



C(Extr.)/31/3 ORIGINAL: English DATE: April 11, 2014

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

Geneva

COUNCIL

Thirty-First Extraordinary Session Geneva, April 11, 2014

REPORT BY THE PRESIDENT ON THE WORK OF THE EIGHTY-SEVENTH SESSION OF THE CONSULTATIVE COMMITTEE; ADOPTION OF RECOMMENDATIONS, IF ANY, PREPARED BY THAT COMMITTEE

Document prepared by the Office of the Union

Disclaimer: this document does not represent UPOV policies or guidance

1. The Consultative Committee held its eighty-seventh session in Geneva on April 11, 2014.

2. The recommendations made by the Consultative Committee on the following items, as set out in this report, will be considered by the Council under the relevant agenda items (see document C(Extr.)/31/1 Rev.):

- (a) Examination of the conformity of the Draft ARIPO Protocol for the Protection of New Varieties of Plants with the 1991 Act of the UPOV Convention (documents C(Extr.)/31/2)
- (b) Calendar of meetings in 2014 (document C/47/8 Rev.2)
- (c) Press Release (document C(Extr.)/31/4)

3. The Consultative Committee recommended to the Council the adoption of the answers to the frequently asked questions, as set out in the Annex to this document.

4. The Consultative Committee recommended to the Council to create a special UPOV account to finance extra-budgetary projects agreed by the Council (Project Account) and to transfer the amount of the reserve fund exceeding 15 percent of the total income for the 2012-2013 Biennium to that account.

5. The work of the Consultative Committee at its eighty-seventh session is summarized in the following paragraphs.

6. The Council is invited to:

(a) consider the recommendations of the Consultative Committee contained in paragraphs 3 and 4 above; and

(b) note the work of the Consultative Committee at its eighty-seventh session, as reported in this document.

Opening of the session

7. The Consultative Committee noted that an electronic mail of April 10, 2014, had been received from the Association for Plant Breeding for the Benefit of Society (APBREBES), addressed to the Office of the Union, with a request to participate in the Consultative Committee in order to present the views of APBREBES on the Draft ARIPO Protocol for the Protection of New Varieties of Plants.

8. The Consultative Committee recalled that document UPOV/INF/19/1 "Rules governing the granting of observer status to States, intergovernmental organizations and international non-governmental organizations in UPOV bodies" provides as follows: "Observer States and certain intergovernmental organizations may be invited by the Office of the Union to participate within an item of the agenda concerning the preliminary examination of their legislation in order to respond to any questions raised by the Consultative Committee, but would not be present during the discussions of the legislation." It noted that a reply in accordance with document UPOV/INF/19/1 would be provided to APBREBES.

9. The Consultative Committee further noted that an electronic mail of April 11, 2014, had been received from APBREBES, addressed to the Office of the Union, requesting that an open letter to UPOV members by the Alliance for Food Sovereignty in Africa (AFSA) be shared with members of the Union. The Consultative Committee noted that copies had been made available.

Adoption of the agenda

10. The Consultative Committee adopted the revised draft agenda.

<u>Preliminary examination of the conformity of the Draft ARIPO Protocol for the Protection of New Varieties of</u> Plants with the 1991 Act of the UPOV Convention

- 11. The Consultative Committee considered document C(Extr.)/31/2.
- 12. The Consultative Committee noted the following intervention of the representative of ARIPO:

"The African Regional Intellectual Property Organization was established by the Agreement on the Creation of an African Regional Intellectual Property Organization (ARIPO) in Lusaka (Zambia) on December 9, 1976 with a view to pooling of resources together for the promotion and development of intellectual property in the Member States in particular, and Africa as a whole. The Lusaka Agreement provides the basis for the establishment of individual protocols to address specific intellectual property domains at the instance of the Member States, taking into account their level of developments and interests. These protocols, on entry into force, bind the Contracting States in respect of their territories.

"The policy developments and orientation of the Organization are given by the supreme organ of the Organization, the Council of Ministers composed of ministers responsible for intellectual property in the Member States. Recently, the ministers extended the mandate of the Organization to include copyright, traditional knowledge, expressions of folklore, genetic resources and the benefits to be derived from them, as well as protection of new varieties of plants.

"It is therefore within this context that, at the Twelfth Session of the Council of Ministers, the ministers requested the Secretariat to develop a Regional Plant Variety Protection System to provide farmers with improved varieties of plants to enhance sustainable agricultural production. The Draft ARIPO Protocol has been driven by the Member States through consultations, reviews and determination of the way forward in a transparent and inclusive manner.

"Regarding the question of territoriality of ARIPO in relation to the UPOV Convention, on the request made by ARIPO to the UPOV Secretariat, a response was provided by the UPOV Consultative Committee regarding the notion of territory, as provided in document C(Extr.)/31/2. On the basis of this response, the Council of Ministers of ARIPO adopted the Option of all Contracting States to be bound by the Protocol.

"Permit me to add that ARIPO is in the process of amending the Harare Protocol relating to Patents and Industrial Designs in order to become party to the Hague Agreement on Industrial Designs to provide a uniform territory for the Contracting States.

