

SEMINAR ON  
PLANT VARIETY PROTECTION AND TECHNOLOGY TRANSFER:  
THE BENEFITS OF PUBLIC-PRIVATE PARTNERSHIP

## **BENEFITS OF THE UPOV SYSTEM FOR TECHNOLOGY TRANSFER**

Peter Button (Vice Secretary-General, UPOV)

*Geneva, April 11 and 12, 2011*

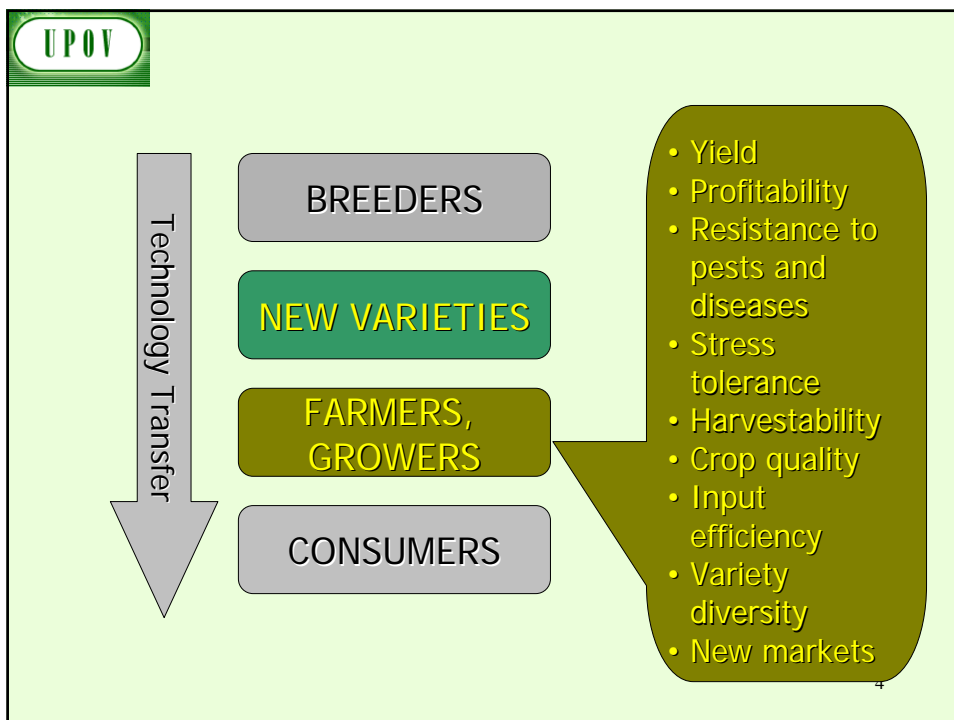
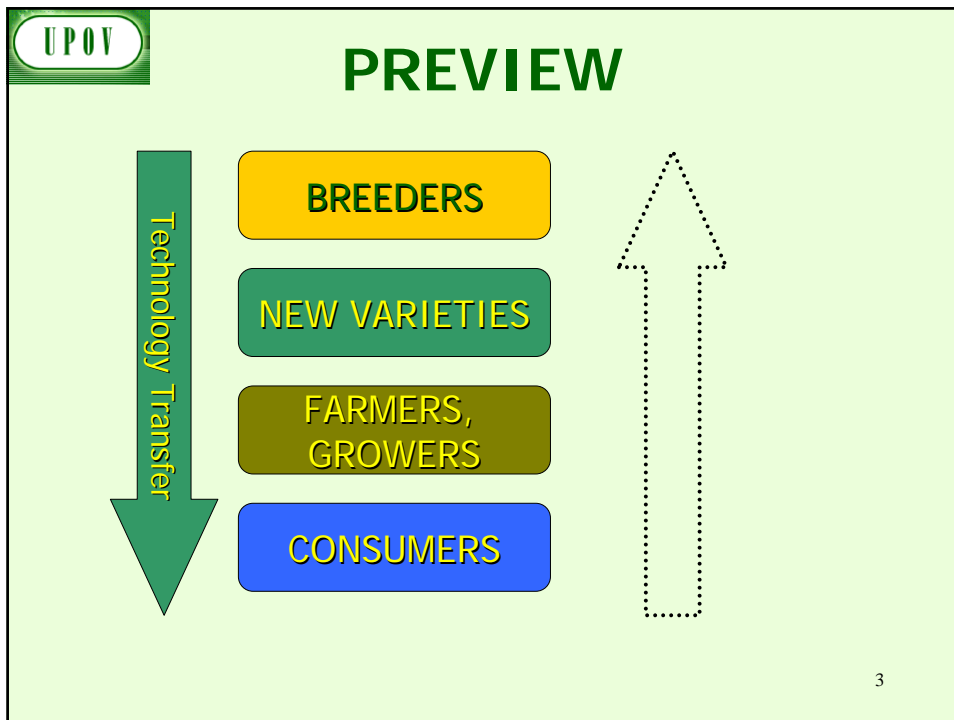


