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Organización  
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para la  
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y la  
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## Item 8 of the Draft Provisional Agenda

### COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE

Eighth Regular Session

Rome, 19 – 23 April 1999

**BACKGROUND DOCUMENTATION PROVIDED BY THE  
INTERNATIONAL UNION FOR THE PROTECTION OF NEW  
VARIETIES OF PLANTS (UPOV) TO THE FAO COMMISSION ON  
GENETIC RESOURCES FOR FOOD AND AGRICULTURE**

This report is fully the responsibility of UPOV.

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## REPORT FROM THE INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS (UPOV)

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### *Promote Use of Genetic Resources in the Form of Improved Varieties*

#### GENERAL

1. This report is an updated version of the report submitted to the FAO Commission on Genetic Resources for Food and Agriculture at its seventh regular session, in May 1997.

#### WHAT IS UPOV?

2. The International Union for the Protection of New Varieties of Plants (UPOV) is an intergovernmental organization with headquarters in Geneva (Switzerland). UPOV has been established by the International Convention for the Protection of New Varieties of Plants (the "UPOV Convention"), which was signed in Paris in 1961. The Convention entered into force in 1968. It was revised in Geneva in 1972, 1978 and 1991.

3. UPOV is working in close contact with the World Intellectual Property Organization (WIPO), an organization with which it has concluded a cooperation agreement under which UPOV receives logistic support from it. UPOV is thus associated with the family or organizations of the United Nations.

4. UPOV currently has 39 member States:

- (a) On the basis of the 1961/1972 Act: *Belgium, Spain* (2);
- (b) On the basis of the 1978 Act (the States marked with an asterisk have a law that conforms entirely or substantially with the 1991 Act; most of the others are in the process of revising their law): *Argentina, Australia\**, *Austria, Canada, China, Czech Republic, Chile, Colombia\**, *Ecuador\**, *Finland, France, Hungary, Ireland, Italy, Mexico, New Zealand, Norway, Paraguay, Poland\**, *Portugal, Slovakia\**, *South Africa\**, *Switzerland, Trinidad and Tobago, Ukraine, Uruguay* (26).
- (c) On the basis of the 1991 Act (entered into force on April 24, 1998): *Bulgaria, Denmark, Germany, Israel, Japan, Netherlands, Republic of Moldova, Russian Federation, Sweden, United Kingdom, United States of America* (11).

5. The following States – and the *European Community* – have initiated the procedure for becoming members by tabling before the Council of UPOV a request for advice on the conformity of their laws with the provisions of the Act which they wished to adhere to: *Belarus, Bolivia, Brazil, Costa Rica, Croatia, Estonia, Georgia, Kenya, Kyrgystan, Morocco, Nicaragua, Panama, Romania, Slovenia, Venezuela, Zimbabwe* (16). The States from the preceding list which wish to become a member of UPOV on the basis of the 1978 Act will have to deposit their instrument of accession before April 24, 1999.

6. There is considerable interest in plant variety protection and in membership in UPOV from a great number of States. Some 60 further States have laws or draft laws based upon the UPOV Convention. That interest is essentially generated by the increased awareness of the benefits that are to be drawn from a plant variety protection system – fostered in many developing countries by the current trend towards privatization of the plant variety and seed sector in an effort to make it more effective.

## WHAT IS THE PURPOSE OF THE UPOV CONVENTION?

7. The purpose of the UPOV Convention is to ensure that the member States of the Union acknowledge the achievements of breeders of new plant varieties, by making available to them an exclusive property right, on the basis of a set of uniform and clearly defined principles.
8. Protection is afforded to new varieties of plants not only to safeguard the interests of plant breeders, but also as an incentive to the development of agriculture, horticulture and forestry. Improved varieties are a necessary, and very cost-effective, element in the quantitative and qualitative improvement of the production of food, renewable energy and raw material.
9. The right granted to the breeder is not just a reward for his achievement and a tool for recovering his costs and accumulating the funds necessary for further investment in plant breeding; it also requires the breeder to maintain the variety and enables him to participate actively in the distribution of the variety, thus ensuring that past investments are not wasted but exploited in the most efficient manner.
10. The breeder's right is of advantage to both private and public breeding.

## PLANT VARIETY PROTECTION AND GENETIC RESOURCES

### Creation and Conservation of Genetic Resources

11. Plant variety protection is an efficient tool for the production of genetic diversity for use in agriculture, horticulture and forestry and for its conservation, both as commercial varieties (breeders are required to maintain their varieties throughout the period of protection) and as raw material for further breeding work (breeders maintain and evaluate extensive germplasm collections). It is in the nature of plant breeding that genetic progress cannot be achieved on request; the more breeders are at work, the better are the chances of success.
12. The agricultural systems seeking optimal use of the available resources are characterized by a territorial expansion of improved varieties into farmers' fields and territorial concentration of obsolete but still valuable germplasm into collections (and also by uniformity in single fields and diversity between fields). They are also characterized by a rapid turnover in varieties, reflecting continuous improvement and adaptation to farmers' and society's needs and desires. Competition between breeders, and the fact that the public sector can better focus its activities, ensures that work is carried out on many species and not just the staple crops.