"There is a standard provision in all ARIPO Protocols that any State which ratifies or accedes to the ARIPO Protocols shall, by the instrument of ratification or accession, be deemed to have indicated its acceptance to be bound by the provisions of the Lusaka Agreement. The intention is to provide the required flexibility to undertake the commitment to be bound by the substantive matters of the specific Protocol at the

C(Extr.)/31/3 page 3

appropriate time for the State concerned. Therefore each ARIPO Protocol has different Contracting States.

"The Draft Protocol before the Consultative Committee is the result of constructive engagement and consensus building efforts of the Member States of the Organization. ARIPO Council of Ministers, which meets every two years, approved in November 2013 the text of the Draft Protocol on the Protection on New Varieties of Plants for its adoption at the Diplomatic Conference to be held in 2014. Therefore, the consideration by UPOV members of the Draft Protocol at this time is crucial for ARIPO."

13. The Consultative Committee recommended to the Council to:

(a) note the analysis in this document;

(b) note that the letters "(c)" and "(d)" of Articles 11, 12(1) and (3), 19(6), in Annex II of document C(Extr.)/31/2, should read "(a)" and "(b)" and that the word "not" should be deleted from Article 27(5) in accordance with the original text of the Draft Protocol;

(c) take a positive decision on the conformity of the Draft ARIPO Protocol for the Protection of New Varieties of Plants with the provisions of the 1991 Act of the International Convention for the Protection of New Varieties of Plants, which allows:

(i) the Contracting States to the Protocol that are not members of the Union bound by the 1991 Act, and

(ii) ARIPO, in relation to the territories of the Contracting States bound by the Protocol,

once the Draft Protocol is adopted with no changes and the Protocol is in force, to deposit their instruments of accession to the 1991 Act; and

(d) authorize the Secretary-General to inform ARIPO of that decision.

Reports of the WIPO Independent Advisory Oversight Committee

14. The Consultative Committee noted that, on the basis of the risk assessment of UPOV, there had been no internal audit of UPOV in 2013 and the annual work plan of the Audit and Oversight Division (IAOD) for 2014 did not include an internal audit of UPOV. It also noted the information contained in the Independent Advisory Oversight Committee (IAOC) quarterly reports for 2013 (documents WO/IAOC/28/2, WO/IAOC/29/2, WO/IAOC/30/2 and WO/IAOC/31/2), and in the IAOC Annual Report 2012-2013 (document WO/GA/43/5).

15. The Consultative Committee agreed to change the title of the standard item to "Internal Audit and Reports of the WIPO Independent Advisory Oversight Committee".

Access to UPOV documents and publication of information

UPOV documents

16. The Consultative Committee noted the plans for the scanning and posting on the UPOV website of important documents that had not been published on the UPOV website.

17. The Consultative Committee agreed to the procedure for the checking of translations before posting on the UPOV website.

Publication of the list of observers in UPOV bodies

18. The Consultative Committee noted that, to date, the resources of the Office of the Union had not allowed the posting on the UPOV website of the date of granting of observer status in the list of observers in UPOV bodies.

Database of consultants

19. The Consultative Committee noted the information on consultants used by UPOV in 2013.

Communication strategy

20. The Consultative Committee noted the communication strategy approved at its eighty-sixth session, and agreed to include an item on the agenda of its eighty-eighth session for a report on the implementation of the Workplan contained in the communication strategy.

21. The Consultative Committee recalled that, at its eighty-sixth session, held in Geneva on October 23 and 24, 2013, it had agreed the answers to the following frequently asked questions:

- What is UPOV?
- What does UPOV do?
- What is a plant variety?
- What are the requirements for protecting a new plant variety?
- Can breeders use a protected variety in their breeding programs?
- Who can protect a plant variety?
- Where do I apply for protection of a variety?
- Can I obtain protection for more than one country from a single application?
- What are the benefits of plant variety protection and UPOV membership?
- What is the effect of plant variety protection on varieties that are not protected (e.g. traditional varieties, landraces etc.)?
- What is the relationship between plant breeders' rights and measures regulating commerce, e.g. seed certification, official registers of varieties admitted to trade (e.g. National List, Official Catalogue) etc.?
- Does the UPOV Convention allow a variety to be refused protection because it is genetically modified?
- Can I use plant variety protection to protect the following: a trait (e.g. disease resistance, flower color), a chemical or other substance (e.g. oil, DNA), a plant breeding technology (e.g. tissue culture)?
- Can I protect a hybrid variety under the UPOV system?
- How do I know if a variety is protected?
- Who is responsible for enforcing plant breeders' rights?
- Is it true that UPOV only promotes commercially bred plant varieties geared to industrialized farmers?

22. The Consultative Committee noted that the Technical Committee (TC), at its fiftieth session, had recalled that, at its forty-ninth session, it had agreed that there was a need to provide suitable information on the situation in UPOV with regard to the use of molecular techniques to a wider audience, including breeders and the public in general. That information should explain the potential advantages and disadvantages of the techniques, and the relationship between genotype and phenotype, which lay behind the situation in UPOV (see document TC/49/41 "Report on the Conclusions"). In that regard, the TC agreed that the following explanation provided suitable information on the situation in UPOV with regard to the use of molecular techniques for breeders and persons with knowledge of DUS testing:

Question: Does UPOV allow molecular techniques (DNA profiles) in the DUS examination?