DECLARATION FROM THE SECOND WORLD SEED CONFERENCE

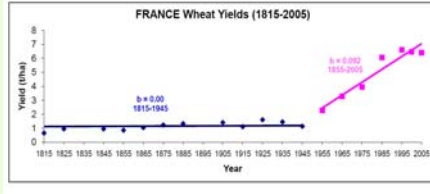
### **Responding to the challenges of a changing world: The role of new plant varieties and high quality seed in agriculture**

held at the FAO Headquarters in Rome, September 8-10, 2009

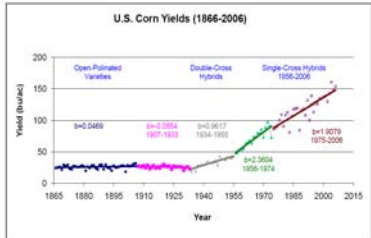
[...] **The conference emphasized the important role of both the public and the private sectors to meet the challenges ahead and the benefits when the two work together.** [...] The Conference highlighted the critical role of new plant varieties and high quality seed in providing a dynamic and sustainable agriculture that can meet those challenges. It concluded that governments need to develop and maintain an enabling environment to encourage plant breeding and the production and distribution of high quality seed.



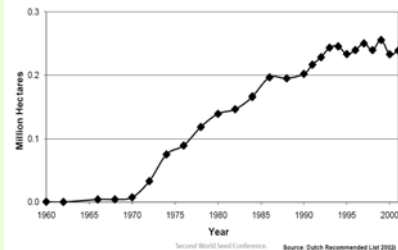
### Evolution of Wheat yield in France



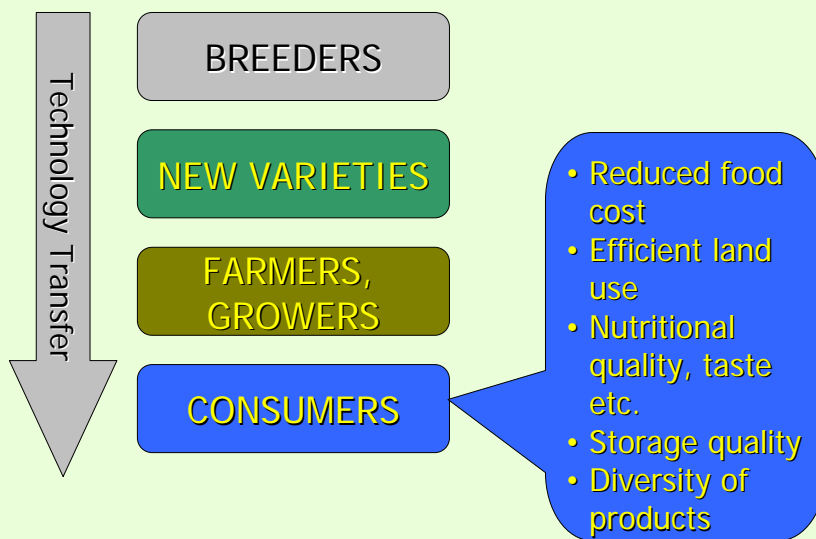
### Evolution of Maize Yield in USA

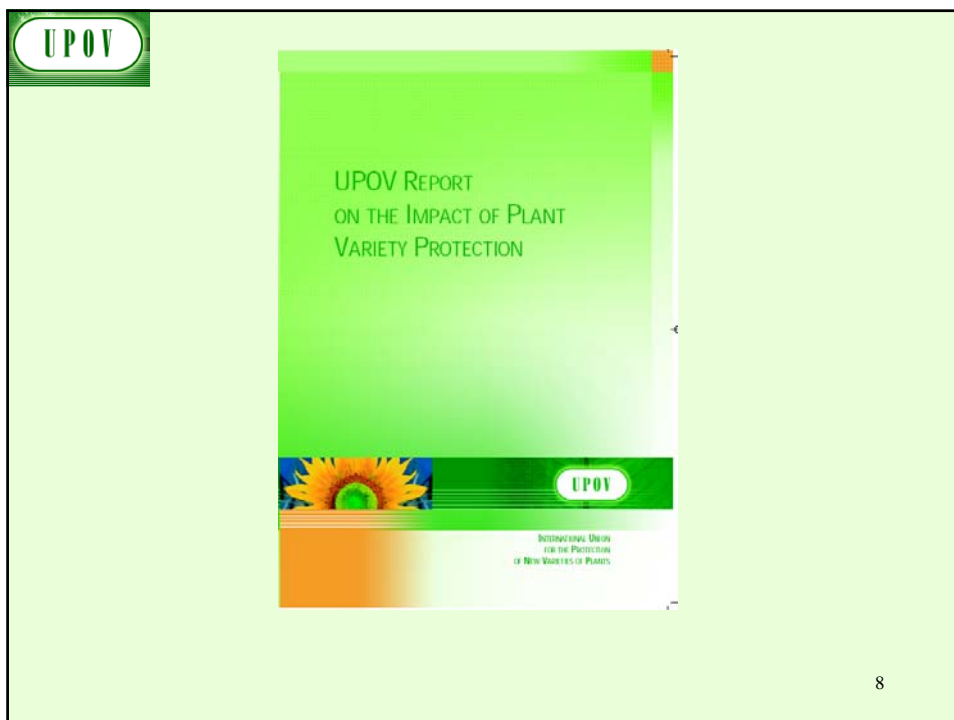
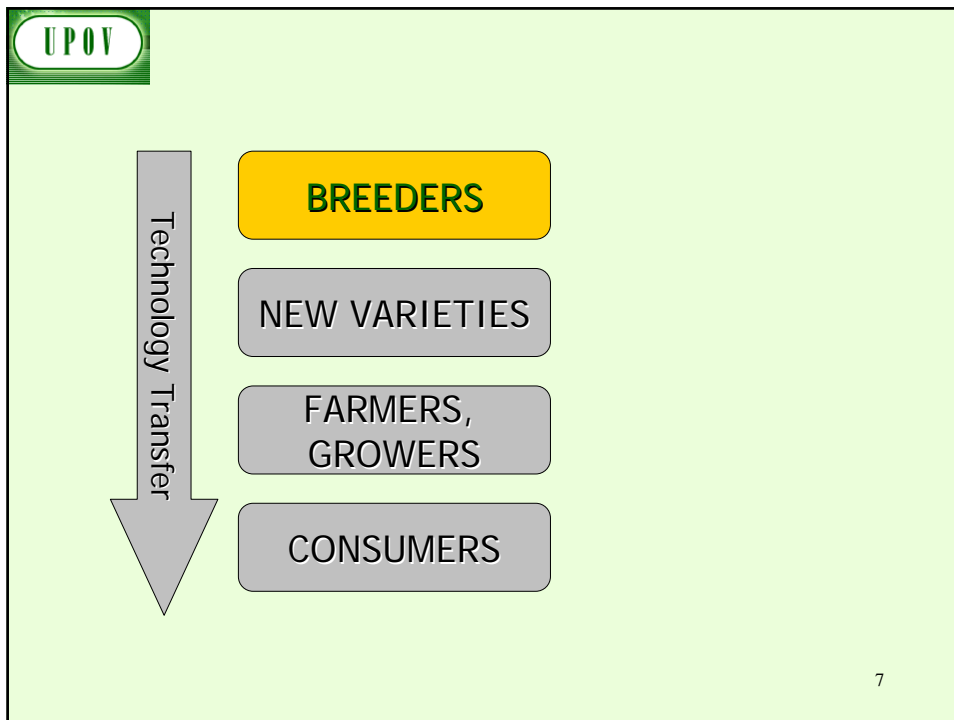


### Adaptation of Maize to Temperate Climate: the case of the Netherlands



Bernard Le Buanec, Second World Seed Conference (Rome, September 2009)





# FINDINGS



Introduction of UPOV system

Diverse types of breeders (private breeders, researchers)

