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The International Treaty

ON PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE



Item 7 of the Draft Provisional Agenda

SECOND MEETING OF THE *AD HOC* ADVISORY TECHNICAL COMMITTEE ON THE STANDARD MATERIAL TRANSFER AGREEMENT AND THE MULTILATERAL SYSTEM

Brasilia, Brazil, 31 August – 2 September 2010

IN SITU MATERIAL AND THE MULTILATERAL SYSTEM: STANDARDS FOR ACCESS¹

I. INTRODUCTION

1. According to Article 12.3h of the International Treaty on Plant Genetic Resources for Food and Agriculture (International Treaty), without prejudice to the other provisions under this Article, access to plant genetic resources for food and agriculture (PGRFA) found *in situ* conditions is provided according to national legislation or in the absence of such legislation, in accordance with such standards as may be set by the Governing Body.

2. The first meeting of this Committee² noted that the Governing Body has not yet decided to initiate the preparation of standards for access to PGRFA found in *in situ* conditions. The Committee recommended that:

- elements of possible standards be identified, for consideration by the Committee;
- in identifying elements of possible standards, particular attention be paid to the possibility of referring to relevant provisions of the existing *International Code of Conduct on Plant Germplasm Collecting and Transfer* (Code of Conduct), given in the *Annex* to this document.

3. This document identifies and briefly analyses relevant elements of standards for access to PGRFA found in *in situ* conditions, taking into account the Code of Conduct.

II. PROVISIONS OF ARTICLE 12.3H OF THE INTERNATIONAL TREATY

4. At its first meeting, the Committee provided some clarifications on the provisions of Article 12.3h of the International Treaty. These clarifications are relevant to contextualizing the scope and content of standards under Article 12.3h.

5. The Committee noted that Article 12.3h is to be considered in the context of access and benefit-sharing for PGRFA. Its provisions apply to material under the management and

¹ Following the request of the referenced *Ad Hoc* Advisory Committee, this document was prepared for the exclusive purpose of facilitating the discussions and deliberations of the same Committee. Any opinion or position expressed in the document is not to be attributed to the Secretariat of the International Treaty on Plant Genetic Resources for Food and Agriculture, or the Secretariat of the Commission on Genetic Resources for Food and Agriculture.

² Rome, 18-19 January 2010.

control of Contracting Parties, and in the public domain (which is thus available under the terms and conditions of the Multilateral System).

6. Hence, the scope of standards established under Article 12.3h should be limited to *in situ* material (of Annex I crops) that is under the management and control of Contracting Parties, and in the public domain. If *in situ* material does not meet those conditions, for instance because it is subject to proprietary rights of local communities that take it out from the public domain, then the material does not fall under the MLS and Article 12.3 h does not apply to it.

7. In the same vein, standards under Article 12.3h will apply to access for the purposes of the Multilateral System, i.e. utilization and conservation for research, breeding and training for food and agriculture.³ It is also to be recalled that any such standards will be of subsidiary nature, meaning that they will apply in the absence of national legislation. The objective should then be the development of a practical system that is consistent with the rest of Article 12 to guide *in situ* access under the Multilateral System.

8. In practice, this means that standards in the meaning of Art. 12.3h are those regulating the act of collection and not the possible subsequent transfer of collected material. Under the Multilateral System, transfer of PGRFA occurs under the Standard Material Transfer Agreement, which establishes the rights and responsibilities of providers and recipients of collected material and Article 12.3h makes it very clear that the standards to which it refers are “without prejudice to the other provisions under this Article.”

9. The Committee had in its deliberations made specific reference to the Code of Conduct. However, while the Code of Conduct is directly relevant and has received a high degree of international recognition and acceptance, other standards (some sector-specific) have been developed to provide guidance in genetic resources collection and, in particular, to promote good, ethical and responsible research. Those standards are contained in, among others, the following non-binding instruments/ proposals:

- ISE Code of Ethics, International Society of Ethnobiology, 2006;⁴
- 1996 Proposed Guidelines for Researchers and Local Communities Interested in Accessing, Exploring and Studying Biodiversity, developed by the Biodiversity and Ethics Working Group of Pew Conservation Fellows.⁵

III. THE CODE OF CONDUCT ON THE PLANT GERMPLASM COLLECTING AND TRANSFER, AND OTHER TECHNICAL STANDARDS

10. The Code of Conduct, negotiated through the Commission on Genetic Resources for Food and Agriculture, which also has the responsibility of overseeing its implementation and review, was adopted by the FAO Conference at its 27th Session in November 1993. It contains a set of non-binding guidelines and standards for the collection and transfer of plant germplasm from their natural habitats or surroundings.