Answer: "It is important to note that, in some cases, varieties may have a different DNA profile but be phenotypically identical, whilst, in other cases, varieties which have a large phenotypic difference may have the same DNA profile for a particular set of molecular markers (e.g. some mutations). "In relation to the use of molecular markers that are not related to phenotypic differences, the concern is that it might be possible to use a limitless number of markers to find differences between varieties at the genetic level that are not reflected in phenotypic characteristics.

"On the above basis, UPOV has agreed the following uses of molecular markers in relation to DUS examination:

"(a) Molecular markers can be used as a method of examining DUS characteristics that satisfy the criteria for characteristics set out in the General Introduction if there is a reliable link between the marker and the characteristic.

"(b) A combination of phenotypic differences and molecular distances can be used to improve the selection of varieties to be compared in the growing trial if the molecular distances are sufficiently related to phenotypic differences and the method does not create an increased risk of not selecting a variety in the variety collection which should be compared to candidate varieties in the DUS growing trial.

"The situation in UPOV is explained in documents TGP/15 'Guidance on the Use of Biochemical and Molecular Markers in the Examination of Distinctness, Uniformity and Stability (DUS)' and UPOV/INF/18 'Possible use of Molecular Markers in the Examination of Distinctness, Uniformity and Stability (DUS)".

With regard to a wider audience, the TC had agreed that the question was not framed in an appropriate way and, therefore, it would not be appropriate to seek to develop an answer to that question. The TC had agreed that the question should be rephrased after clarification of the issues of interest to a wider audience.

23. The Consultative Committee agreed the answer to the question above proposed by the TC. It further agreed the answers to the following questions, as set out in the Annex to this document:

- Who can attend UPOV meetings?
- Why do farmers and growers need new plant varieties?
- Why is plant variety protection necessary?
- How does plant variety protection work?
- Why does UPOV require varieties to be uniform and stable; doesn't that lead to a loss of diversity?
- What is the relationship between the UPOV Convention and international treaties concerning genetic resources, e.g. the Convention on Biological Diversity (CBD) and the International Treaty on Plant Genetic Resources for Food and Agriculture
- What is the relationship between patents and plant breeders' rights
- Can I protect an existing plant or variety that I discover?
- Can a farmer replant seed of a protected variety without the authorization of the breeder"
- Can a farmer sell seed of a protected variety without the authorization of the breeder?
- Does UPOV allow biochemical or molecular data in the DUS examination?

24. The Consultative Committee recommended to the Council the adoption of the answers to the frequently asked questions, as set out in the Annex to this document.

25. The Consultative Committee requested the Office of the Union of the Union to prepare draft questions and answers with regard to the following matters, on the basis of contributions from the members of the Union:

- the UPOV Convention does not regulate varieties that are not protected by plant breeders' rights
- the possibility for subsistence farmers to exchange negligible or unimportant quantities of harvested food produce against other vital goods within the local community
- under the UPOV system, breeders decide the conditions and limitations under which they authorize the exploitation of their protected varieties. They may, for instance, allow farmers to exchange seeds freely within the local community.

• information on the situation in UPOV with regard to the use of molecular techniques for a wider audience, including the public in general

Matters raised by the International Seed Federation (ISF)

16. The Consultative Committee noted the developments concerning information materials and databases of variety descriptions.

26. The Consultative Committee agreed to invite the International Seed Federation (ISF), the International Community of Breeders of Asexually Reproduced Ornamental and Fruit Plants (CIOPORA) and CropLife International to elaborate the problems faced with the current situation and possible solutions offered by an international filing system, a UPOV quality assurance program and a central examination system for variety denominations, for consideration by the Consultative Committee at its eighty-eighth session in October 2014.

27. The Consultative Committee agreed to invite ISF, CIOPORA and CropLife International to be present, at the relevant part of the eighty-eighth session, in order to provide further information in response to guestions from the Consultative Committee.

28. The Consultative Committee requested the Office of the Union to provide relevant information on the international filing systems of the World Intellectual Property Organization (WIPO) at its eighty-eighth session.

UPOV distance learning courses

29. The Consultative Committee agreed to the separation of the DL-305 course into two separate courses, DL-305-1 "Administration of Plant Breeders' Rights" and DL-305-2 "DUS Examination", and approved the program for distance learning courses in 2014 to 2015, as follows:

March 31 to May 11, 2014	DL-305 single course (English only)
May 5 to June 8, 2014	DL-205 (E, F, G, S)
October 6 to November 9, 2014	DL-205 (E, F, G, S)
February/March 2015	DL-305-1 (E, F, S)
April/May 2015	DL-305-2 (E, F, S)
October/November 2015	DL-205 (E, F, G, S)

Developments of relevance to UPOV in other international fora

Developments under the auspices of the Food and Agriculture Organization of the United Nations (FAO)

International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)

30. The Consultative Committee recommended to the Council to express its appreciation to the Governing Body of the ITPGRFA (GB) for the thanks the GB had offered for the practical support provided by UPOV to the ITPGRFA and to confirm its commitment to mutual supportiveness.