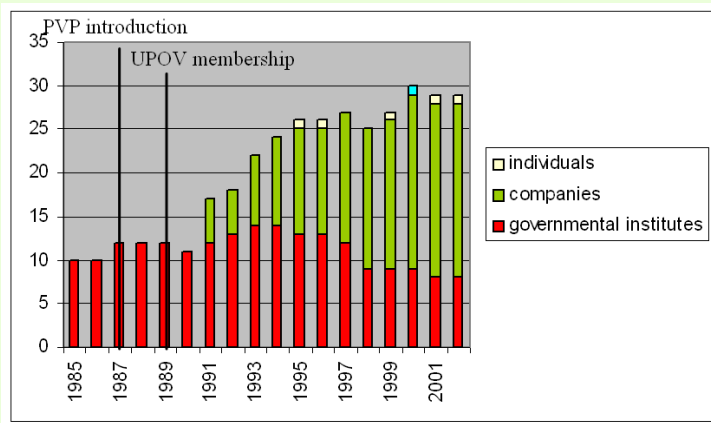


Increases breeding activities

# Poland



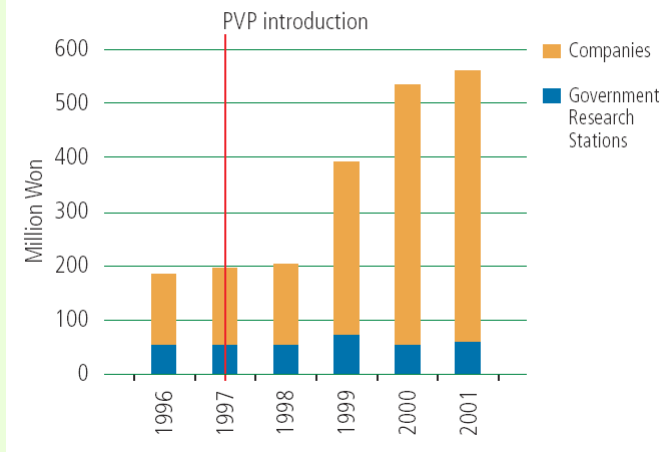
Figure 45: Number of Tomato breeding entities



## Republic of Korea



**Figure 55. Republic of Korea: Breeding Investment-Chinese Cabbage**

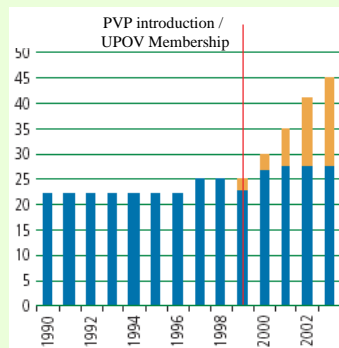


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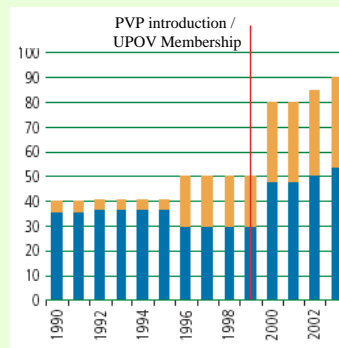
## China



**Figure 29. China: Number of Breeders in Henan Province (Maize)**



**Figure 30. China: Number of Breeders in Henan Province (Wheat)**



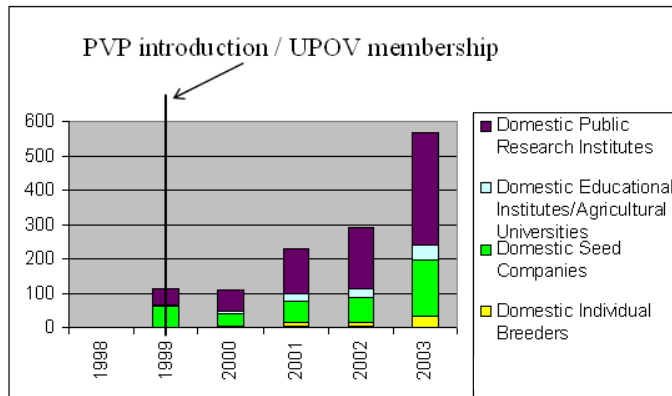
■ Number of other breeders  
■ Number of breeders at the Provincial Research Institute

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# China



Figure 33. China: Number of Applications by Categories of Applications (Agriculture)