11. The Code of Conduct was crafted well before the adoption of the International Treaty. Consequently, while many of its standards are directly relevant, some do not necessarily address the specific needs and rules of the Multilateral System, in particular as regards, Article 12.3h of the International Treaty. In light of this fact, should they be considered a starting point for the consideration of possible standards for the purposes of

³ See Article 12.3a, of the International Treaty

⁴ http://www.ethnobiology.net/_common/docs/ISE%20COE_Eng_rev_24Nov08.pdf

⁵ <http://geography.berkeley.edu/ProjectsResources/BRP/protocols.html>

Article 12.3h, the compatibility of the provisions in the Code of Conduct and other relevant technical standards relevant to the scope of Article 12.3h with the rules governing the Multilateral System should be examined.

IV. THE PHASES OF COLLECTING *IN SITU* PGRFA

12. Following the conceptual framework that derives from standards of collection in the Code of Conduct, the regulatory phases of collection can be divided in three: a) before collection; b) during collection; and c) after collection. These are the phases where standards intervene to regulate the technical aspects of collection. Accordingly, relevant provisions of the Code of Conduct are presented in the next paragraphs.

1) *Before collection*

13. Some provisions in the Code of Conduct contain regulatory elements for the pre-collection phase. Those provisions essentially refer to the responsibilities of collectors. They require collectors, upon arrival in the host country, to acquaint themselves with all research results or work in progress in the country, which might have a bearing on the mission.⁶

14. Before the commencement of field work, the collector and their national collaborators should discuss and decide on practical arrangements, including for: a) collecting priorities, methodologies and strategies; b) information to be gathered during the mission; c) processing and conservation of samples and voucher specimens; and d) financial aspects of the mission.⁷

2) *During collection*

15. Standards for *in situ* collection will normally operate at the local level, where PGRFA are found in their natural habitats and, most relevantly, in the context of farming systems. This is why some elements of the Code of Conduct recognize that proper interaction with the relevant farming communities is required during the collecting mission.

16. The Code of Conduct requires collectors to respect local customs, traditions, and values, and property rights, as well as to demonstrate a sense of gratitude towards local communities, especially if use is made of local knowledge of the characteristics and value of germplasm. Collectors should respond to their requests for information, germplasm or assistance, to the extent feasible.⁸ When collecting cultivated or wild resources, local

⁶ Article 9.1, Code of Conduct. In the pre-collection phase, the practical guidelines of the ISE Code of Ethics recommend that, prior to undertaking any research activities, a good understanding of the local community institutions with relevant authority and their interest in the research to be undertaken, as well as knowledge of cultural protocols of the community shall be developed (from ISE Code of Ethics, guideline #1).

⁷ Article 9.2, Code of Conduct.

⁸ Article 10.1, Code of Conduct. The ISE Code of Ethics recommend that all persons and organizations undertaking research activities shall do so throughout in good faith, acting in accordance with, and with due respect for, the cultural norms and dignity of all potentially affected communities, and with a commitment that collecting specimens and information, whether of a zoological, botanical, mineral or cultural nature, and compiling data or publishing information thereon, means doing so only in the holistic context, respectful of norms and belief systems of the relevant communities (from ISE Code of Ethics, guideline #5).

The Pew Conservation Fellows' Guidelines recommend that research should be based on respect for the local cultural values and norms (from the Guidelines, Principles Underlying These Guidelines, #3). Accordingly, the collector should perform an initial disclosure of information to the concerned local community or individual, including by explaining the nature and purpose of the proposed research,

communities and farmers concerned should be informed about the purpose of the mission and how and where they could request and obtain samples of the collected germplasm. If requested, duplicate samples should also be left with local communities and farmers.⁹

17. The prevention (or mitigation) of genetic erosion is a relevant criterion for the collection phase. In order not to increase the risk of genetic erosion, the collection should not deplete the populations of the farmers' planting stocks or wild species, or remove significant genetic variation from the local gene pool.¹⁰

