

**FAO International Technical Conference
on Plant Genetic Resources**

**REPORT OF THE SUB-REGIONAL
PREPARATORY MEETING FOR
SOUTH/SOUTHEAST ASIA
AND THE PACIFIC**

**Bangkok, Thailand
3-9 October 1995**



Food
and
Agriculture
Organization
of
the
United
Nations

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INTRODUCTION

1. The ICPPGR/SSEAP Meeting was held at the FAO Regional Office for Asia and the Pacific, Bangkok, Thailand on 3-6 October 1995. It was attended by 28 delegates representing 16 countries, namely: Bangladesh, India, Maldives, Nepal, Sri Lanka (South Asia); Cambodia, Indonesia, Malaysia, Myanmar, Philippines, Thailand, Vietnam (Southeast Asia); Papua New Guinea, Solomon Islands, Kingdom of Tonga, and Western Samoa (Pacific). Also participating were nine representatives from two international non-government organizations - the Third World Network (TWN) and the Southeast Asian Regional Institute for Community Education (SEARICE), and the International Agricultural Research Centres (IARCs) that are based in the sub-region -AVRDC, ICRISAT, and CIFOR. Representatives from IPGRI and FAO also participated as members of the organizing committee, and resource persons, and provided the secretariat.

OPENING CEREMONY

2. Dr. Narong Chomchalow, FAO Regional Plant Production Officer, chaired the opening session and called the meeting to order at 9:00 AM of 3 October 1995. He welcomed the participants on behalf of the FAO/RAP and the organizing committee.

3. Dr. Cary Fowler, Project Manager of the ICPPGR, gave the introductory remarks. He informed the participants that the meeting is the seventh of 11 sub-regional meetings preparatory to the 4th International Technical Conference on Plant Genetic Resources for Food and Agriculture that will be held in Leipzig, Germany on June 17-23, 1996. He emphasized that this was a meeting of the countries of the sub-region, and expressed the hope that the delegates would articulate the aspirations of their respective nations and the sub-region as a whole.

4. Dr. Vichitr Benjasil, Director-General of the Department of Agriculture, Thailand, officially welcomed the delegates on behalf of the host government. He emphasized the importance of plant genetic resources as a "key element in sustainable development and where international cooperation and collaboration is very much necessary" .



5. Mr. A.Z.M. Obaidullah Khan, Assistant Director-General and FAO Regional Representative for Asia and the Pacific, also welcomed the participants to the meeting on behalf of the FAO. In his Opening Address, he laid out the broader perspective and challenges in food and agriculture and enumerated key issues which the meeting might consider and address.

ORGANIZATIONAL MATTERS

6. The meeting elected Dr. R.B. Singh of India as Chairman, Dr. D. Setijati Sastrapiadja of Indonesia and Mr. Lim Eng Siang of Malaysia as Vice Chairmen, and Dr. Randy A. Hautea of the Philippines as Rapporteur.

7. The provisional agenda was adopted with the additional item proposed by Bangladesh to provide an opportunity for the delegates to have a caucus before the working group meetings.

OVERVIEW OF THE FOURTH INTERNATIONAL CONFERENCE AND ITS PREPARATORY PROCESS

8. Dr. Cary Fowler, Project Manager of the ICPPGR, gave an overview of the Fourth International Conference and the Preparatory Process for the 4th International Technical Conference.

9. He reiterated that the ongoing meeting is the 7th of 11 sub-regional and regional meetings organized by FAO, consistent with the principle that the Preparatory Process must be participatory and country-driven to ensure commitment from all participating countries. The country reports and the recommendations coming out of the meetings would be the main input to the 4th International Technical Conference on Plant Genetic Resources.

10. Two key documents are expected to be adopted at the International Conference: the State of the World's Plant Genetic Resources Report and the Global Plan of Action. The State of the World Report would contain the general assessment of the world's PGR - the extent, state, threats, and opportunities to PGR at large; the state of the science and art of PGR conservation with emphasis on the gaps and needs for new information and technologies; and the state of the capacity of member states to conserve, manage and utilize PGR.



11. The Global Plan of Action, on the other hand, would consist of the recommendations that will serve as a blueprint for the course of actions to promote the conservation and sustainable utilization of PGRFA, consisted with the provision of the Conservation on Biological Diversity.

12. Dr. R. B. Singh, Chairman of the Meeting, reiterated the points raised by Dr. Fowler and enjoined the participating countries to focus on substantive issues with clear, development- and action-oriented recommendations during presentations and deliberations. He solicited clarifications and suggestions from the delegates as to what other issues and items must be focused on during the meeting.