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# Republic of Korea

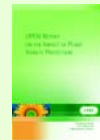


Figure 52. Republic of Korea: Number of Rose Breeders



Figure 53. Republic of Korea: Number of Rice Breeders



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# Kenya



Crop	Category	Source of Application			Total	
		Foreign	Local			
			Public	Private	Joint public & private	
Oat	Cereal	-	1	-	-	1
Finger millet	Cereal	-	-	-	2	2
Barley	Cereal	-	-	7	-	7
Proso millet	Cereal	-	-	-	1	1
Pearl millet	Cereal	-	3	-	-	3
Sorghum	Cereal	-	3	-	4	7
Wheat	Cereal	-	4	2	24	30
Maize	Cereal	-	27	14	14	55
Tea	Industrial	-	12	21	-	33
Pyrethrum	Industrial	-	23	-	-	23
Coffee	Industrial	-	4	-	-	4
Cotton	Industrial	-	1	1	-	2
Macadamia nut	Industrial	-	4	7	-	11
Sugarcane	Industrial	-	6	-	-	6
Safflower	Oil	-	1	-	-	1
Sunflower	Oil	-	5	5	-	10
Castor oil	Oil	-	2	-	-	2
Soybean	Oil	-	7	-	-	7
Bracharia	Pasture	-	1	-	-	1
Rhodes grass	Pasture	-	5	-	-	5
Guinea grass	Pasture	-	1	-	-	1
Setaria	Pasture	-	2	-	-	2
Clover	Pasture	-	-	1	-	1
Pigeon pea	Pulse	-	4	-	-	4
Dolichos bean	Pulse	-	2	-	-	2
Runner bean	Pulse	-	-	1	-	1
Dry beans	Pulse	-	6	1	6	13
Peas	Pulse	7	-	-	-	7
Cow pea	Pulse	-	3	1	-	4
Mung bean	Pulse	-	2	1	-	3
Cassava	Root crop	-	2	-	-	2
<b>Total</b>			<b>131</b>	<b>61</b>	<b>51</b>	<b>251</b>

# Kenya



Table 19: Distribution of PVP applications for agricultural crops (1997-2003)

Crop	Category	Source of Application		
		Public	Private	Joint public & private
Oat	Cereal	1	-	-
Finger millet	Cereal	-	-	2
Barley	Cereal	-	7	-
Proso millet	Cereal	-	-	1
Pearl millet	Cereal	3	-	-
Sorghum	Cereal	3	-	4
Wheat	Cereal	4	2	24
Maize	Cereal	27	14	14

[...]

Dry beans	Pulse	6	1	6
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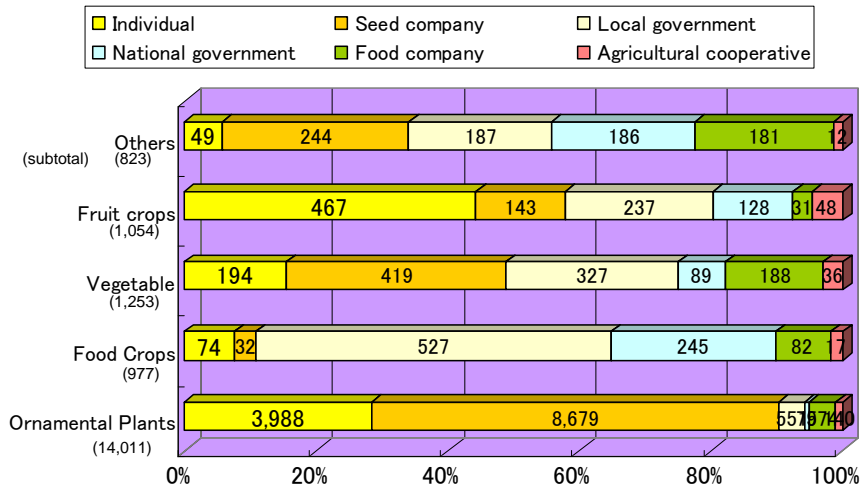
[...]

