



**30 YEARS OF PLANT BIOTECHNOLOGY**

*A forum on Global Agriculture and Forestry*



# Foundation Statement: The International Industrial Biotechnology Network

**Institute of Plant Biotechnology Outreach  
VIB-Ghent University  
Belgium**

**13 TH** of November 2013, Gent



## The International Industrial Biotechnology Network



The International Industrial Biotechnology Network (IIBN) is a joint initiative of the **Institute of Plant Biotechnology Outreach (IPBO)**, **VIB-Ghent University, Belgium** and the **United Nations Industrial Development Organization (UNIDO)**, Austria, set up within the framework of UNIDO's Resource Efficiency and Sustainable Agribusiness Programs, with support from the **Government of the Flanders Region of Belgium**.

The benefits of biotechnology for sustainable development have been documented in numerous international studies and reports<sup>1</sup>. The Flanders Region of Belgium has made a global contribution to agricultural productivity through frontier R&D, amongst which, most notably is the invention of plant genetic engineering. In recognition of these accomplishments, the 2013 World Food Prize was awarded to **Em. Prof Marc Van Montagu** (VIB-Ghent University, Belgium) and two co-laureates for 'contributing significantly to increasing the quantity and availability of food'.

The IIBN Cooperation Network was initiated in 2010 to foster the science-based application of biotechnology for sustainable and inclusive development addressing constraints in the food and non-food sectors of developing and emerging economies. Since 2010, IIBN is being developed along two tracks: (i) by engaging in advocacy to raise awareness and improve understanding of the potential sustainability benefits of biotechnology; and (ii) by fostering R&D activities that translate biotechnology applications into social, economic and environmental benefits for emerging and developing regions.

IIBN is foreseen to comprise of like-minded public or private sector stakeholders for science-based and responsible adaptation, demonstration and/or application of biotechnology. To amplify IIBN's activities, expand its knowledge base, and reinforce international cooperation and impact, a number of key members, the IIBN Founding Members, agree herewith to cooperate to improve science and technology collaboration and transfer in biotechnology between knowledge institutions, businesses, governments and other stakeholders in developing, transition and industrialized nations. The IIBN Founding Members are: the **Science and Technology Centre, Ukraine**; **Embrapa, Brazil**; the **Guangxi Academy of Sciences, China**; the **African Biosafety Network of Expertise, Burkina Faso**; and **IPBO, VIB-Ghent University, Belgium**.

<sup>1</sup> Assessment of the economic performance of GM crops worldwide. 2011. Kaphengst et al. Report to the European Commission. Global food security and the governance of modern biotechnologies. 2011. Tait & Barker. EMBO Reports 12: 763-768. Industrial Biotechnology: More than green fuel in a dirty economy? 2009. Kornerup Bang et al. World Wildlife Fund, Denmark. Disruptive technologies: Advances that will transform life, business, and the global economy. May 2013. McKinsey Global Institute.

# Ghent Declaration

The undersigned met on 13<sup>th</sup> November 2013 in Ghent, Flanders Region of Belgium at the occasion of the seminar **'Thirty Years of Plant Biotechnology: A Forum on Global Agriculture and Forestry'** and:

1. Reflecting upon the positive contribution biosciences and technology have made in the past three decades towards addressing the global inter-related challenges of: food security, nutrition and health; environment, energy and climate change; and poverty eradication, in particular as these affect developing and emerging economies;
2. Acknowledging the leadership of the VIB-Ghent University, Institute of Plant Biotechnology Outreach, the Government of Flanders and the United Nations Industrial Development Organization in facilitating developing country access to advanced biosciences and its appropriate technological applications and creating developing countries' capacities for science based applications of biotechnology; and
3. Recognizing the need to scale up and accelerate the transfer of fundamental and applied bioscience know how and technology to developing countries, to facilitate science based applications of appropriate biotechnological solutions in manners supportive to developing countries' national sustainable development priorities, aims and objectives,
4. Resolved to become Founding Members of the IIBN and invite like-minded organizations to consider joining the IIBN,
5. Decided that this IIBN will:
  - a. operate as a not for profit global partnership of public and private research institutes, centres of expertise and governmental and non-governmental organizations;
  - b. work towards scaling-up and expanding research and technology cooperation, ranging from basic research, through applications and pilots, and deployment and commercialization, in biosciences and technology for inclusive and sustainable industrialization and development in developing and emerging economies; and
  - c. commit to science-based, transparent and unbiased advocacy on opportunities, benefits and safeguards for application of biosciences and technology in developing and emerging economies.
6. Agreed to formalize before 31<sup>st</sup> December 2013 the operation of the IIBN by means of a Charter and Code of Conduct, addressing amongst others functions, membership, and governance of the IIBN, and
7. Invited the Government of Flanders and UNIDO to support IPBO, VIB-Ghent University, Belgium to assume the role as founding executive secretariat for the IIBN for at least the duration of the establishment period of the IIBN