18. Adequate and appropriate recording of information on the collecting mission and the collected material is an action that standards should require. Whenever germplasm is collected, the collector should systematically record the passport data, and describe in detail the plant population, its diversity, habitat and ecology, so as to provide curators and users of germplasm with an understanding of its original context. For this purpose, local knowledge about the resources (including observations on environmental adaptation and local methods and technologies of preparing and using the plant) should be also documented.¹¹

3) *After collection*

19. In the post-collection phase, collectors should maintain certain responsibilities, with the overall goal of ensuring accuracy of information and preserving plant health. In this regard, the Code of Conduct encourages collectors to:

- a. process, in a timely fashion, the plant samples, and any associated microbial symbionts, pests and pathogens that may have been collected for conservation; the relevant passport data should be prepared at the same time;
- b. deposit duplicate sets of all collections and associated materials, and records of any pertinent information, with the host country and other agreed curators;
- c. make arrangements with quarantine officials, seed storage managers and curators to ensure that the samples are transferred as quickly as possible to conditions which optimize their viability;
- d. obtain, in accordance with the importing countries' requirements, the phytosanitary certificate(s) and other documentation needed for transferring the material collected;
- e. alert the host country about any impending threat to plant populations, or evidence of accelerated genetic erosion, and make recommendations for remedial action; and
- f. prepare a consolidated report on the collecting mission, including the localities visited, the confirmed identifications and passport data of plant samples collected, and the intended site(s) of conservation. Copies of the report should be submitted to the host country's permit issuing authority, to national counterparts and curators.¹²

including its duration, the geographic area in which research would take place, and research and collecting methods (from the Guidelines, Initial Disclosure of Information).

⁹ Article 10.3, Code of Conduct.

¹⁰ Article 10.2, Code of Conduct. The ISE Code of Ethics recommend that, if during the cycle of a project it is determined that the practices of any parties to the research are harmful to components of an ecosystem, it shall be incumbent upon the parties to first bring such practices and the impacts thereof to the notice of the offenders and attempt to establish a mutually agreed conflict resolution process, prior to informing the local community and/or government authorities of such practices and impacts (from ISE Code of Ethics, guideline #11).

¹¹ Article 10.4, Code of Conduct.

¹² Article 11.1, Code of Conduct. References to FAO's Commission on Genetic Resources for Food and Agriculture that appear in the Code of Conduct have been omitted as not applicable.

20. The linkage with local communities and farmers concerned should be maintained in the post-collection phase. In that respect, the Code of Conduct sets forth that curators of the collected germplasm should take practical steps to ensure that future enquiries from the local communities and farmers who have provided the original material, and the host country, are responded to, and the samples of the plant germplasm collected are supplied upon request.¹³

21. The above aspects of the Code of Conduct provide possible elements for a set of standards for access to PGRFA in *in situ* conditions that are of relevance to and compatible with the Multilateral System.

V. PRACTICAL IMPLEMENTATION OF STANDARDS

22. As is the case with standards generally, the practical implementation is an issue to be considered. In general, a permit system seems to be a practical solution for with the implementation standards for access.

23. The Code of Conduct gives some useful indications as to elements for a permit system. Governments are encouraged to designate a competent authority for administering a system of collecting permits.¹⁴

24. In the application phase, collectors should submit certain information in order to enable an informed decision by the competent authority. Such information is directed at:

- establishing the competence of the prospective collector (e.g. by demonstrating knowledge and familiarity with species to be collected, distribution and methods of collection); and
- indicating the technical details of the mission (e.g. by providing indicative plans for the field mission, including provisional route, estimated timing of expedition, the types of material to be collected, species and quantity – and plans for evaluation, storage and use of material collected).

25. The application should also notify the host country of the kind of assistance that may be requested for the success of the mission and indicate plans of cooperation with national scholars, scientists, students, non-governmental organizations and others who may assist with or benefit from participation in the mission or follow up activities. The application should also list, as far as it is known, the national and foreign curators to whom the collected material and related information are intended to be distributed on completion of the mission.¹⁵

26. After receiving the application, the competent authority should expeditiously:

- (a) acknowledge the application, indicating the estimated time needed to examine it;
- (b) communicate to the collectors [and sponsors] of the proposed collecting mission its decision. In case of a positive decision, conditions of collaboration be established as soon as possible before the mission arrives in the country, or begins field work. If the decision is to prohibit or restrict the mission, whenever possible, the reasons should be given, and where appropriate, an opportunity should be given to modify the application.

