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Science Debates in Portuguese

11st Session - “Agriculture: from plows to satellites”

D March 31 - 3 pm (Lisbon time)



Because the Science Debates in Portuguese do not end at the end of each session Key ideas for further reflection

- Satellites can help plows without replacing them;
- Much of agriculture is not done by choice, but as a means of subsistence;
- The transition from traditional to sustainable agriculture is a complex process that requires patience and guidance and a vision of innovative work at a pace beyond the usual;
- Agriculture is the engine of economic growth and social peace in Africa;
- The concept of environmental sustainability must be addressed in both the economic and social dimensions;
- Different soils with different topographies need different treatments;
- Analyze agriculture considering the variables climate, water, energy and food;
- Bet on short production chains;
- Many industrial agricultural practices are contributing to the degradation of the ecological processes that sustain life on earth;
- Achieving sustainable agrarian systems implies increasing scientific knowledge in agroecology and in the study of the native characteristics of fauna and flora;
- Earth observation via satellites provides indispensable data to make agriculture more efficient and sustainable;
- The involvement of the young people into the farming sector is very important and can be achieved by combining the technological and digital concept with more traditional or more conventional activities;
- Precision agriculture, supported by satellites data, is a management system that can be incorporated into different models of sustainable intensification, including agroecological farming;
- Supporting farmers to relearn how to cultivate on an ecological basis, with strong investment in technical and government support and mobilization of effective financing;
- Compliance with the human right to food, maintaining high environmental quality;

- Encourage the reduction of waste and surplus;

- Science and technology allow the “massification of personalization” to help rural producers mapping their activities and monitoring the results of their decision-making processes very closely;
- The digitization of rural territories is central to Rural Development and an opportunity to provide agricultural activity with a modern and attractive image for young professionals;
- The global redistribution of the use of fertilizers is recommended to achieve environmental sustainability in industrial countries and for a sustainable intensification in countries that still need to increase their agricultural production;
- Investment in new protein forms and superfoods, more functional and nutritious, as well as in the productive diversification and requalification of land available for cultivation
- Educational demonstration projects for young people, such as robots that check and report on the humidity of the soil in planted pots, are very important to raise awareness among the population about the importance of technology in agricultural development;
- Today the greatest challenge is to replace food imports by domestic production and by stimulating the consumption of local products;
- Dissemination, training and education of students, the creation of value for their establishment in the areas of exploitation and means and local conditions for pursuit of studies;
- Positive discrimination against women and girls in training as a multiplier idea of training and education expenses and direct intervention in society in the long run;
- Investment in research and resources (satellite data, data from sensors in the field, earth observation, big data, etc.) to prevent food security failures, destruction of natural ecosystems and monitoring scalable and sustainable agricultural development;
- New models to organize farmers and develop innovative initiatives;
- Improve access to markets and enhance value chains;

Guests:

Moderation:

Ana Noronha, Executive Director of Ciência Viva

Interventions and Roundtable:

Angela Moreno, President of the National Institute for Agricultural Research and Development (INIDA), Cape Verde

José Rafael Marques da Silva, Professor University of Évora, Director of Master's degree in Technologies in Precision Agriculture

Isabel Ferreira, Secretary of State for the Development of Inland Regions, Professor and Researcher, Portugal

Leonardo Kerber, Specialist in Precision Agriculture at Cotrijal, Brazil

Luís Goulão, Professor at School of Agronomy – University of Lisbon (ISA) and member of the Coordinating Council of the Center for Research in Agronomy, Food, Environment and Landscape (LEAF), Portugal

António Batel Anjos, Mathematician and Executive Director of Osuwela - Association of Mozambican law, for the Promotion of Development through Science Training, Mozambique

Xavier Mendes, Director of the Center for Agronomic and Technological Research (CIAT), São Tomé and Príncipe