

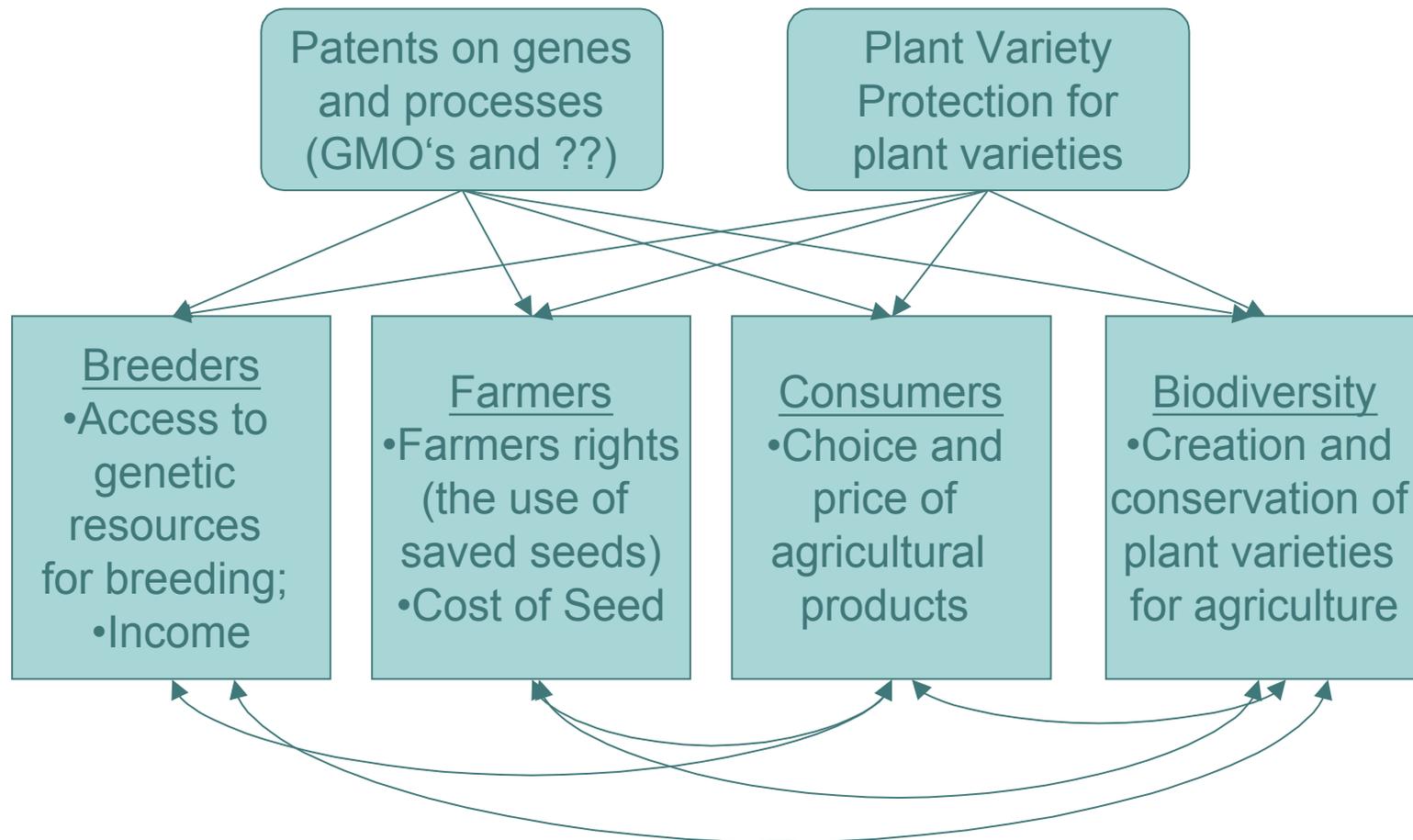


# Plant Patents and Plant Variety Protection

Food and Democracy,  
Lucerne 2009

François Meienberg,  
Berne Declaration

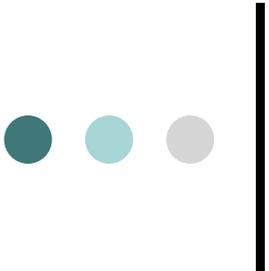
# Impact on farmers and breeders by Patents and PVP