31. The Consultative Committee requested the Office of the Union to identify with the Secretary of the ITPGRFA and the Secretariat of WIPO possible areas of interrelations among the international instruments of the ITPGRFA, WIPO and UPOV with a view to a possible joint publication on interrelated issues regarding innovation and plant genetic resources, and other possible initiatives, and to present proposals for consideration by the Consultative Committee at its eighty-eighth session.

World Intellectual Property Organization (WIPO)

WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC)

32. The Consultative Committee noted the developments in relation to the WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC).

World Trade Organization (WTO)

Council for TRIPS (Trade-Related Aspects of Intellectual Property Rights)

33. The Consultative Committee noted the developments in relation to WTO.

Financing of long-term employee benefits

34. The Consultative Committee noted that the UN System CEB High-Level Committee on Management had identified a common approach to After-Service Health Insurance (ASHI) within its Priority Issues for the period 2013-2016, which referred to both the management of funds and the financing of liabilities. It was noted that the CEB Finance and Budget Network had established a working group to analyze and report on the possible approaches to funding and managing ASHI liabilities. The working group was expected to present its conclusions in October 2014.

35. The Consultative Committee agreed to the postponement of the discussion on financing of long-term employee benefits until the conclusions of the working group of the UN CEB Finance and Budget Network became available. It agreed to consider the establishment of a UPOV working group at that time.

36. The Consultative Committee recalled that any decision with regard to funds exceeding 15 percent of the total income in future biennia would be considered at the appropriate time in accordance with the Financial Regulations and Rules of UPOV (document UPOV/INF/4/3).

Financial situation in relation to the 2012-2013 Biennium

37. The Consultative Committee recommended to the Council to create a special UPOV account to finance extra-budgetary projects agreed by the Council (Project Account) and to transfer the amount of the reserve fund exceeding 15 percent of the total income for the 2012-2013 Biennium to that account.

38. The Consultative Committee requested the Office of the Union to prepare a document for consideration at its eighty-eighth session, setting out possible projects, and requested members of the Union to provide proposals to the Office of the Union.

Draft press release

39. Subject to developments in the Council, the Consultative Committee recommended to the Council to approve the draft press release contained in document C(Extr.)/31/4.

Preparation of the calendar of meetings

40. The Consultative Committee considered document C/47/8 Rev.2

41. The Consultative Committee recommended to the Council the following change to the calendar of meetings in 2014:

CAJ/70 October 13 and 14 (Administrative and Legal Committee Advisory Group: October <u>14 and</u> 17)

C(Extr.)/31/3

ANNEX

ANSWERS TO FREQUENTLY ASKED QUESTIONS

TABLE OF CONTENTS

•	What is UPOV?	2
•	What does UPOV do?	2
•	Who can attend UPOV meetings?	2
•	What is a plant variety?	2
•	Why do farmers and growers need new plant varieties?	2
•	Why is plant variety protection necessary?	3
•	How does plant variety protection work?	3
•	What are the requirements for protecting a new plant variety?	3
•	Why does UPOV require varieties to be uniform and stable; doesn't that lead to a loss of diversity?	3
•	Can breeders use a protected variety in their breeding programs	4
•	Who can protect a plant variety?	4
•	Where do I apply for protection of a variety?	5
•	Can I obtain protection for more than one country from a single application?	5
•	What are the benefits of plant variety protection and UPOV membership?	5
•	What is the effect of plant variety protection on varieties that are not protected (e.g. traditional varieties, landraces etc.)?	5
•	What is the relationship between the UPOV Convention and international treaties concerning genetic resources, e.g. the Convention on Biological Diversity (CBD) and the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)	5
•	What is the relationship between patents and plant breeders' rights	5
•	What is the relationship between plant breeders' rights and measures regulating commerce, e.g. seed certification, official registers of varieties admitted to trade (e.g. National List, Official Catalogue) etc.?	6
•	Can I protect an existing plant or variety that I discover?	6
•	Does the UPOV Convention allow a variety to be refused protection because it is genetically modified?	6
•	Can I use plant variety protection to protect the following: - a trait (e.g. disease resistance, flower color) - a chemical or other substance (e.g. oil, DNA) - a plant breeding technology (e.g. tissue culture)?	7
•	Can I protect a hybrid variety under the UPOV system?	7
•	Can a farmer replant seed of a protected variety without the authorization of the breeder?	7
•	Can a farmer sell seed of a protected variety without the authorization of the breeder?	8
•	How do I know if a variety is protected?	8
•	Who is responsible for enforcing plant breeders' rights?	8
•	Does UPOV allow molecular techniques (DNA profiles) in the examination of Distinctness, Uniformity and Stability ("DUS")?	8
•	Is it true that UPOV only promotes commercially bred plant varieties geared to industrialized farmers?	9

• What is UPOV?

The International Union for the Protection of New Varieties of Plants (UPOV) is an intergovernmental organization based in Geneva, Switzerland. UPOV was established in 1961 by the International Convention for the Protection of New Varieties of Plants (the "UPOV Convention").

The mission of UPOV is 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.