<b>Total</b>		<b>131</b>	<b>61</b>	<b>51</b>
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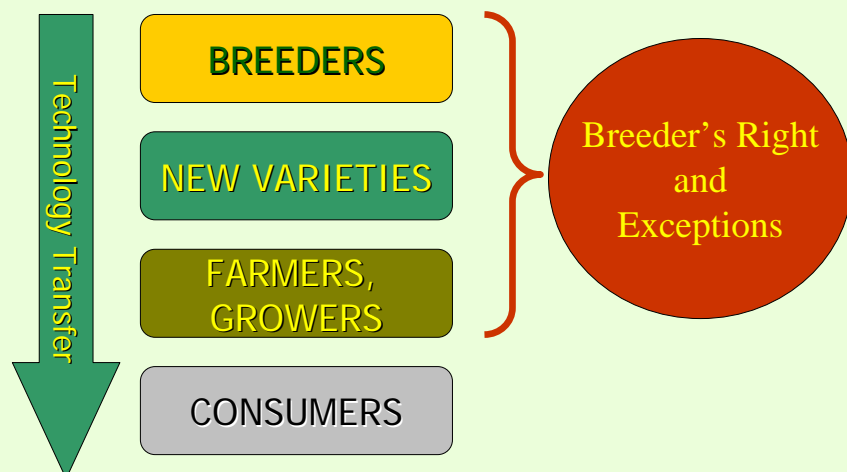


### Registration Number by Breeder (Japan)

(~March 31, 2009)



Yasunori Ebihara, International Symposium (Seoul, August 2009)



## Breeder's Right

[1991 Act of UPOV Convention]  
Article 14  
Scope of the Breeder's Right

(1) [*Acts in respect of the propagating material*]

**(a) Subject to Articles 15 and 16, the following acts in respect of the propagating material of the protected variety shall require the authorization of the breeder:**

- (i) production or reproduction (multiplication),
- (ii) conditioning for the purpose of propagation,
- (iii) offering for sale,
- (iv) selling or other marketing,
- (v) exporting,
- (vi) importing,
- (vii) stocking for any of the purposes mentioned in (i) to (vi), above.

**(b) The breeder may make his authorization subject to conditions and limitations.**

**BREEDERS decide their policy on authorization, including conditions/limitations**

## Exceptions to the Breeder's Right: 1991 Act

### Compulsory

Acts done:

- privately and for non-commercial purposes
- for experimental purposes
- breeding other varieties (breeder's exemption)

### Optional

Farm-saved seed

## Exceptions to the Breeder's Right: 1991 Act

### Compulsory

#### Acts done:

- **privately and for non-commercial purposes**
- for experimental purposes
- breeding other varieties (breeder's exemption")

### Optional

Farm-saved seed

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## UPOV Convention: 1991 Act

### Exceptions to the Breeder's Right:

#### • Compulsory

(i) Acts done privately **and** for non-commercial purposes

- propagation of a variety by a **farmer exclusively** for the production of a **food crop to be consumed entirely by that farmer and the dependents of the farmer** living on that holding  
**therefore**

"**subsistence farming**" where these constitute acts done privately and for non-commercial purposes, may be considered by a UPOV member to be excluded from the scope of the breeder's right

Acts **Possibly falling** within the scope of the exception



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## Exceptions to the Breeder's Right: 1991 Act

### Compulsory

Acts done:

- privately and for non-commercial purposes
- for experimental purposes
- breeding other varieties (breeder's exemption")

### Optional

#### **Farm-saved seed**

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## UPOV Convention: 1991 Act

**A Contracting Party may restrict breeder's rights in order to permit farmers to use:**

- for propagating purposes on their own holdings  
the product of the harvest
- obtained on their own holdings  
from the protected variety
- within reasonable limits  
subject to
- safeguarding legitimate interests of the breeder

[Article 15(2) and Recommendation of the Diplomatic Conference]

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## Exceptions to the Breeder's Right

### Compulsory

#### Acts done:

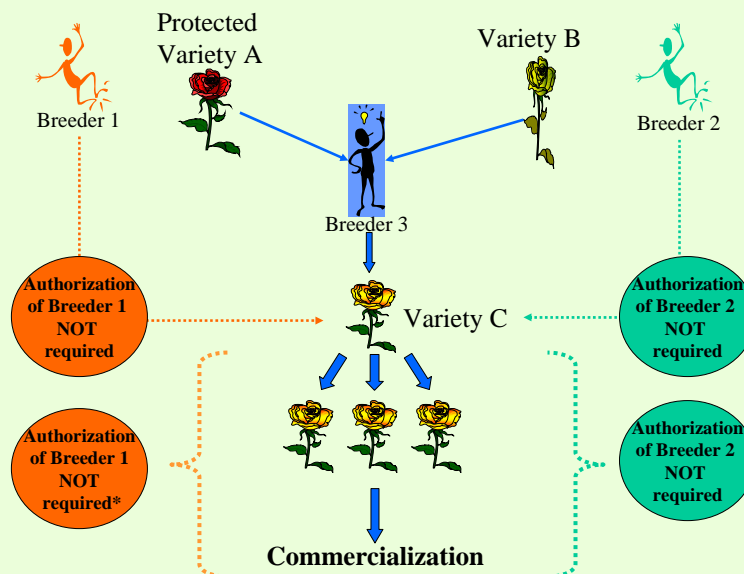
- privately and for non-commercial purposes
- for experimental purposes
- **breeding other varieties (breeder's exemption")**