# Plant Variety Protection

- UPOV (International Union for the Protection of New Varieties of Plants)
- UPOV 1961, 1972 (3 member states), 1978 (24 member states), 1991(31 member states).
- Obligation by the WTO TRIPS Agreement to protect seed varieties by PVP or Patents.



## UPOV 78 was a monopol for the sale of seeds

- UPOV 78, Article 5 : *The effect to the right granted to the breeder is that his prior authorisation shall be required for*
  - *The production for purposes of commercial marketing*
  - *The offering for sale*
  - *The marketing*



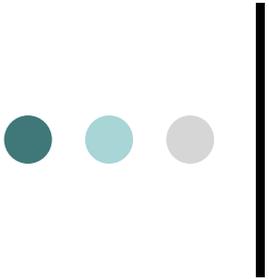
## UPOV 91 is much broader

- UPOV, Article 14: *The following acts ... shall require the the authorization of the breeder:*
  - *Production or reproduction (multiplication)*
  - *Conditioning for the purpose of propagation*
  - *Offering for sale; selling or other marketing*
  - *Exporting, importing, stocking for any of the mentioned purposes.*



# Breeders Exemption

- In all acts of UPOV there is a strong breeders exemption.
- UPOV 91, Article 15: *The breeders right shall not extend to acts done for the purpose of breeding other varieties.*
- Exemption: Essentially derived varieties (GMOs, selection, mutants)



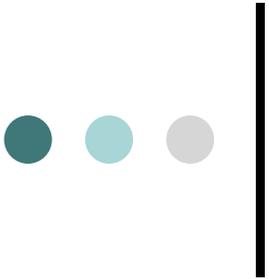
# Farmers Rights (farmers privilege)

- No problem under UPOV 78
- Only optional exception under UPOV 91:
- Article 15: *Each contracting Party may, **within the reasonable limits and subject to the safeguarding of the legitimate interest of the breeder**, restrict the breeder's right in relation to any variety in order to permit farmers to use for propagating purposes, on their own holdings **the product of the harvest** which they have obtained by planting, **on their own holdings** the protected variety.*



## How to read Article 15?

- Seed exchange farmer to farmer is forbidden.
- *Product of the harvest* is not the same as *propagating material*. Therefore the multiplication of fruits, berries and vegetables is forbidden.
- Where the re-use of seeds is allowed a payment is (sometimes) required.



## Implementation in Europe – EC Regulation 2100/94 / Art. 14

- Farmers rights only apply to listed agricultural plant species of: fodder plants, cereals, potatoes, oil and fibre plants.
- small farmers shall not be required to pay any remuneration to the holder.



- other farmers shall be required to pay an equitable remuneration to the holder, which shall be sensibly lower than the amount charged for the licensed production of propagating material of the same variety in the same area;
- the actual level of this equitable remuneration may be **subject to variation over time**, taking into account the **extent to which use will be made** of the derogation provided for in paragraph 1 in respect of the variety concerned



## Implementation on country level.

- The payment of the remuneration differentiates between european countries.
- No payment in Italy, Austria and Switzerland).
- Payment only for soft wheat in France – when selling the crop
- Payment for all listed species in Germany – on farm level



# Tasks on PVP in Europe

- Do not ratify UPOV 91
- Do not strengthen PVP on European or national level
- Use all flexibilities possible under the European regulation
- Do not allow private contracts override the farmers' rights still in place.
- ... do not pay (German example)
- Keep not protected varieties on the market