## Signed by the IIBN Founding Members:

1. **The Center of Genetic Resources and Biotechnology (Cenargen), EMBRAPA, Brasil**  
Representative: Prof. Maria Fatima Grossi de Sa

Signature

2. **Science & Technology Center Ukraine (STCU), Ukraine**  
Representative: Dr. Michel Zayet, STCU, Deputy Executive Director (European Union)

Signature

3. **Guangxi Academy of Sciences (GXAS), China**  
Representative: Mr. Junhua Wu, Director, International Cooperation Division

Signature

4. **African Biosafety Network of Expertise (ABNE), African Union - New Partnership for Africa's Development (AU-NEPAD), Burkina Faso**  
Representative: Dr. Diran Makinde, Director, African Biosafety Network of Expertise

Signature

5. **Institute of Plant Biotechnology Outreach (IPBO), VIB-Ghent University, Belgium**  
Representative: Em. Prof. Marc Van Montagu, Chairman IPBO

Signature

## IIBN Founding Members

### 1. **Center of Genetic Resources and Biotechnology (Cenargen), Embrapa, Brasil**

The Embrapa Center of Genetic Resources and Biotechnology (Cenargen) was created in 1970 under the stimulus of FAO for the preservation of genetic resources. Cenargen's mission is to "make possible solutions to research, development and innovation in genetic resources for sustainability of Brazilian agriculture". Cenargen has been strongly active in the exchange and quarantine of plant germplasm, ensuring continuity of Embrapa's breeding program as well as preventing the introduction and spread of agricultural pests. Cenargen is focused on adding value to genetic resources using advanced biotechnology tools and has generated knowledge and patented products, processes and services that contributed to the development and sustainability of Brazilian agriculture.

### 2. **Science & Technology Center Ukraine (STCU), Ukraine**

The STCU is the first intergovernmental organization in Ukraine and was established in 1993 by the four founding Parties: Ukraine, Canada, Sweden and the United States of America. In 1998, the European Union acceded to the STCU replacing Sweden. The STCU's main purpose is: "To support research and development activities for peaceful applications by Ukrainian, Georgian, Uzbekistani, Azerbaijani, and Moldovan scientists and engineers as part of the general process of conversion to a civilian, market-oriented environment."

### 3. **Guangxi Academy of Sciences (GXAS), China**

Established in 1980, the Guangxi Academy of Sciences (GXAS) is the most important R&D institute in Guangxi Province of China, affiliated directly to provincial Government. GXAS has seven sub-institutes and 19 research centers with research covering 19 areas and 41 disciplines, including biotechnology, oceanography, environment, informatics, botany, new material, renewable energy, amongst others. As the major biorefinery institute in China, GXAS has three national and six provincial research centers (key laboratories). The three key laboratories are (i) the National Engineering Research Center for Non-food Biorefinery; (ii) the State Key Laboratory of Non-Food Biomass and Enzyme Technology; and (iii) the National-Province Joint Engineering Research Center for Bio-Energy. Research at the GXAS on enzyme engineering, microbial strain reconstruction, ethanol fermentation from molasses and lignocellulosic feedstocks is well known in China and also worldwide.

### 4. **African Union - New Partnership for Africa's Development (AU-NEPAD), African Biosafety Network of Expertise (ABNE), Burkina Faso**

ABNE was conceptualized under NEPAD's Consolidated Plan of Action and fulfills the recommendation of the High-Level African Panel on Modern Biotechnology 'Freedom to Innovate' by Juma and Serageldin (2007). It is a science-based biosafety resource network for African regulators established to build functional biosafety systems in Africa. The service network is offered by a team of biosafety specialists based at its nodes in Burkina Faso and

Uganda with expertise drawn from institutions in and outside Africa. The ABNE services include information resources; training and education that includes biosafety training workshops, short courses in biosafety, online courses, internships and study tours; technical support and consultations that are related to the development of guidelines, standard operating procedures and implementing regulations used for reviewing applications, monitoring, and compliance of laboratory and greenhouse trials, confined field trials, general releases, and imports of biotechnology food products.

**5. Institute of Plant Biotechnology Outreach (IPBO), VIB-Ghent University, Belgium**

The Institute of Plant Biotechnology Outreach was established in 2000 by Em. Prof. M Van Montagu - the 2013 World Food Prize Laureate - as a central node of international networking in plant biotechnology. IPBO's mission is to stimulate applications of agricultural biotechnology for inclusive and sustainable development of developing and emerging economies. IPBO's activities include advocacy to raise awareness and improve understanding of the sustainability benefits of biotechnology, capacity building, and fostering international R&D cooperation oriented towards the needs of developing and transition economies.