¹³ Article 13.2, Code of Conduct.

¹⁴ Article 6.2, Code of Conduct.

¹⁵ Article 7, Code of Conduct. It is expected that, in accordance with the provisions of the International Treaty, such “distribution” should be made under the Standard Material Transfer Agreement.

- (c) indicate, when applicable, what categories and quantities of germplasm may or may not be collected or exported, and those which are required for deposit within the country; indicate areas and species which are governed by special regulation;
- (d) inform the applicant of any restrictions on travel or any modification of plans desired by the host country;
- (e) state any special arrangement or restriction placed on the distribution or use of the germplasm, or improved materials derived from it;
- (f) if it so desired, designate a national counterpart for the field mission, and/or for subsequent collaboration;
- (g) define any financial obligation to be met by the applicant including possible national participation in the collecting team, and other services to be provided; and
- (h) provide the applicant with the relevant information regarding the country, its genetic resources policy, germplasm management system, quarantine procedures, and all relevant laws and regulations. Particular attention should be drawn to the culture and the society of the areas through which the collectors will be travelling.¹⁶

VI. ELEMENTS FOR CONSIDERATION BY THE COMMITTEE

27. The Committee is invited to consider the elements of possible standards that were identified and other relevant information in its discussions of standards of access and the issues related to Article 12.3h of the International Treaty.

¹⁶ Article 8 Code of Conduct.

**INTERNATIONAL CODE OF CONDUCT ON PLANT GERMPLASM
COLLECTING AND TRANSFER**

CHAPTER I

Objectives and Definitions

Article 1: Objectives

This Code has the following objectives:

- 1.1 to promote the conservation, collection and use of plant genetic resources from their natural habitats or surroundings, in ways that respect the environment and local traditions and cultures;
- 1.2 to foster the direct participation of farmers, scientists and organizations in countries where germplasm is collected, in programmes and actions aimed at the conservation and use of plant genetic resources;
- 1.3 to avoid genetic erosion and permanent loss of resources caused by excessive or uncontrolled collection of germplasm;
- 1.4 to promote the safe exchange of plant genetic resources, as well as the exchange of related information and technologies;
- 1.5 to help ensure that any collecting of germplasm is undertaken in full respect of national laws, local customs, rules and regulations;
- 1.6 to provide appropriate standards of conduct and to define obligations of collectors;
- 1.7 to promote the sharing of benefits derived from plant genetic resources between the donors and users of germplasm, related information and technologies by suggesting ways in which the users may pass on a share of the benefits to the donors, taking into account the costs of conserving and developing germplasm;
- 1.8 to bring recognition to the rights and needs of local communities and farmers, and those who manage wild and cultivated plant genetic resources and in particular to promote mechanisms:
 - (a) to facilitate compensation of local communities and farmers for their contribution to the conservation and development of plant genetic resources; and
 - (b) to avoid situations whereby benefits currently derived from plant genetic resources by these local communities and farmers are undermined by the transfer or use by others of the resources.

Article 2: Definitions

- 2.1 "**Collector**" means a legal or natural person that collects plant genetic resources and related information;
- 2.2 "**Curator**" means a legal or natural person that conserves and manages plant genetic resources and related information.
- 2.3 "**Donors**" means a country or legal or natural person that makes available plant genetic resources for collection.
- 2.4 "**Farmers' Rights**" means the rights arising from the past, present and future contributions of farmers in conserving, improving, and making available plant genetic resources, particularly those in the centres of origin/diversity. These rights are vested in the International Community, as trustee for present and future generations of farmers, for the purpose of ensuring full benefits to farmers, and supporting the continuation of their contributions, as well as the attainment of the overall purposes of the International Undertaking.
- 2.5 "**Ex situ conservation**" means the conservation of plant genetic resources outside their natural habitat.
- 2.6 "**Genetic erosion**" means loss of genetic diversity;
- 2.7 "**In situ conservation**" means the conservation of plant genetic resources in the areas where they have naturally evolved, and, in the case of cultivated species or varieties, in the surroundings where they have developed their distinctive properties;
- 2.8 "**Plant genetic resources**" - means germplasm or genetic material of actual or potential value.
- 2.9 "**Plant germplasm**" or "**genetic material**" means the reproductive or vegetative propagating material of plants.
- 2.10 "**Sponsor**" means a legal or natural person that sponsors, financially or otherwise, a plant collecting mission;
- 2.11 "**User**" means a legal or natural person that utilizes and benefits from plant genetic resources and related information.