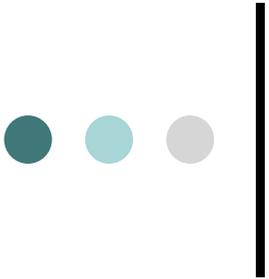


# Patent law related to seeds

- TRIPS, Article 27.3:

*Members may also exclude from patentability:*

*(b) plants and animals other than **micro-organisms**, and essentially biological processes for the production of plants or animals other **than non-biological and microbiological processes**. However, Members shall provide for the protection of plant varieties either by patents or by an effective sui generis system or by any combination thereof.*



# European Directive on the legal protection of biotechnological inventions - 98/44/EC

- Article 4

1. The following shall not be patentable:

- (a) plant and animal varieties;

- (b) essentially biological processes for the production of plants or animals.

2. Inventions which concern plants or animals shall be patentable if the technical feasibility of the invention is not confined to a particular plant or animal variety



# Broad coverage

- Article 8

The protection conferred by a patent on a biological material possessing specific characteristics (or on a process that enables a biological material to be produced possessing specific characteristics) as a result of the invention shall extend to any biological material derived from that biological material (or directly obtained through that process) through propagation or multiplication in an identical or divergent form and possessing those same characteristics.



# Patents on genes

- Article 9

The protection conferred by a patent on a product containing or consisting of genetic information shall extend to all material in which the product is incorporated and in which the genetic information is contained and performs its function.



# Farmers Rights

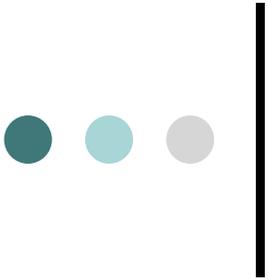
- Article 11
  1. By way of derogation from Articles 8 and 9, the sale or other form of commercialisation of plant propagating material to a farmer by the holder of the patent or with his consent for agricultural use implies authorisation for the farmer to use the product of his harvest for propagation or multiplication by him on his own farm, the extent and conditions of this derogation corresponding to those under Article 14 of Regulation (EC) No 2100/94.



- Farmers right for patented seeds = farmers right for protected seeds by plant variety protection

**but**

- There is only one pvp for one variety, but maybe several patents on this plant.
- Therefore a farmer could be confronted with higher remunerations für GMOs then for conventional seeds. (??)
- Possibility to exempt seeds which are unintentionally contaminated with GM traits from patent protection (Swiss law)



# Breeders Exemption

- There is no breeders exemption in patent law (best case: a research exemption).
- Article 12
  1. Where a breeder cannot acquire or exploit a plant variety right without infringing a prior patent, he may apply for a compulsory licence for non-exclusive use of the invention protected by the patent inasmuch as the licence is necessary for the exploitation of the plant variety to be protected, subject to payment of an appropriate royalty.

but

- Applicants for the licences must demonstrate that:
  - (a) they have applied unsuccessfully to the holder of the patent or of the plant variety right to obtain a contractual licence;
  - (b) the plant variety or the invention constitutes **significant technical progress of considerable economic interest compared with the invention claimed in the patent or the protected plant variety.**
- Easy for GMOs
  - very hard for conventional breeding



# Patents impede breeding

- The access to genetic resources for breeding was always free. With patents on genes and processes this time is over.
- This could have a severe impact on food security.



# Tasks on patents in Europe

- The flexibility under the patent directive is quite small (scope of the protection for genes).
- The directive has to be changed (Input from Germany?).



## Further work .....

- If we like to protect farmers rights, we have to work especially on plant variety protection (and seed laws).
- If we like to safeguard the access to genetic resources for breeders we have to work especially on patent law. (including the FAO Seed-Treaty)
- If we like to protect and promote agricultural diversity and the choice of consumers we have to work patent law, plant variety protection and seed laws.
- .....and not forget the threat of „biological protection“ (new hybrids, terminator, traitor).