# UPOV

### Seminar on the role of plant breeding and plant variety protection in enabling agriculture to mitigate and adapt to climate change

Report of Thematic session 1: Climate change and its impact on agricultural production

Moderator: Mr. Marien Valstar, President of the Council, UPOV





## Speakers

Mr. John Derera, Senior Director, Plant Breeding and Pre-Breeding, Consultative Group on International Agricultural Research (CGIAR)

Ms. Arianna Giuliodori, Secretary-General, WFO

Mr. Michael Keller, Secretary-General, ISF

Mr. Edgar Krieger, Secretary General, CIOPORA









## Main messages

### John Derera:

Climate change impacts global agricultural productivity

Agricultural practices need to change

- Intensification
- Crop rotation,
- Cover crops,
- Irrigation

AND breeding climate resilient varieties



### Arianna Giuliodori, Secretary-General, WFO:

Farmers are impacted and are key to solutions

Support is needed (extension, knowledge exchange)

Regarding new plant varieties: > 80% of farmers said that new improved plant varieties are important to respond to climate change

Important :

- acces to seeds (affordable and available)
- enabling environment good seed legislation
- organised agriculture
- partnerships in the value chain





### Michael Keller, Secretary-General, ISF

Seeds are a very important and powerful input

Farmers and breeders have to take many factors into account there is not one single solution-breeders want to give farmers seed choice to address climate change at local level

Getting the best quality seeds accessible to all farmers will support sustainable agriculture and food security (SDG's)

Innovation goes hand in hand with protection of IP (UPOV) preferred for plant varieties)

International regulatory environment is important (FAO, UPOV, OECD, WTO, IPPC, etc,)

## Main messages



### Edgar Krieger, Secretary General, CIOPORA

Impact of climate change on plant breeding:

- loss of genetic diversity
- emerging diseases and pests
- water supply issues
- change in seasonality
- heat stress

Food security under pressure

Breeders need to work to create solutions

Accelerated breeding using different tools is necessary