### Optional

Farm-saved seed

25

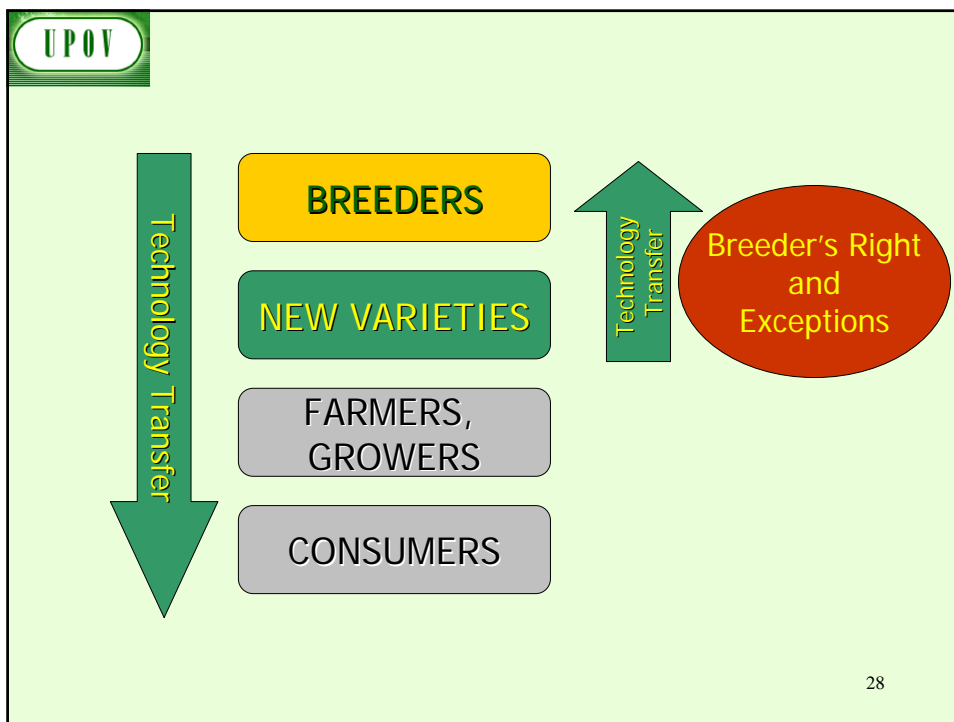
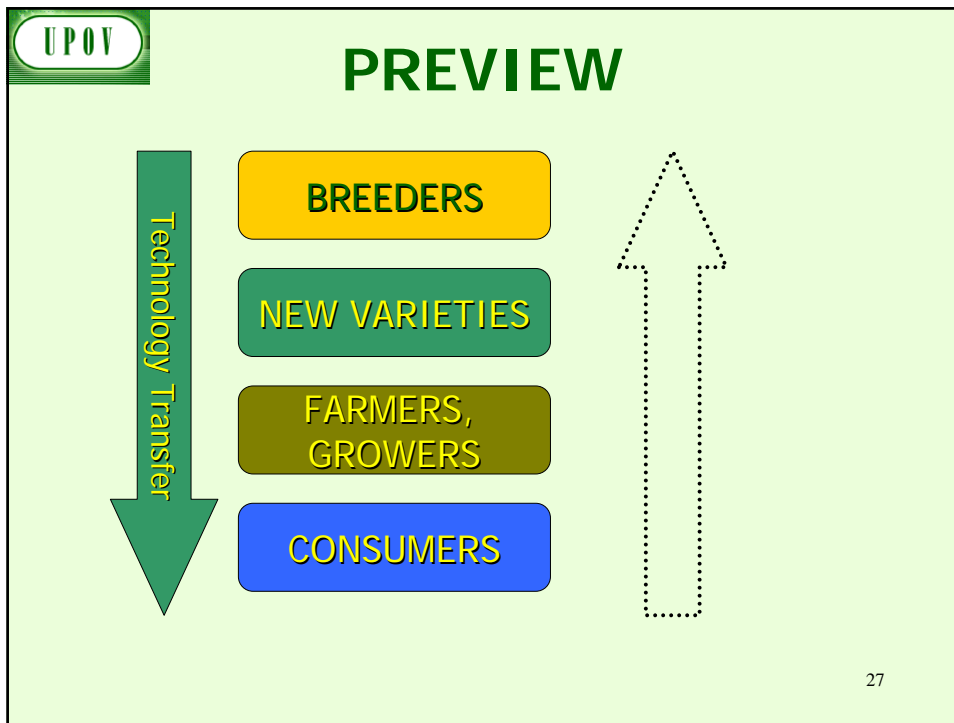
### THE BREEDER'S EXEMPTION: *Example*