The UPOV Convention provides the basis for members to encourage plant breeding by granting breeders of new plant varieties an intellectual property right: the breeder's right.

• What does UPOV do?

UPOV's mission is 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. The main objectives of UPOV are, in accordance with the UPOV Convention, to:

- provide and develop the legal, administrative and technical basis for international cooperation in plant variety protection;
- assist States and organizations in the development of legislation and the implementation of an effective plant variety protection system; and
- enhance public awareness and understanding of the UPOV system of plant variety protection.

• Who can attend UPOV meetings?

In addition to UPOV members, observer States, intergovernmental organizations and international non-governmental organizations may attend the sessions of the Council and, if applicable, of the Administrative and Legal Committee (CAJ), Technical Committee (TC) and Technical Working Parties (TWPs). The Consultative Committee normally holds closed sessions, restricted to the members of the Union. However, observers may be invited to present their views in relevant agenda items. The "Rules governing the granting of observer status to States, intergovernmental organizations and international non-governmental organizations in UPOV bodies" (document UPOV/INF/19/1) can be consulted at http://www.upov.int/information_documents/en/.

• What is a plant variety?

The term "species" is a familiar unit of botanical classification within the plant kingdom. However, it is clear that within a species there can be a wide range of different types of plant. Farmers and growers need plants with particular characteristics and that are adapted to their environment and their cultivation practices. A plant variety represents a more precisely defined group of plants, selected from within a species, with a common set of characteristics. To see an illustrative example of a plant variety, please go to http://www.upov.int/overview/en/variety.html.

A detailed explanation of the definition of "variety" is provided document UPOV/EXN/VAR "Explanatory Notes on the Definition of Variety under the 1991 Act of the UPOV Convention" (see <u>http://www.upov.int/edocs/expndocs/en/upov exn var 1.pdf</u>)

• Why do farmers and growers need new plant varieties?

New varieties of plants with features such as improved yield, resistance to plant pests and diseases, salt and drought tolerance, or better adaptation to climatic stress are a key element in increasing productivity and product quality in agriculture, horticulture and forestry, whilst minimizing the pressure on the natural environment. Due to the continuous evolution of new pests and diseases as well as changes in climatic conditions and users' needs, there is a continuous demand by farmers/growers of new plant varieties and development by breeders of such new plant varieties.

The tremendous progress in agricultural productivity in various parts of the world is largely based on improved varieties, together with improved farming practices, and future food security depend on them.

• Why is plant variety protection necessary?

Successful breeding requires great skill and knowledge. In addition, large-scale breeding calls for significant investment in land, specialized equipment (for example, greenhouses, growth chambers and laboratories), and skilled, scientific manpower.

It takes a long time to develop a successful plant variety (10 to 15 years in the case of many plant species). Yet not all new plant varieties are successful and, even where the varieties show significant improvements, changes in market requirements may eliminate the possibility of a return on investment. This makes it necessary to balance the benefits with the return of the original high investment. Generally, however, plant breeding results in the availability of varieties with increased output and improved quality for the benefit of the society.

Sustained and long-term breeding efforts are only worthwhile if there is a chance to be rewarded for the investment made. To recover the costs of this research and development, the breeder may seek protection to obtain exclusive rights for the new variety.

At the same time, a new variety, once released, can often be easily reproduced by others. The original breeder is thus deprived of the fair opportunity to benefit from his or her investment. It is, therefore, critical to provide an effective system of plant variety protection, which encourages the development of new varieties of plants thereby benefiting the breeder and society at large.

• How does plant variety protection work?

The UPOV Convention provides the basis for members to encourage plant breeding by granting breeders of new plant varieties an intellectual property right: the breeder's right.

The breeder's right means that the authorization of the breeder is required to propagate the variety for commercial purposes. The UPOV Convention specifies the acts that require the breeder's authorization in respect of the propagating material of a protected variety and, under certain conditions, in respect of the harvested material. UPOV members may also decide to extend protection to products made directly from harvested material, under certain conditions.

In order to obtain protection, the breeder needs to file individual applications with the authorities of UPOV members entrusted with the task of granting breeders' rights (see http://www.upov.int/members/en/pvp_offices.html).

• What are the requirements for protecting a new plant variety?

Under the UPOV Convention, the breeder's right is only granted where the variety is (i) new, (ii) distinct, (iii) uniform, (iv) stable and has a suitable denomination.

• Why does UPOV require varieties to be uniform and stable; doesn't that lead to a loss of diversity?

...Why does UPOV require varieties to be uniform and stable?

A variety which is the object of a breeder's right needs to be both sufficiently uniform and stable in order to define the object of the right granted to the holder.

The notion of uniformity ensures that the variety can be defined as far as is it necessary for the purpose of protection. This is indicated by the notion of sufficient uniformity, i.e., the criterion for uniformity does not seek absolute uniformity. The UPOV Convention links the uniformity requirement for a variety to the particular features of its propagation. This means that the level of uniformity required for truly self-pollinated varieties, mainly self-pollinated varieties, inbred lines of hybrid varieties, vegetatively propagated varieties, cross-pollinated varieties, mainly cross-pollinated varieties, synthetic varieties and hybrid varieties will, in general, be different. Furthermore, it relates only to the characteristics which are relevant for the protection of the variety.

