

## Chatham House Dialogue

### Crop Diversity for Challenging Times: the Role of Genebanks in Sustainable Development

#### Background

We are entering a period of increasing environmental unpredictability, socio-economic instability and political uncertainty. Looking a decade into the future, we might foresee continued erosion of biodiversity globally, coupled with new crises – climatic shocks and tipping points, pandemics, financial and trade crises and national and international political manoeuvring – playing havoc with food security and human welfare. What do trends such as these mean for the collective need to conserve shared resources such as crop genetic diversity, which are both threatened by these developments and could help alleviate them?

Current and future breeders, researchers, farmers, and consumers will need to have at their disposal the widest possible range of crops and crop varieties with diverse traits. Developing and making available such varieties represents a critically important challenge. Traditionally, breeding is expensive and slow, requiring years of investment to develop a new variety. Modern technologies, however, are already significantly speeding up the breeding process and opening up new avenues for identifying and deploying genes.

Genebanks around the world play a key role in conserving genetic diversity and making it available to breeders and others. Advanced genetic, digital and other technologies offer exciting opportunities for using the limited financial and human resources available to genebanks more efficiently and effectively. Who will have access to these technologies and how will the benefits from such developments be shared? Scaling collaboration up and out and strengthening complementary roles among international and national institutes, universities and communities are critical. How can international genebanks evolve so that they contribute more fully to modern crop improvement and enable and help support access and benefit sharing.

In order to address such issues, the Crop Trust and Chatham House proposed to convene a facilitated on-line dialogue among experts in relevant fields.

#### Objectives and Outputs

The Dialogue will comprise three separate sessions that will aim to build a vision of how genebanks can play a fuller and more effective role in helping agriculture meet future challenges. Special attention will be paid to the evolving role of the international genebanks managed by the CGIAR. The key findings and recommendations of the dialogue, together with background documents prepared for the Dialogue, will be used as the basis for a System level review of CGIAR genebank costs and operations (GCO review), as well as for relevant discussions in the context of 'One CGIAR' and the International Plant Treaty, and for consideration of the Crop Trust Executive Board.

#### Proposed invitees

It is proposed to invite 20-30 experts and strategic thinkers with a broad range acting in their personal capacity. Not all will be required to participate in all sessions, but a core set of experts will be present throughout. Individuals will be invited so that collectively the following topics and stakeholders will be covered:

- Futurology and scenario building
- Biodiversity and genetic resources conservation

- Plant breeding, genomics & bioinformatics
- Agricultural economics and policy
- Private, for-profit sector
- Civil Society Organizations and NGOs

In addition, GCO Review Panel members representing CGIAR, Crop Trust and the International Plant Treaty Secretariat will take part.

### Sessions

- A series of three, 3-hour facilitated online sessions, each for about 20 participants, tentatively on the 14<sup>th</sup>, 16<sup>th</sup> and 24<sup>th</sup> September 2020
- At least 2 background documents will be provided in advance, so that all participants have key information at their fingertips:
  - One looking at possible future global scenarios that could impact the need for, role of and access to plant genetic resources and
  - One looking at possible technological futures and their implications;

The three sessions will be framed around key questions:

#### 1. The Big Picture: What future scenarios might we envisage for multilateralism, development, diversity and agriculture? *(Facilitated by Prof Tim Benton)*

- What can we say about future global trends and how will they will impact on agriculture, the use of crop diversity and food security?

#### 2. What technological and policy changes will impact how we conserve and use crop diversity? *(Facilitated by Prof Jonathan Drori)*

- What materials and services will be needed of genebanks by whom?
- How can genebanks better speed up and support research and breeding?

#### 3. How can we ensure genebanks are fit for purpose in a changing world by our actions today? *(Facilitated by Prof. Jonathan Drori)*

- How can more users access what more of what they need in the form they need it?
- How should the roles and responsibilities of local, national, regional and international genebanks evolve?