CHAPTER II

Nature and Scope of the Code

Article 3: Nature of the Code

- 3.1 The Code is voluntary.
- 3.2 The code recognizes that nations have sovereign rights over their plant genetic resources in their territories and it is based on the principle according to which the conservation and continued availability of plant genetic resources is a common concern of humankind. In executing these rights, access to plant genetic resources should not be unduly restricted.
- 3.3 The Code is addressed primarily to governments. All relevant legal and natural persons are also invited to observe its provisions, in particular those dealing with plant exploration

and plant collection, agricultural and botanical activities and research on endangered species or habitat conservation, research institutes, botanical gardens, harvesting of wild plant resources, agro- industry including pharmaceutical plants and the seed trade.

3.4 The provisions of the Code should be implemented through collaborative action by governments, appropriate organizations and professional societies, field collectors and their sponsors, and curators and users of plant germplasm.

3.5 FAO and other competent organizations, are invited to promote observance of the Code.

3.6 The Code provides a set of general principles which governments may wish to use in developing their national regulations, or formulating bilateral agreements on the collection of germplasm.

Article 4: Scope

4.1 The Code describes the shared responsibilities of collectors, donors, sponsors, curators and users of germplasm so as to ensure that the collection, transfer and use of plant germplasm is carried out with the maximum benefit to the international community, and with minimal adverse effects on the evolution of crop plant diversity and the environment. While initial responsibility rests with field collectors and their sponsors, obligations should extend to parties who fund or authorize collecting activities, or donate, conserve or use germplasm. The Code emphasizes the need for cooperation and a sense of reciprocity among donors, curators and users of plant genetic resources. Governments should consider taking appropriate action to facilitate and promote observance of this Code by sponsors, collectors, curators and users of germplasm operating under their jurisdiction.

4.2 The Code should enable national authorities to permit collecting activities within its territories expeditiously. It recognizes that national authorities are entitled to set specific requirements and conditions for collectors and sponsors and that sponsors and collectors are obliged to respect all relevant national laws as well as adhering to the principles of this Code.

4.3 The Code is to be implemented within the context of the FAO Global System on Plant Genetic Resources, including the International Undertaking and its annexes. In order to promote the continued availability of germplasm for plant improvement programmes on an equitable basis governments and users of germplasm should endeavour to give practical expression to the principles of Farmers' Rights.

Article 5: Relationship with the other legal instruments

5.1 The Code is to be implemented in harmony with:

(a) the Convention on Biological Diversity and other legal instruments protecting biological diversity or parts of it;

(b) the International Plant Protection Convention (IPPC) and other agreements restricting the spread of pests and diseases;

(c) the national laws of the host country; and

(d) any agreements between the collector, host country, sponsors, and the gene bank storing the germplasm.

CHAPTER III

Collectors' permits

Article 6: Authority for Issuing Permits

6.1 States have the sovereign right, and accept the responsibility, to establish and implement national policies for the conservation and use of their plant genetic resources, and within this framework, should set up a system for the issuance of permits to collectors.

6.2 Governments should designate the authority competent for issuing permits. This authority should inform proposed collectors, sponsors, and the other agencies of the government's rules and regulations in this matter, and of the approval process to be followed, and of follow-up action to be taken.

Article 7: Requesting of permits

To enable the permit issuing authority to arrive at a decision to grant or to refuse a permit, prospective collectors and sponsors should address an application to the issuing authority to which they:

- (a) undertake to respect the relevant national laws;
- (b) demonstrate knowledge of, and familiarity with, the species to be collected, their distribution and methods of collection;
- (c) provide indicative plans for the field mission - including provisional route, estimated timing of expedition, the types of material to be collected, species and quantities - and their plans for evaluation, storage and use of the material collected; where possible, the sort of benefits the host country may expect to derive from the collection of the germplasm should be indicated;
- (d) notify the host country of the kind of assistance, that may be required to facilitate the success of the mission;
- (e) indicate, if the host country so desires, plans for cooperation with national scholars, scientists, students, non-governmental organizations and others who may assist or benefit from participation in the field mission or its follow-up activities;
- (f) list, so far as it is known, the national and foreign curators to whom the germplasm and information is intended to be distributed on the completion of the mission; and
- (g) supply such personal information as the host country may require.