\* Except for:

- varieties which are essentially derived from the protected variety, where the protected variety is not itself an essentially derived variety,
- varieties which are not clearly distinguishable in accordance with Article 7 from the protected variety and
- varieties whose production requires the repeated use of the protected variety.

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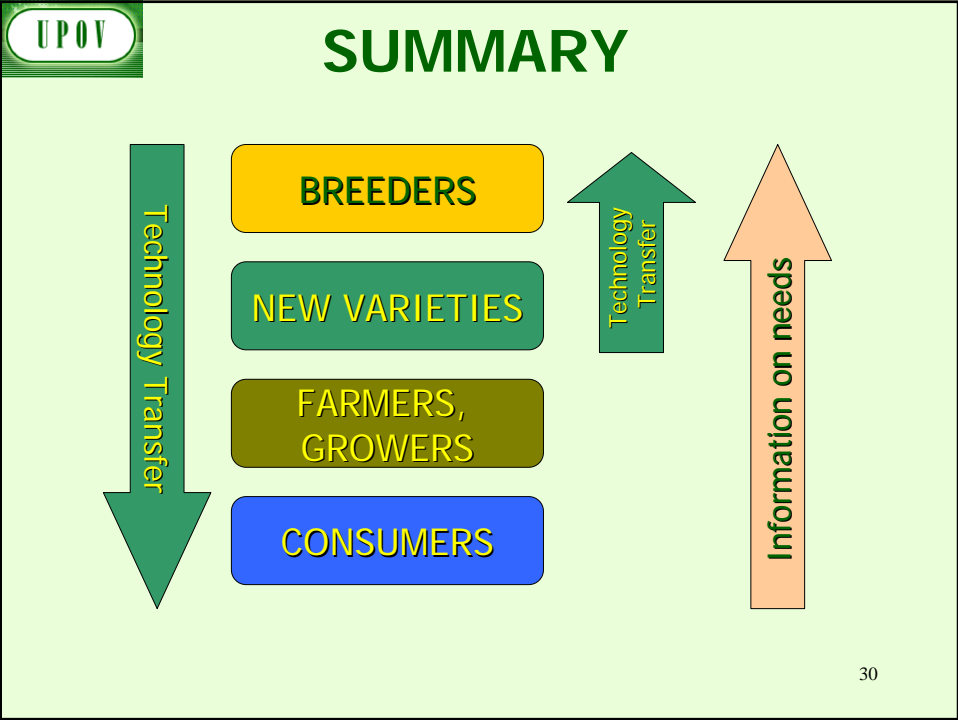


2<sup>nd</sup> World Seed Conference  
 DECLARATION FROM THE SECOND WORLD SEED CONFERENCE

## Responding to the challenges of a changing world: The role of new plant varieties and high quality seed in agriculture

held at the FAO Headquarters in Rome, September 8-10, 2009

[...] **The conference emphasized the important role of both the public and the private sectors to meet the challenges ahead and the benefits when the two work together.** [...] The Conference highlighted the critical role of new plant varieties and high quality seed in providing a dynamic and sustainable agriculture that can meet those challenges. It concluded that governments need to develop and maintain an enabling environment to encourage plant breeding and the production and distribution of high quality seed.



## UPOV MISSION STATEMENT

**“To provide and promote an effective system of plant variety protection, with the aim of encouraging the development of new varieties of plants, for the benefit of society”**

# THANK YOU