes
3. Contribution of the Science and Technology Sector
4. Millennium Villages Program
5. Soybean Production and Research in Mozambique

The vision of GoM on S&T



Scientific Research should be geared to contribute to the poverty eradication and wealth generation

Human capacity development is key, targeting current priorities but with open mind to fundamental research deemed critical for future development

Main MCT Programmes



- Human Resources Development;
- **Millenium Villages;**
- Creating the Scientists of Tomorrow;
- **Mozambican Innovator's Programme;**
- Construction using local material;
- Dissemination of Science;
- Community Multimedia Centers;
- **Scientific and Technology Parks;**
- MoRENet;
- **Biotechnology;**
- Ethnobotany.

Contribution of the Science and Technology Sector



- The Ministry of Science and Technology is the central organ of the state that determines, regulates, plans, coordinates, develops, monitors and evaluates the activities within the Science and Technology sector;
- The Ministry of Science and Technology has been enhancing science, technology and innovation (STI) in Mozambique, to increase its contribution for poverty reduction, economic growth and the social wellbeing of its population;
- Agriculture has been identified as a strategic area of STI in Mozambique; Article 103 of Constitution;

Contribution of the Science and Technology Sector (Cont.)



Some of the programmes and projects to improve the livelihoods of rural communities in Mozambique include:

- Millennium Villages Program, an integrated community development program established in four provinces of Mozambique;
- Establishment of Centres of Research, Training, Technology Transfer for production and processing of rice, maize and wheat. The project is funded by the Government of India, and will be implemented as a food security project;
- Establishment of a center for biotechnology research in Gaza province;
- Centre for Research and Technology Transfer of Agrarian Umbelúzi (CITTAU): The Centre is an institution for research, technological development, technology transfer, innovation, human capital formation and agricultural and livestock production. The project is being implemented with the support of the Government of China.

Millennium Villages Location



Legend

Village Name	Location	Number of Covered Inhabitants	Creation Date
1. Chibuto Millennium Village	Gaza – Chibuto District	13.000	2006
2. Vila do Milénio de Lumbo	Nampula – Mozambique Island District	8.085	2007
3. Itoculo Millennium Village	Nampula – Monapo District	6.000	2009
4. Malua Millennium Village	Zambézia – Alto-Molocué District	5.763	2009
5. Lionde Millennium Village	Gaza – Chokwé District	8.000	2009
6. Chitima Millennium Village	Téte – Chitima District	23.000	2011

Concept of the Millennium Villages Program



- Millennium Villages is an integrated community development program based on the transfer of scientific knowledge, and technological innovations to rural communities combined with local knowledge promotes the accelerated socio-economic development;
- Millennium Villages is a program of the Government of Mozambique being implemented by the Ministry of Science and Technology through the Technology Transfer Center of Community Development.
- The Millennium Villages are created in communities with high rates of poverty but with high potential in terms of resources, mainly agriculture.

Innovation Center and Technological Development



Science & Technology Parks



- Stimulate the innovation activities;
- Create favourable starting conditions for scientists, students, who plan to open own spin-off companies (Business incubators);
- Create favourable conditions for already existing companies to expand their business;
- Help solve intellectual property problems;
- Technology transfer.

Soybean production in Mozambique



- The majority of soybean production is done by smallholder farmers (95 % of the production);
- Soybeans are used to satisfy three separate markets: soybean oil, soybean cake (animal feed) and soybean products (human consumption);
- Mozambique is a net importer of soybeans, with production of 18,000 MT and consumption of 216,000 MT (2010/11);
- The poultry and livestock industries demand at least 40,000 MT of soybeans for feed every single year;

Soybean research in Mozambique



- Agricultural Research Institute of Mozambique (IIAM) has started testing, on-station and on-farm, new varieties of soybean;
- ProSavanna - a triangular partnership: Brazil, Japan and Mozambique is developing improved seeds of different soybean varieties;
- ProSavanna - aims to support Mozambique's growing livestock industry, grow enough production for export, and use the nitrogen-fixing crop to improve soil health and overall farm productivity.

Soybean processing



- Processors in Mozambique have low processing capacity and often are not able to sell the oil;
- The soybean meal market has been driven by the growth of the poultry industry which drives demand for poultry feed;

Soybean processing (Cont.)



- The oil market is large enough to absorb all the soybean oil produced in the country. Its processing capacity is currently equivalent to 216 000 ton of soybeans;
- Mozambique is well placed to export its excess soybeans in the North and Center to neighboring Malawi, Tanzania and Zimbabwe, while continuing to import soybean meal from South Africa and other international markets for demand in the South;

Soy For Human Conception in Mozambique



- Soy milk - early 1990;
- WISHH Program & ADPP: between 500 – 1,000 people, mostly women, trained;
- Soy Booket - in both English and Portuguese published to SADC Region: first volume with recipes from Central Mozambique and Malawi;
- Mineral resources x poultry feed.

Possibilities of Application of Soy in Cereal Food Products in Mozambique



- Beverages: Mahewu – soybean + cereal (maize);
- Breakfast cereals – soybean + cereal (maize, millet, sorghum);
- Weaning foods – soybean + cereal;
- Porridges – soybean + cereal (maize, millet, sorghum);









Khanimambu!
Thank you for your attention!