13. The Third World Network, through Mr. Martin Khor Kok Peng, requested clarification as to whether the Report would also highlight the causes of plant genetic erosion and what could and should be done to slow down, if not reverse it. He expressed the apprehension that this may be glossed over in country reports and deliberations.

14. Dr. Fowler expressed the view that based on most country reports, there is a consensus that genetic erosion occurs at a high rate at the global level. However, there is little detailed analysis of genetic erosion and its dynamics in various ecosystems. It is therefore important that the problem be clearly defined so that appropriate recommendations can be incorporated in any plan of action.

15. Responding to a request for clarification from Indonesia and SEARICE, Dr. Fowler also explained the procedural matters in inviting NGO's to this and other FAO-organized meetings. As a general rule, the FAO Secretariat is obliged to invite only international NGO's already accredited by FAO. However, the Commission on Plant Genetic Resources is actively encouraging national NGO's to participate in discussions and meetings both at the regional and international levels. The Chairman seconded that the role of NGO's is well-recognized in the FAO system.

16. Malaysia emphasized that the meeting should focus on a few, selected key items. The pressing issue is the need to institutionalize a mechanism for equitable sharing of benefits arising from the utilization of PGR. The Global Plan must come out with a specific system and mechanism to ensure this, otherwise international cooperation on PGR will be difficult to secure. Malaysia likewise emphasized the need for an appropriate rewards and incentive system for *in situ* conservation, Farmers' Rights, individual innovations, as well as institutional efforts. Finally, the GPA must address the needs and rights of indigenous people and communities.



17. Dr. Jayawardena of IPGRI/APO suggested other items that should be taken up. Foremost of which is to consider the whole SA, SEA, and Pacific as one region, where common areas of concern can be identified and where the region as a whole can take a unified position. There is also a need to identify specific issues and areas of concern and responsibilities for international and national initiatives and identify the roles of national centers, international centers and organizations, national governments, NGO's, and others. There is also a need to highlight the strengths and weaknesses of national PGR programmes and develop models for PGR systems appropriate to various countries in the region, taking into consideration their diversity in terms of size, capabilities, and culture that may lead to unique needs.

18. Bangladesh suggested that the concept of community participation should be recognized and be a distinctive feature of the GPA on PGR.

19. India reiterated the importance of accurate documentation of the extent and nature of plant genetic diversity and the rate of genetic erosion. Considering the aspect of utilization, the loss of landraces is a grave concern as they represent genetic resources that are highly useful in crop improvement. There is thus an urgent need to identify the areas where rapid genetic erosion is taking place and ensure adequate measuring to check it. Also, considering the perceived magnitude of genetic erosion in many countries, the importance of *ex situ* conservation cannot be overemphasized.

20. The need for an immediate and comprehensive inventory of PGR in the region was also raised by Bangladesh. It also suggested that an international fund be established for this purpose.

21. Papua New Guinea suggested looking into the need for human resource development to strengthen expertise on PGR that is appropriate for the circumstances of developing countries in the region. It was suggested that there may be a need to establish a training institution in the region for this purpose. The training must have a strong component on management and policy issues, and not just focus on PGR technologies. The suggestion was strongly seconded by Bangladesh and other delegates.

22. Western Samoa flagged the issue of access to PGR. It was pointed out that it is most important that PGR is available when needed, especially to countries that provided the original germplasm. The same concern was also raised by Solomon Islands. The meeting endorsed that this issue must be addressed in the GPA.

23. Indonesia articulated the need for the countries in the Region to have a unified position with regard to PGR issues in international negotiations.



24. Malaysia also suggested that the GPA must incorporate provisions on biosafety concerns. Most developing countries in the Region at present have no capabilities to establish and implement effective biosafety regulations.

25. R. B. Singh summarized the suggestions and issues raised that would be taken up in the meeting as follows:

A. Technical Aspects:

- State of PGR in the countries and the region as a whole
- assessment of the PGR and the nature and extent of PGR erosion
- science and art of PGR conservation and utilization
- capabilities of the national and regional programmes - facilities, human resources, etc.
- need for accurate and quantified information on PGR

B. Non-Technical Aspects:

- equitable distribution of the benefits from PGR
- rewards and incentives for PGR conservation and management
- Farmer's Right, Intellectual Property Right's (IPR's)
- participatory roles of communities, people's organizations, NGO's, etc.
- funding requirements

C. Need for a unified position in the sub-region on matters pertaining to PGR, hopefully including the developed countries in the greater Asia and Pacific Region such as Japan, Australia, New Zealand, and others.

D. Harmonization of Biosafety Rules and Regulations.

PRESENTATION OF COUNTRY REPORTS, DRAFT REGIONAL SYNTHESIS REPORTS AND INSTITUTIONAL REPORTS

26. The participants were grouped into three: South Asia, Southeast Asia, and the Pacific. Member countries in each group presented their respective country reports, highlighting the current state of PGR in their country, conservation and utilization activities, the identified national needs and priorities, and their proposals for incorporation in the GPA.