As with the uniformity requirement, the criterion for stability has been developed to establish the identity of the variety as the subject matter of protection by ensuring that the relevant characteristics of the variety

C(Extr.)/31/3 Annex, page 4

remain unchanged after repeated propagation or, in the case of a particular cycle of propagation, at the end of each such cycle.

...doesn't that lead to a loss of diversity?

On the contrary, the UPOV system encourages the development of new varieties of plants, therefore adding to diversity. The "breeder's exemption" in the UPOV Convention enables plant diversity to be available for further breeding activities because acts done for the purpose of breeding other varieties are not subject to any restriction by the breeder. This reflects the fact that access to protected varieties contributes to sustain greatest progress in plant breeding and, thereby, to maximize the use of genetic resources for the benefit of society.

Moreover, the UPOV system does not govern the use of non-protected varieties nor the implementation of policies and legislation related to the use of non-protected varieties.

• Can breeders use a protected variety in their breeding programs

Under the "breeder's exemption" in the UPOV Convention, the authorization of the breeder for the use of protected varieties for breeding purposes is not required.

The relevant provisions of the 1978 Act and of the 1991 Act of the UPOV Convention are reproduced and explained as follows:

1978 ACT

Article 5: Rights Protected; Scope of Protection

"(3) Authorisation by the breeder shall not be required either for the utilisation of the variety as an initial source of variation for the purpose of creating other varieties or for the marketing of such varieties. Such authorisation shall be required, however, when the repeated use of the variety is necessary for the commercial production of another variety."

1991 ACT

Article 15: Exceptions to the Breeder's Right

"(1) [Compulsory exceptions] The breeder's right shall not extend to [...]

"(iii) acts done for the purpose of breeding other varieties, and, except where the provisions of Article 14(5) apply, acts referred to in Article 14(1) to (4) in respect of such other varieties."

Thus, with regard to the use of a protected variety for breeding "other" varieties, the authorization of the breeder of the protected variety is not required in either the 1978 Act ("Authorisation by the breeder shall not be required ... for the utilisation of the variety as an initial source of variation for the purpose of creating other varieties...") or the 1991 Act ("The breeder's right shall not extend to ... acts done for the purpose of breeding other varieties").

In addition, acts done with the "other" varieties (e.g. marketing), do not require the authorization of the breeder of the protected variety except for the circumstances specified in the 1978 Act and the 1991 Act. Article 5(3) of the 1978 Act (see above) specifies that the "authorisation shall be required … when the repeated use of the variety is necessary for the commercial production of another variety". The 1991 Act specifies that the authorization of the breeder is required, where the provisions of Article 14(5) (essentially derived and certain other varieties) apply, in respect of the acts for material covered under Article 14(1) to (4).

• Who can protect a plant variety?

Only the breeder of a new plant variety can protect that new plant variety. It is not permitted for someone other than the breeder to obtain protection of a variety.

There are no restrictions on who can be considered to be a breeder under the UPOV system: a breeder might be an individual, a farmer, a researcher, a public institute, a private company etc.

• Where do I apply for protection of a variety?

In order to obtain protection, the breeder needs to file individual applications with the authorities of UPOV members entrusted with the task of granting breeders' rights (see http://www.upov.int/members/en/pvp offices.html).

• Can I obtain protection for more than one country from a single application?

In order to obtain protection the breeder needs to file an application with the authority of each UPOV member where protection is sought. The European Union operates a (supranational) community plant variety rights system which covers the territory of its 28 member States. Contact details of the authorities responsible for the granting of breeders' rights are provided at <u>http://www.upov.int/members/en/pvp_offices.html</u>

• What are the benefits of plant variety protection and UPOV membership?

The UPOV Report on the Impact of Plant Variety Protection (<u>http://www.upov.int/about/en/pdf/353_upov_report.pdf</u>) demonstrated that in order to enjoy the full benefits which plant variety protection is able to generate, both implementation of the UPOV Convention and membership of UPOV are important. The introduction of the UPOV system of plant variety protection and UPOV membership were found to be associated with:

- (a) increased breeding activities,
- (b) greater availability of improved varieties,
- (c) increased number of new varieties,
- (d) diversification of types of breeders (e.g. private breeders, researchers),
- (e) increased number of foreign new varieties,
- (f) encouraging the development of a new industry competitiveness on foreign markets, and
- (g) improved access to foreign plant varieties and enhanced domestic breeding programs.

In order to become a UPOV member the advice of the UPOV Council in respect of the conformity of the law of a future member with the provisions of the UPOV Convention is required. This procedure leads, in itself, to a high degree of harmony in those laws, thus facilitating cooperation between members in the implementation of the system.

• What is the effect of plant variety protection on varieties that are not protected (e.g. traditional varieties, landraces etc.)?

The UPOV Convention only offers protection to new varieties of plants. UPOV does not regulate varieties that are not covered by plant variety protection. Therefore, plant variety protection does not restrict the ability of farmers to grow and sell propagating material of non-protected varieties.

