

# IGTC policy Plant Breeding Innovation November, 2017<sup>1</sup>

The IGTC's overarching objective is to achieve a market and regulatory environment supportive of trade that avoids disruptions in the international trade of grain, oilseeds, pulses and derived products.

Trade plays a crucial role on the market, connecting producers to consumers, through distribution of capacities and services. A stable grain trade plays a major role in feeding the world's growing population, moving goods from areas of surplus into areas of deficit. Governments must appreciate the grain trade as a key economic driver and a crucial component of world food security.

Grains, oilseeds and agri-bulks have been traded in large volumes for centuries. Today, the international grain trade is well-developed and highly globalized, using sophisticated infrastructure to provide safe, high volume, affordable, competitive, timely, predictable, responsive, and resilient supply. Central to this is "fungible" supply, meaning that most grain is treated as interchangeable from multiple points in exporting countries to multiple points in importing countries for a variety of end uses.

Crop production methods have a significant impact on trade and marketing of grain, oilseeds, pulses and derived products. Innovations in plant breeding may allow for faster and more precise results, with significant potential to help overcome limitations of traditional breeding and enlarge the portfolio of available and traded products worldwide. Plant breeding innovation, like the trade of the products it enhances, makes an important contribution to contemporary food security challenges such as the need to provide more food and energy for an ever-growing population in a sustainable fashion, using less land, water and resources in a changing climate.

In light of use and availability of new breeding technologies, the global grain trade faces new and expanded challenges largely related to meeting regulatory and customer requirements. For instance, while new plant varieties developed with the help of certain methods may be exempt from regulation in one country, they may be subject to regulation in another country or, as in most cases, there remains a significant level of uncertainty. This legislative uncertainty is of great concern for the agri-food supply chain. For the grain trade in particular, it is a threat to providing for trade and adequate fungibility of plant products needed to provide for global food security and economic well being provided for by world's food, feed and processing industries. Regulatory decision making on product safety should be grounded in sound-science.

<sup>&</sup>lt;sup>1</sup> This policy was approved by IGTC Management Council on November 17, 2017.



#### **IGTC POLICY**

IGTC policy on plant breeding innovation is structured around three key pillars:

## 1) Safety of the product

Any plant variety derived from the introduction and use of plant breeding innovation placed on the market must be safe and must not pose risks to human and animal health or to the environment. The safety of plants obtained through the application of breeding techniques must be ensured.

# 2) Regulatory coherence

Worldwide regulatory coherence is of paramount importance to enable trade to continue efficiently and without facing hurdles. This principle is valuable and necessitates the highest attention: authorities across the globe are gradually taking their stance in relation to plant breeding innovations, including their scientific and regulatory classification. A certain lack of compatibility among trading partners is already emerging, posing trade concerns due to the intrinsic characteristics of bulk commodity operations. Indeed, the trade in grains and oilseeds is tied inextricably to global sourcing to achieve a sustainable supply of these basic commodities.

International alignment of regulatory and labelling policies on new plant breeding tools is an immediate need that includes:

- ✓ Legal certainty as a goal;
- ✓ Consistent policy outcomes across relevant global, regional, national and local jurisdictions;
- ✓ Regulatory approaches that are comparable, compatible, and recognized as acceptable by government authorities in key import and export markets to minimize or avert the risk of costly trade disruptions;
- ✓ Support for the least trade-distortive commercial and public measures for both imports/exports and provision for fungibility throughout the supply chain, which is a critical component of agricultural commodities trading.

### 3) Education and sharing of information

It is the responsibility of the industry using plant breeding innovations to undertake a comprehensive educational effort to inform the public of the benefits and risks, if any, of innovation in plant breeding. This communication is essential to gain consumer acceptance and trust, which is a fundamental requirement to ensure access to the market. The plant breeding sector is encouraged to lead industry efforts to establish public confidence.

The successful introduction of plant breeding innovation varieties into grain value chains will require **exchange of information** between breeding and seed companies, grain producers, handlers, exporters and importers, and the food and feed and processing sectors. This flow of



information is fundamental to identify and mitigate any risks related to marketability and public acceptance and to avoid trade disruption, while ensuring regulatory compliance within transboundary movements. To achieve this, it is vital that the trade works with the breeding and seed industry, as well as other stakeholders, to identify, discuss and implement pragmatic, achievable and effective information-sharing solutions.

**BACKGROUND** Since the 1980s, several new tools have been added to the plant breeder's toolbox. These tools are often grouped together under the more general term plant breeding innovation, also referred to as new plant breeding techniques (NBPTs). The earliest of these tools have been developed and first applied to plant breeding programs in the 1990s. Many of these 'new' approaches have been derived from innovations related to the evolution of biotechnology.

The differences compared to earlier transgenic approaches lie in the applied methodology and the changes achieved in the genome of the crops. These tools generate similar outcomes to those that can be achieved through traditional approaches, albeit more precisely and efficiently and not necessarily involving the introduction of foreign DNA.

Because these new methods may be more efficient and economical when compared to other plant breeding methods, they are more accessible to public and commercial plant breeders. Global deployment, in developed and developing economies, in most every geography, and for use in virtually all important crops, including field, vegetable and specialty crops is likely by most all agricultural seed breeding endeavours.