Reports will be available at the Fourth International Technical Conference on Plant Genetic Resources in Leipzig, Germany.

27. The draft sub-regional synthesis reports for South Asia, Southeast Asia, and the Pacific were presented by IPGRI/APO's Dr. Jayawardena, Mr. Altoveros, and Dr. Riley, respectively. The presenters clarified that the draft synthesis reports were prepared mainly on the basis of information from country reports that were made available earlier. It was agreed that the IPGRI/APO would prepare an updated version of the synthesis reports. The Chairman commended the IPGRI/APO and the presenters for their valuable contributions.

28. CIFOR, AVRDC, ICRISAT, FAO, IPGRI, SEARICE, TWN presented reports on their respective activities related to plant genetic resources conservation and utilization.

WORKING GROUPS AND THEIR REPORTS

29. The delegates of the meeting were divided into two working groups designated as groups A and B. As most countries had two delegates each, they were represented in both working groups. Group A was tasked to discuss the national programme and system on PGRFA while group B was tasked to deliberate on the subject of international cooperation with focus on integration of conservation and utilization. Both groups were also tasked to formulate specific recommendations for the GPA.

30. Working Groups A and B presented their respective reports. Because of commonality of concerns and for purposes of formulating a unified set of recommendations, the outputs of the two groups were integrated. The summary of deliberations and the recommendations are set forth in the following section.

SUMMARY AND RECOMMENDATIONS

31. The meeting took cognizance of the following:

- (a) The sub-regions of South Asia, Southeast Asia and the Pacific are among the most highly populated sub-regions of the world. Paradoxically, while they have achieved improvements in reducing undernutrition during the



last thirty years, the sub-regions still have the largest number of impoverished, hungry and undernourished people.

- (b)** The sub-regions are also one of the megacenters of biodiversity and endowed with immense wealth of plant genetic resources and biodiversity.
- (c)** However, this genetic endowment is being depleted and eroded at an alarming rate. The genetic erosion represents a total and irreversible loss that must be urgently checked, if not reversed.
- (d)** Conservation and sustainable utilization of these resources are crucial in securing the future food and medicine, nutrition, and well-being of the peoples of the region and of the world at large.
- (e)** The importance of these resources and the contributions of indigenous and rural communities in their conservation and enhancement are also seldom recognized and appreciated, especially women. The germplasm and associated knowledge constitute part of these communities' collective intellectual achievements and contributions to the common good and welfare.
- (f)** Access to and control of these bio-resources and associated knowledge by the same farmers and communities are also seriously threatened.
- (g)** Central to the dynamic conservation and sustainable utilization of these germplasm resources is the recognition of the rights accruing to farmers and farming communities because of their unique and significant contributions, and the rights of nation states that have sovereignty over these germplasm resources.
- (h)** A just, fair, and equitable sharing of the benefits costs of germplasm conservation and enhancement, and the benefits derived from utilization of these germplasm resources is imperative.
- (i)** There is interdependence among communities and nations in the conservation and utilization of plant genetic resources. Yet the various countries and the sub-regions have been working somewhat in isolation. To meet the challenges and opportunities, the countries in the region need to forge a common and unified agenda on plant genetic resources, and must collaborate with each other and with the greater global community in pursuing their common goals.
- (j)** The capabilities of farmers, particularly women farmers, communities, and national governments to conserve and utilize these genetic resources are often constrained by, among others, limitations in information and knowledge, funding and logistics, and human resources, as well as by regulatory and policy limitations. A good number of countries in this region, especially low-income ones, do not have the desired level of capacity.



- (k) Countries in the region, to be able to actively and productively contribute to the global efforts for the conservation and sustainable utilization of plant genetic resources, should endeavor to strengthen their respective national programs on plant genetic resources.
- (l) To the extent possible, and where necessary and appropriate, international assistance should be sought and provided to strengthen the national programs on plant genetic resources conservation and utilization.
- (m) The various PGR activities are interrelated. The different conservation mechanisms *viz ex situ* and *in situ* are complementary processes. Likewise, conservation without utilization is of little value. Thus, the need to establish an integrated approach, strategies and activities for the conservation and utilization of PGR in the region can hardly be over emphasized.
- (n) There are several national, regional and international initiatives in the region, but there is poor linkage among them. Likewise, while the PGR needs of certain commodities such as rice are adequately addressed in the region, a large number of commodities of great socio-economic importance for the people remain neglected.
- (o) The past efforts in the region to manage PGR have mostly been around the technological solutions, and socio-economic, ethical, and cultural aspects with profound impact on the resources have generally been neglected.
- (p) There is widespread indifference to the government opportunities on PGR in the region as a whole. It is essential to promote the awareness in the region of the importance of PGR in a comprehensive sense to include food and industrial crops, medicinal and aromatic plants, ornamentals and forest species.
- (q) With new advancement in science and technology, it is essential that countries of the region have access to the technologies linked to the conservation and sustainable utilization of plant genetic resources. In some countries of the region, the capacity to assess and utilize these technologies should be enhanced.
- (r) With the inevitable shift in the paradigm for management of PGR in the region as a whole, new research and technological development initiatives, based on participatory approaches, will be required. The rapid development in the technology, especially biotechnologies, and their impact in the socio-economic development of the region and their potential risks to the environment and human health should be duly recognized.