 What is the relationship between the UPOV Convention and international treaties concerning genetic resources, e.g. the Convention on Biological Diversity (CBD) and the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)

The UPOV Convention, the CBD and the ITPGRFA are all international instruments.

The objectives of the CBD and the ITPGRFA are the conservation and sustainable use of genetic resources and the sharing of benefits arising from their use.

Both the ITPGRFA and the UPOV Convention aim to support plant breeding activities and to encourage the development of new varieties of plants. The ITPGRFA does so by providing a system for facilitated access to plant genetic resources, while the UPOV Convention does so by establishing a system for plant variety protection. When implemented by UPOV members, the relevant legislations dealing with these matters should be compatible and mutually supportive.

• What is the relationship between patents and plant breeders' rights

Patents and plant breeders' rights are separate intellectual property rights with different conditions of protection, scope and exceptions. Breeders can use plant breeders' rights, patents or other forms of intellectual property rights, or a combination to the extent that such systems are available in the territory concerned.

Nowadays, with recent technological developments, for example the rising number of gene-related patents and rapid progress in the field of genetic engineering, patents and plant breeders' rights are more interlinked.

• What is the relationship between plant breeders' rights and measures regulating commerce, e.g. seed certification, official registers of varieties admitted to trade (e.g. National List, Official Catalogue) etc.?

It is not the role of the UPOV system to regulate the marketplace. The UPOV Convention requires that the breeder's right shall be independent of any measure taken by a Contracting Party to regulate within its territory the production, certification and marketing of material of varieties or the importing or exporting of such material. In any case, such measures shall not affect the application of the provisions of this Convention. This clarification should not be taken to mean that UPOV believes that there should be a particular type or level of market regulation, but rather as a recognition that such regulation should be dealt with by an appropriate, dedicated and independent mechanism.

• Can I protect an existing plant or variety that I discover?

Only the breeder* of a new plant variety can protect that new plant variety. The 1991 Act of the UPOV Convention provides, under its Article 21(1)(iii), that "[e]ach Contracting Party shall declare a breeder's right granted by it null and void when it is established [...] (iii) that the breeder's right has been granted to a person who is not entitled to it, unless it is transferred to the person who is so entitled."

*The term "breeder" is defined in Article 1(iv) of the 1991 Act of the UPOV Convention as:

- the person who bred, or discovered and developed, a variety,
- the person who is the employer of the aforementioned person or who has commissioned the latter's
- work, where the laws of the relevant Contracting Party so provide, or
- the successor in title of the first or second aforementioned person, as the case may be.

The term "person" embraces both physical and legal persons, and refers to one or more persons. Under the UPOV Convention, there is no restriction on who can become a breeder. A breeder might be, for example, an amateur gardener, a farmer, a scientist, a plant breeding institute or an enterprise specialized in plant breeding.

With regard to "discovered and developed", a discovery might be the initial step in the process of breeding a new variety. However, the term "discovered and developed" means that a mere discovery, or find, would not entitle the person to obtain a breeder's right. Development of plant material into a variety is necessary for a breeder to be entitled to obtain a breeder's right. A person would not be entitled to protection of an existing variety that was discovered and propagated unchanged by that person.

The Convention on Biological Diversity and the International Treaty on Plant Genetic Resources for Food and Agriculture address the issue of access to genetic resources and benefit sharing.

Does the UPOV Convention allow a variety to be refused protection because it is genetically modified?

No. Under the UPOV Convention, no further requirements can be requested for protection than those stated in Article 5. Furthermore, Article 18 of the 1991 Act of the UPOV Convention states that "[the] breeder's right shall be independent of any measure taken by a Contracting Party to regulate within its territory the production, certification and marketing of material of varieties or the importing or exporting of such materials [....]." In that respect, it is also important to note that the grant of protection does not grant the right to produce or market a plant variety.

The UPOV Convention makes no restriction with regard to the methods or techniques by which a new variety is "bred".

C(Extr.)/31/3 Annex, page 7

- Can I use plant variety protection to protect the following:
 - a trait (e.g. disease resistance, flower color)
 - a chemical or other substance (e.g. oil, DNA)
 - a plant breeding technology (e.g. tissue culture)?

No. The definition that a variety means a "plant grouping" clarifies that a trait, a chemical or other substance and a plant breeding technology do not correspond to the definition of a variety.

• Can I protect a hybrid variety under the UPOV system?

Yes. The definition of variety in the 1991 Act of the UPOV Convention, Article 1 (vi) states that "variety" means a plant grouping within a single botanical taxon of the lowest known rank, which grouping, irrespective of whether the conditions for the grant of a breeder's right are fully met, can be "defined by the expression of the characteristics resulting from a given genotype or combination of genotypes [...]". The notion of "combination of genotypes" covers, for example, synthetic varieties and hybrids.

• Can a farmer replant seed of a protected variety without the authorization of the breeder?

Commercial farmers

It is necessary to consult the legislation in each UPOV member to know the answer to this question.

Under the 1978 Act of the UPOV Convention (see Article 5), the prior authorization of the breeder is required for the production for purposes of commercial marketing of the reproductive or vegetative propagating material, as such, of the variety. However, no specific mention is made of replanting seed of a protected variety by farmers. Therefore, it is necessary to consult the legislation in each UPOV member.