Article 8: Granting of permits

The permit issuing authority of the country in which a field mission proposes collecting plant genetic resources should expeditiously:

- (a) acknowledge the application, indicating the estimated time needed to examine it;
- (b) communicate to the collectors and sponsors of the proposed collecting mission its decision. In case of a positive decision, conditions of collaboration be established as soon as

possible before the mission arrives in the country, or begins field work. If the decision is to prohibit or restrict the mission, whenever possible, the reasons should be given, and where appropriate, an opportunity should be given to modify the application.

(c) indicate, when applicable, what categories and quantities of germplasm may or may not be collected or exported, and those which are required for deposit within the country; indicate areas and species which are governed by special regulation;

(d) inform the applicant of any restrictions on travel or any modification of plans desired by the host country;

(e) state any special arrangement or restriction placed on the distribution or use of the germplasm, or improved materials derived from it;

(f) if it so desired, designate a national counterpart for the field mission, and/or for subsequent collaboration;

(g) define any financial obligation to be met by the applicant including possible national participation in the collecting team, and other services to be provided; and

(h) provide the applicant with the relevant information regarding the country, its genetic resources policy, germplasm management system, quarantine procedures, and all relevant laws and regulations. Particular attention should be drawn to the culture and the society of the areas through which the collectors will be travelling.

CHAPTER IV

Responsibilities of Collectors

Article 9: Pre-collection

9.1 Upon arrival in the host country, collectors should acquaint themselves with all research results, or work in progress in the country, that might have a bearing on the mission.

9.2 Before field work begins, collectors and their national collaborators should discuss, and to the extent possible, decide on practical arrangements including: (i) collecting priorities, methodologies and strategies, (ii) information to be gathered during collection, (iii) processing and conservation arrangements for germplasm samples, associated soil/symbiont samples, and voucher specimens, and (iv) financial arrangements for the mission.

Article 10: During collection

10.1 Collectors should respect local customs, traditions, and values, and property rights and should demonstrate a sense of gratitude towards local communities, especially if use is made of local knowledge on the characteristics and value of germplasm. Collectors should respond to their requests for information, germplasm or assistance, to the extent feasible.

10.2 In order not to increase the risk of genetic erosion, the acquisition of germplasm should not deplete the populations of the farmers' planting stocks or wild species, or remove significant genetic variation from the local gene pool.

10.3 When collecting cultivated or wild genetic resources, it is desirable that the local communities and farmers concerned be informed about the purpose of the mission, and about

how and where they could request and obtain samples of the collected germplasm. If requested, duplicate samples should be also left with them.

10.4 Whenever germplasm is collected, the collector should systematically record the passport data, and describe in detail the plant population, its diversity, habitat and ecology, so as to provide curators and users of germplasm with an understanding of its original context. For this purpose, as much as local knowledge about the resources (including observations on environmental adaptation and local methods and technologies of preparing and using the plant) should be also documented; photographs may be of special value.

Article 11: Post-collection

11.1 Upon the completion of the field mission, collectors and their sponsors should:

- (a) process, in a timely fashion, the plant samples, and any associated microbial symbionts, pests and pathogens that may have been collected for conservation; the relevant passport data should be prepared at the same time;
- (b) deposit duplicate sets of all collections and associated materials, and records of any pertinent information, with the host country and other agreed curators;
- (c) make arrangements with quarantine officials, seed storage managers and curators to ensure that the samples are transferred as quickly as possible to conditions which optimize their viability;
- (d) obtain, in accordance with the importing countries' requirements, the phytosanitary certificate(s) and other documentation needed for transferring the material collected;
- (e) alert the host country and the FAO Commission on Plant Genetic Resources about any impending threat to plant populations, or evidence of accelerated genetic erosion, and make recommendations for remedial action; and
- (f) prepare a consolidated report on the collecting mission, including the localities visited, the confirmed identifications and passport data of plant samples collected, and the intended site(s) of conservation. Copies of the report should be submitted to the host country's permit issuing authority, to national counterparts and curators, and to the FAO for the information of its Commission on Plant Genetic Resources and for inclusion in its World Information and Early Warning System on PGR.

