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“Global food security and food safety:
The role of universities”

Technology Transfer and Capacity Building in Biotechnology and Biosafety for a Sustainable and Intensified Agriculture in Africa

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Abstract

The IPBO (International Plant Biotechnology Outreach) promotes access to scientific and technological innovations as ways of enhancing food security and promoting a sustainable intensification of agriculture. Innovations in biotechnology hold massive opportunities for developing a more sustainable agriculture. However, converting these opportunities into practice in emerging economies requires a concerted effort in training in – and access to – the latest technological developments and the design of effective biosafety and regulatory mechanisms. IPBO is an active cell within the VIB, Belgium (Flemish Institute for Biotechnology) created by Prof. Marc van Montagu in 2000. The mission of IPBO is threefold: (1) improve understanding and create awareness about the importance of green biotechnology applications for sustainable development (communication), (2) empower plant biotechnologists and plant breeders from developing countries and emerging economies through training and capacity building in plant biotechnology and biosafety (training), (3) act as a focal platform for green biotechnology in Europe and leverage outreach to developing countries and emerging economies. For instance, with support of the Flanders Government, IPBO has joined forces with the UN Industrial Development Organisation (UNIDO, Austria) to set up the International Industrial Biotechnology Network (IIBN, www.iibn.eu). This network is being used to work out projects linking Flanders, European-Asian and American scientists or companies at one side and African partners at the other side.

Under IIBN, agricultural constraints that are potential targets for biotechnology interventions are being mapped in different parts of the world, especially in sub-Saharan Africa. Also, a member-based cooperation network is being developed. Together, these efforts will create an effective platform for identifying new opportunities for cooperation.

Keywords: Africa, plant biotechnology, sustainable agriculture