Under the 1991 Act of the UPOV Convention (see Article 15(2)), there is an optional exception to the breeder's rights according to which UPOV members can decide to allow farmers to replant seed on their own farms without the authorization of the breeder, under certain circumstances. The wording of this optional exception is as follows:

"Notwithstanding Article 14, each Contracting Party may, within reasonable limits and subject to the safeguarding of the legitimate interests 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 or a variety covered by Article 14(5)(a)(i) or Article 14(5)(a)(i)."

It is a matter for each UPOV member to decide if, and how, to incorporate this option in its legislation.

Subsistence farmers

Since the 1991 Act and 1978 Act give no definition of the words "commercial" and "subsistence farming", it is necessary to consult the legislation in each UPOV member to know the answer to this question specific for that UPOV member.

Under the 1978 Act of the UPOV Convention (see Article 5), the prior authorization of the breeder is required for the production for purposes of commercial marketing of the reproductive or vegetative propagating material, as such, of the variety. The 1978 Act of the UPOV Convention is silent on the question of subsistence farmers, and therefore it totally depends on the national legislation.

Under the 1991 Act of the UPOV Convention (see Article 15(1)(i)), a compulsory exception sets out that the breeder's right does not extend to "acts done privately and for non-commercial purposes". With subsistence farming, it is observed that the farmer produces barely enough food for their own consumption and that of their dependents. Thus, the propagation of a protected variety by a farmer exclusively for the production of a food crop to be consumed by that farmer and the dependents of the farmer, may be considered to fall within the meaning of acts done privately and for non-commercial purposes.

C(Extr.)/31/3 Annex, page 8

• Can a farmer sell seed of a protected variety without the authorization of the breeder?

The authorization of the breeder is required for the selling of seed of a protected variety by any person.

Under the 1978 Act of the UPOV Convention (see Article 5), the prior authorization of the breeder is required for "the offering for sale" and "the marketing" of the reproductive or vegetative propagating material, as such, of the variety.

Under the 1991 Act of the UPOV Convention (see Article 14(1)) the "offering for sale" and "selling or other marketing" of the propagating material of the protected variety requires the authorization of the breeder.

How do I know if a variety is protected?

It is necessary to consult the official publication concerning protected varieties for the UPOV member concerned.

The UPOV Plant Variety Database (PLUTO) (<u>http://www.upov.int/pluto/en/</u>) is a compilation of data supplied by many of the competent authorities of the UPOV members. However, the information concerning plant breeders' rights provided in PLUTO does not constitute the official publication of the authorities concerned. To consult the official publication, or to obtain details on the status and completeness of the information in PLUTO, please contact the relevant authority, contact details for which are provided at http://www.upov.int/members/en/pvp offices.html.

All contributors to PLUTO are responsible for the correctness and completeness of the data they supply. Users are particularly requested to note that it is not obligatory for members of the Union to supply data for PLUTO and, for those members of the Union who supply data, it is not obligatory to supply data for all items.

• Who is responsible for enforcing plant breeders' rights?

While the UPOV Convention requires members of the Union to provide for appropriate legal remedies for the effective enforcement of breeders' rights, it is a matter for breeders to enforce their rights.

• Does UPOV allow molecular techniques (DNA profiles) in the examination of Distinctness, Uniformity and Stability ("DUS")?

It is important to note that, in some cases, varieties may have a different DNA profile but be phenotypically identical, whilst, in other cases, varieties which have a large phenotypic difference may have the same DNA profile for a particular set of molecular markers (e.g. some mutations).

In relation to the use of molecular markers that are not related to phenotypic differences, the concern is that it might be possible to use a limitless number of markers to find differences between varieties at the genetic level that are not reflected in phenotypic characteristics.

On the above basis, UPOV has agreed the following uses of molecular markers in relation to DUS examination:

(a) Molecular markers can be used as a method of examining DUS characteristics that satisfy the criteria for characteristics set out in the General Introduction if there is a reliable link between the marker and the characteristic.

(b) A combination of phenotypic differences and molecular distances can be used to improve the selection of varieties to be compared in the growing trial if the molecular distances are sufficiently related to phenotypic differences and the method does not create an increased risk of not selecting a variety in the variety collection which should be compared to candidate varieties in the DUS growing trial.

The situation in UPOV is explained in documents TGP/15 "Guidance on the Use of Biochemical and Molecular Markers in the Examination of Distinctness, Uniformity and Stability (DUS)" and UPOV/INF/18 "Possible use of Molecular Markers in the Examination of Distinctness, Uniformity and Stability (DUS)".

• Is it true that UPOV only promotes commercially bred plant varieties geared to industrialized farmers?

The aim of the UPOV system is encourage breeding of new plant varieties for all types of farmers. The "Seminar on Plant Variety Protection and Technology Transfer: the Benefits of Public-Private Partnership" and the "Symposium on the Benefits of Plant Variety Protection for Farmers and Growers" demonstrated, for example, the way in which plant breeders' rights have been used by the public sector to transfer new varieties to both commercial and resource-poor farmers.

[End of Annex and of document]