11.2 Collectors should take steps to promote observance of the Code by the curators and users to whom they have passed the germplasm which they have collected. Where appropriate, this might be by means of agreements with curators and users consistent with Articles 13 and 14.

CHAPTER V

Responsibilities of Sponsors, Curators and Users

Article 12: Responsibilities of Sponsors

12.1 Sponsors should take steps to ensure, as far as is possible and appropriate, that collectors of collecting missions which they sponsor abide by the Code, particularly Articles 9, 10 and 11.

12.2 Sponsors should, as far as is possible and appropriate, establish agreements with curators of the germplasm collected under missions that they sponsor to ensure that curators abide by the Code, particularly Article 13. Such agreements should, as far as is possible and appropriate ensure that subsequent curators and users of the collected germplasm also abide by the Code.

Article 13: Responsibilities of Curators

13.1 In order to be able to identify in the future the origin of the samples, curators should ensure that the collectors' original identification numbers, or codes, continue to be associated with the samples to which they refer.

13.2 Curators of the collected germplasm, should take practical steps to ensure, as far as is possible and appropriate, that future enquiries from the local communities and farmers who have provided the original material, and the host country, are responded to, and the samples of the plant germplasm collected are supplied upon request.

13.3 Curators should take practical steps, *inter alia* by the use of material transfer agreements, to promote the objectives of this code including the sharing of benefits derived from collected germplasm by the users with the local communities, farmers and host countries as indicated in Article 14.

Article 14: Responsibilities of Users

Without prejudice to the concept of Farmers' Rights, and taking into account Articles 1.7 & 1.8, users of the germplasm, should, to benefit the local communities, farmers and the host countries, consider providing some form of compensation for the benefits derived from the use of germplasm such as:

- (a) facilitating access to new, improved varieties and other products, on mutually agreed terms;
- (b) support for research of relevance to conservation and utilization of plant genetic resources, including community- based, conventional and new technologies, as well as conservation strategies, for both *ex situ* and *in situ* conservation;
- (c) training, at both the institutional and farmer levels, to enhance local skills in genetic resources conservation, evaluation, development, propagation and use;
- (d) facilitate the transfer of appropriate technology for the conservation and use of plant genetic resources;
- (e) support for programmes to evaluate and enhance local land races and other indigenous germplasm, so as to encourage the optimal use of plant genetic resources at national, sub-national, and farmers and community level and to encourage conservation;
- (f) any other appropriate support for farmers and communities for conservation of indigenous germplasm of the type collected by the mission; and
- (g) scientific and technical information obtained from the germplasm.

CHAPTER VI

Reporting, Monitoring and Evaluating the Observance of the Code

Article 15: Reporting by Governments

15.1 Governments should periodically inform the FAO Commission on Plant Genetic Resources of actions taken with regard to the application of this Code. When appropriate, this may be effected in the context of the yearly reports provided under Article 11 of the International Undertaking on Plant Genetic Resources.

15.2 Governments should inform the FAO Commission on Plant Genetic Resources of any decision to prohibit or restrict proposed collecting missions.

15.3 In cases of non-observance by a collector or sponsor of the rules and regulations of a host country regarding the collecting and transfer of plant genetic resources, or the principles of this Code, the government may wish to inform the FAO Commission on Plant Genetic Resources. The collector and sponsor should receive copies of this communication, and have the right to reply to the host country with copy to the FAO Commission. At the request of collectors or their sponsors, FAO may provide a certificate stating that no unresolved complaints are outstanding about them under this Code.

Article 16: Monitoring and Evaluating

16.1 Appropriate national authorities and the FAO Commission on Plant Genetic Resources should periodically review the relevance and effectiveness of the Code. The Code should be considered a dynamic text that may be brought up to date as required, to take into account technical, economic, social, ethical and legal developments and constraints.

16.2 Relevant professional associations and other similar bodies accepting the principles embodied in this Code may wish to establish peer review ethics committees to consider their members' compliance with the Code.

16.3 At a suitable time, it may be desirable to develop procedures for monitoring and evaluating the observance of the principles embodied in this Code, under the auspices of the FAO Commission on Plant Genetic Resources which, where invited to do so by the parties concerned, may settle differences that may arise.