# CHARTING TRANSATLANTIC COOPERATION FOR A SUSTAINABLE FOOD SYSTEM

6 PRIORITIES TO UNLOCK THE POTENTIAL OF PLANT BREEDING INNOVATION







Since the domestication of food crops, humans have been plant breeders, continuously selecting better seeds to meet the needs of growing populations for a safe, reliable, and sustainable food supply. Today, agricultural production faces a confluence of global challenges:

### Imbalance in the food system

While 10% of the global population suffers from hunger and two billion people suffer from micronutrient deficiency, two billion people suffer from obesity. The forecast growth in world population will require a significant increase in food production along with greater equality in the distribution of food supplies.

#### Climate change

Extreme events that have an adverse effect on agricultural production are significantly increasing in frequency.

### Environmental & climate footprint

The agricultural sector is under increased social and political pressure to minimize its impact on the environment, climate and biodiversity.

## PLANT BREEDING INNOVATION (PBI) IS PART OF THE SOLUTION

Throughout the course of humanity, plant breeding has been and continues to be a crucial tool to address challenges faced by agriculture worldwide.

Continuous advances in science and technology have provided precise and robust tools to plant breeders that boost innovation and allow for the development of improved varieties more quickly and efficiently. The products of Plant Breeding Innovation must become part of the toolbox for farmers to enable them to continue to feed the world sustainably.

A systematic approach to sustainable food production requires the availability and accessibility of a diversity of crop species and varieties farmers and growers worldwide need a variety of breeding tools to meet: (1) localized environmental and climate challenges to production; and (2) localized food security, nutritional, and consumer needs.

### TRANSATLANTIC COOPERATION FOR A SUSTAINABLE FOOD SYSTEM: 6 PRIORITIES FOR THE EU AND U.S.

- Recognize the fundamental role of plant breeding and innovation in plant breeding methods in achieving Sustainable Development Goals (SDGs) by responding to crises emerging from climatic changes, decreasing biodiversity, and expanding human dietary and health needs.
- Invest in public funding for research & development of neglected and underutilized crops and varieties that support positive environmental impact and ecosystem services and allow for a more diverse crop rotation scheme on farms (e.g. nutrient cycling, soil formation, carbon sequestration).
- Work towards policy alignment and compatibility pertaining to products of PBI. Implement risk proportional criteria to assess when specific premarket review and clearance process is justified for plant varieties developed using certain plant breeding techniques, thereby ensuring transparency, predictability, and legal certainty for PBI that are similar to naturally occurring or conventionally bred varieties.

- Allow competitiveness of different innovations and agricultural production systems to support a more sustainable food system.
- Promote an integrated, competitive and diverse
  Transatlantic seed market to allow seed companies to
  flourish and constantly innovate to ensure a sustainable
  future for the industry.
- Continue to foster an open, science-based and inclusive dialogue on how plant breeding and innovation in plant breeding methods can contribute to sustainability goals.

The dialogue should involve a wide range of stakeholders across the Atlantic, including scientists, breeders, farmers and NGOs.



### **KEY FACTS AND FIGURES ON THE TRANSATLANTIC SEED MARKET IN A GLOBAL CONTEXT**

Plant breeding is a **truly globalised enterprise**, with around 25% of all commercial seed used worldwide traded internationally.

The **U.S.** and the **EU27** are respectively the first and the third largest seed markets worldwide.

The EU and the U.S. seed markets are **highly integrated**, and both the EU27 and the U.S. rank as each other's first trade partners in seeds.

Together the EU and the U.S. represent approximately half of the world seed market, with a combined value of around \$30bn.

### **ABOUT ASTA** AND EUROSEEDS

Founded in 1883, the American Seed Trade Association (ASTA) is one of the oldest trade organizations in the United States. Its membership consists of over 700 companies involved in seed production and distribution, plant breeding, and related industries in North America. More info at www.betterseed.org

Euroseeds is the voice of the European seed sector, representing the interests of those active in research, breeding, production and marketing of seeds of agricultural, horticultural and ornamental plant species. More info at www.euroseeds.eu

## A SHARED VISION FOR THE GLOBAL **SEED INDUSTRY**

ASTA and Euroseeds have 30 members in common and they closely cooperate within several working bodies of the International Seed Federation (ISF). ASTA and Euroseeds work together to:

- Facilitate the unimpeded movement of seeds & market access
- Advocate for consistent, science-based regulations and standards that enable alignment of seed regulatory approach
- ✓ Fund and promote selected seed research programs
- Ensure effective protection of intellectual property rights relating to plants and seeds
- Raise awareness and understanding for plant breeding and seed production