

OFFICIAL FEEDBACK FORM

DIALOGUE DATE	Friday, 23 July 2021 14:00 GMT +00:00
DIALOGUE TITLE	Role of Agricultural Biotechnology in Food Systems Transformation
CONVENED BY	Pablo Orozco - Cornell Alliance for Science
DIALOGUE EVENT PAGE	https://summitdialogues.org/dialogue/35283/
DIALOGUE TYPE	Independent
GEOGRAPHICAL FOCUS	Bangladesh, Brazil, Chile, Ghana, India, Netherlands, Philippines, South Africa, United Kingdom of Great Britain and Northern Ireland, United States of America

The outcomes from a Food Systems Summit Dialogue will be of use in developing the pathway to sustainable food systems within the locality in which they take place. They will be a valuable contribution to the national pathways and also of interest to the different workstreams preparing for the Summit: the Action Tracks, Scientific Groups and Champions as well as for other Dialogues.

1. PARTICIPATION

TOTAL NUMBER OF PARTICIPANTS

PARTICIPATION BY AGE RANGE

0 0-18 20 19-30 25 31-50 51-65 66-80 80+

PARTICIPATION BY GENDER

30 Male 15 Female Prefer not to say or Other

NUMBER OF PARTICIPANTS IN EACH SECTOR

10	Agriculture/crops	15	Education		Health care
	Fish and aquaculture	5	Communication		Nutrition
	Livestock		Food processing	5	National or local government
	Agro-forestry		Food retail, markets		Utilities
	Environment and ecology		Food industry		Industrial
	Trade and commerce		Financial Services		Other

NUMBER OF PARTICIPANTS FROM EACH STAKEHOLDER GROUP

	Small/medium enterprise/artisan		Workers and trade union
	Large national business		Member of Parliament
	Multi-national corporation		Local authority
	Small-scale farmer		Government and national institution
	Medium-scale farmer		Regional economic community
	Large-scale farmer		United Nations
20	Local Non-Governmental Organization		International financial institution
	International Non-Governmental Organization		Private Foundation / Partnership / Alliance
	Indigenous People		Consumer group
25	Science and academia		Other

2. PRINCIPLES OF ENGAGEMENT

HOW DID YOU ORGANIZE THE DIALOGUE SO THAT THE PRINCIPLES WERE INCORPORATED, REINFORCED AND ENHANCED?

Every body was allowed to speak their minds based on their own ideas and thoughts.

HOW DID YOUR DIALOGUE REFLECT SPECIFIC ASPECTS OF THE PRINCIPLES?

Conscious efforts were made to bring multiple stakeholders from different fields to participate in the dialogue.

DO YOU HAVE ADVICE FOR OTHER DIALOGUE CONVENORS ABOUT APPRECIATING THE PRINCIPLES OF ENGAGEMENT?

Yes

3. METHOD

The outcomes of a Dialogue are influenced by the method that is used.

DID YOU USE THE SAME METHOD AS RECOMMENDED BY THE CONVENORS REFERENCE MANUAL?

Yes

No

4. DIALOGUE FOCUS & OUTCOMES

MAJOR FOCUS

It explored the role that advanced innovations like biotechnology can be used to improve upon food systems.

ACTION TRACKS

- ✓ Action Track 1: Ensure access to safe and nutritious food for all
- ✓ Action Track 2: Shift to sustainable consumption patterns
- ✓ Action Track 3: Boost nature-positive production
- ✓ Action Track 4: Advance equitable livelihoods
- ✓ Action Track 5: Build resilience to vulnerabilities, shocks and stress

KEYWORDS

- Finance
- ✓ Innovation
- Human rights
- Women & Youth Empowerment
- ✓ Policy
- ✓ Data & Evidence
- Governance
- Trade-offs
- Environment and Climate

MAIN FINDINGS

There is the need for agricultural biotechnology to be recognised as one of the key tools that can revolutionarize agricultural production. GMOs and gene editing tools should be accepted in the agricultural value chain globally.

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OUTCOMES FOR EACH DISCUSSION TOPIC

Agricultural biotechnology is a crucial tool for transforming global food systems to meet the United Nation's goal of ensuring zero hunger by 2030.

Evidence abounds that biotechnology has had a positive overall impact on agriculture in the areas where it has been employed.

If adopted more widely across the globe, it could be instrumental in meeting the UN's Sustainable Development Goal (SDG) 2, which aims to end world hunger, boost nutrition and support agricultural sustainability within the next nine years.

GMO technology is working for farmers. In Bangladesh for example, there's been a six-fold increase in income that farmers in Bangladesh have earned as a result of growing Bt eggplant, an important food crop genetically modified to resist the destructive fruit and shoot borer pest without the application of insecticides.

More opportunities must be created for farmers to access crop biotechnology if the world's food systems are to be transformed to meet the challenge of feeding the more than 811 million people who suffer hunger across the globe.

It is high time for us all to come forward and allow people to innovate and use GM technology for food security and sustainability.

Given the world's high population growth, limited land for agricultural production and ongoing COVID-19 pandemic, it will be more challenging to achieve the SDG on hunger, Hossain said, adding that all options that can help deal with food insecurity should be explored.

Between 1996 and 2018 produced an additional 824 million tonnes of food, feed and fiber worldwide. He said farmers earned an extra US\$225 billion in income by growing GM crops during that same period, while reducing the use of agricultural pesticides by 8.6 percent, resulting in a 19 percent cut in associated environmental impacts. The technology also helped reduce carbon emissions equal to taking 15.3 million cars off the road.

Because GM crops increase yields, if they had not been available during that time some 24.2 million extra hectares of land would have been destroyed to make way for the same amount of crop production, he noted.

There is a growing range of gene editing research that is focused on crops and traits that have been almost impossible to tackle using conventional breeding technologies. There is a quick rise in use of CRISPR technology in crop improvement to ensure agronomic value, food and feed quality, biotic stress tolerance, herbicide tolerance, abiotic stress adaptations, enhance breeding, etc. These applications are looking at problems that have been difficult to tackle over the years.

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KEYWORDS

- | | | | |
|--------------------------|---------------------------|--------------------------|-------------------------|
| <input type="checkbox"/> | Finance | <input type="checkbox"/> | Policy |
| ✓ | Innovation | ✓ | Data & Evidence |
| <input type="checkbox"/> | Human rights | <input type="checkbox"/> | Governance |
| <input type="checkbox"/> | Women & Youth Empowerment | <input type="checkbox"/> | Trade-offs |
| <input type="checkbox"/> | | <input type="checkbox"/> | Environment and Climate |

AREAS OF DIVERGENCE

Enhanced advocacy for agricultural biotechnology is needed.

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KEYWORDS

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ATTACHMENTS AND RELEVANT LINKS

RELEVANT LINKS

- **Link to story published on event**
<https://allianceforscience.cornell.edu/blog/2021/07/un-food-systems-summit-biotechnology-key-to-meeting-zero-hunger-goals/>
- **Link to video of discussions**
<https://www.youtube.com/watch?v=jjugxnwqReE>