### The Breeder's Exemption

13. It is also in the nature of plant breeding that the most efficient strategy for creating a new variety, adapted to a given agro-ecological environment, is to cross two superior plants, typically from two recent varieties adapted to the same environment, and to select from the progeny one or more varieties that enable agriculture at large to take another step up in performance (in terms of yield, quality, adaptation, resistance to pests, diseases, abiotic stresses, etc.).
14. This does not mean that breeders operating in a socio-economic environment that offers them protection for their achievements do not use wild or unimproved material, or do not make "wide crosses" between material of different origin. These strategies usually require considerable efforts to restore the balanced genetic structure that is characteristic of well-performing varieties.
15. The plant variety protection system reflects the nature of plant breeding in that it provides that a protected variety must be freely available as an initial source of variation – as a genetic resource – for the creation (and subsequent exploitation) of new varieties. This principle is usually referred to as "breeder's exemption" and is a cornerstone of the UPOV system.

16. The “breeder’s exemption” represents a trade-off: in return for free access to the starting material, the breeder of a new variety accepts that his variety, together with all improvements built into it, becomes freely available as starting material for others.

17. The “breeder’s exemption” is qualified in the case of inbred lines used for the production of hybrids and in the case of “essentially derived varieties” (typical examples are a genetically modified variety or a mutant variety that differ from the “initial variety” by a single gene). Whereas the creation of a hybrid or of an essentially derived variety is free under the “breeder’s exemption,” its exploitation will be subject to authorization from the breeder of the protected inbred line or initial variety. The purpose of the qualification is to properly balance the interests of the various breeders involved so that the protection system provides proper incentives for all kinds of breeding work.

#### The Benefits from Plant Variety Protection – The “Farmer’s Privilege”

18. Through the protection of his variety the breeder acquires an exclusive right over specified acts of exploitation of the variety. This right rarely implies that the breeder enjoys a monopoly for it is in the nature of agricultural production that varieties must be used by many farmers and that a sophisticated chain of operators is needed to provide quality seed to farmers. In such cases, the breeder will be happy to license seed production to the largest possible extent and to collect a royalty on the seed, the level of which will be dictated to a great degree by market forces.

19. It is for instance the experience of Argentina that the introduction of plant variety protection did not cause an increase in seed prices: the royalty was offset by savings from a more efficient seed production and marketing system. The effect of protection is thus that the benefits of plant breeding – of the use of genetic resources – are made available to users in an efficient manner.

20. One of the market forces is the fact that farmers are technically and economically able, for a whole range of varieties, to produce their own seed. The UPOV Convention enables member States to provide for a “farmer’s privilege” (but neither the 1978 nor the 1991 Act obliges them to do so) The privilege is implicit under the 1978 Act (i.e. it comes into existence when a State defines the national scope of protection in accordance with the minimum scope set out in that Act) and explicit under the 1991 (i.e. it must be specifically defined in national legislation, and must be so “within reasonable limits and subject to the safeguarding of the legitimate interests of the breeder”). In view of the diversity of the relevant circumstances, the “farmer’s privilege” is a matter that should be dealt with at national level and cannot be the subject of a fixed international norm

21. The breeder’s right does not apply – in accordance with a well-established principle of intellectual property – to “acts done privately and for non-commercial purposes.” This exception applies to seed and planting material used by a subsistence farmer or by an amateur gardener.

#### UPOV AND THE REVISION OF THE INTERNATIONAL UNDERTAKING

22. A written statement has been made available at earlier meetings of the Commission. Its most salient points are as follows:

- (a) UPOV recognized and continues to recognize the importance of adequate support, both financial and otherwise, for the *in situ* and *ex situ* conservation of plant genetic resources useful for food, agriculture and horticulture, and welcomed the approach of the Agreed Interpretation in eliminating the possibility of interpreting the Undertaking so as to create conflicts between the interests of plant breeders and others.
- (b) UPOV welcomes the current activity of the Commission in seeking to revise the International Undertaking. The UPOV Convention establishes a system for the granting of

specific rights to specific persons in respect of the commercial exploitation of specific plant varieties; those plant varieties are thus private property when considered as a production factor, and part of the public domain when taken as a genetic resource. The Convention is silent on the subject of plant genetic resources which are entirely in the public domain and constitute the subject matter of the International Undertaking.

- (c) The member States of UPOV are conscious of the great contribution to increasing both the quantity and quality of world food supplies that has resulted from the free availability of germplasm for plant improvement. They are conscious that plant breeding is one of the principle means of increasing production in a sustainable manner. They would view with disquiet restrictions upon the free availability for breeding purposes of germplasm of species used for food, agriculture and horticulture.
- (d) Projected increases in world population call for future increases in world food supplies which should substantially exceed increases achieved in the past. The ability of the world's farmers to match the production increases of the past in a sustainable way may be prejudiced if the existing principle of free availability of plant germplasm for breeding purposes, enshrined in both the FAO International Undertaking and the UPOV Convention, is called into question.