32. In view of the foregoing, the Meeting put forward the following recommendations:

(1) *In Situ* Conservation

The meeting recommended that *in situ* conservation¹ of PGR in developing countries should be given priority in the Global Plan of Action. Each country shall, as far as possible and appropriate, and with the active participation and involvement of local communities:

- a) establish a system of *in situ* conservation areas where special measures need to be taken to conserve biological diversity for food and agriculture;
- b) develop, where necessary, guidelines for the selection, establishment and management of *in situ* conservation areas where special measures need to be taken to conserve biological diversity for food and agriculture;
- c) manage biological resources important for food and agriculture with a view to ensuring their conservation and sustainable use;
- d) promote environmentally sound and sustainable development in areas adjacent to the *in situ* conservation areas, with a view to furthering protection of these areas;
- e) provide under its national legislation for Farmers' Rights², including a fair and equitable sharing of the benefits arising from the use of the knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity for food and agriculture and promote their application with the approval and active involvement of the holders of such knowledge, innovations and practices;
- f) promote the application of existing international conventions relevant to indigenous peoples, particularly control over their lands, self-management of their resources, and participation in the establishment and management of *in situ* conservation areas; and
- g) increase the resources allocated for *in situ* conservation, especially in developing countries.

¹ As defined in the Convention on Biological Diversity, "*in situ* conservation means the conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings and, in the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive properties".

² As defined in the FAO Undertaking.



(2) Incentive Mechanisms for the Conservation and Sustainable Use of PGR

The meeting recognized that for the effective management of the global genetic resources for food and agriculture, there is a need for an internationally agreed incentive mechanism that provides for the equitable sharing of benefits arising from the conservation and sustainable use of the country which provides the genetic material (rent for the natural capital) and human capital (rent for the traditional knowledge of the genetic material) as well as to the monopoly rights of the breeders/investors who provide the investment and human capital (rent for investment and human capital) for the development of the patented product of plant origin or protected plant varieties under patent or/and effective "*sui generis*" system.

Exploration and bioprospecting

The meeting noted that some countries have legislations, or are in the process of formulating legislations on bioprospecting. In this connection, the meeting noted that the interests and concerns of peoples and communities living in the areas designated for exploration and bioprospecting should be given due consideration in the decision-making process. The meeting recognized the need for an internationally agreed framework to govern the inventive system to host countries which offer their *in situ* conservation areas to the international community, private companies or other interested parties for bioprospecting. The meeting recommended that a multilateral arrangement as opposed to bilateral arrangement be developed for bioprospecting. The meeting recommended that the incentive system must be fair, equitable and transparent to all parties. The meeting further recommended that the incentive system shall consist of two components:

- i) a compensation mechanism based on the area set aside for bioprospecting. The compensation-based mechanism will be based on the opportunity cost of land for other agricultural uses.
- ii) an appropriation mechanism. The appropriation-based mechanism will be based on the fair and equitable sharing of benefits arising from the commercial utilization of genetic resources.

(3) New and Innovative Funding Mechanism for the Conservation and Sustainable Use of PGR

The meeting recognized the need for new and innovative funding mechanisms for the conservation of PGR for food and agriculture, especially to provide the incentives to developing countries to establish and manage *in situ* conservation areas. The meeting recommended that an international taxation system on the sale of the following products be established to provide



the necessary new and additional financial resources required for the conservation of PGR:

- i) patented natural products of plants origins, and
- ii) plant varieties protected under patent or/and effective *sui generis* system.

The meeting proposed that the revenue collected from the international taxation on patented natural products of plant origins or "protected" plant varieties be used for the following purposes:

- i) to pay royalties to the country providing the genetic resources (rent to natural capital) and human capital (traditional knowledge) for the development and production of the patented products or "protected" plant varieties (appropriation of benefits arising from the commercial utilization of genetic resources);
- ii) to compensate host countries which have offered their in situ conservation areas to the international community for bioprospecting;
- iii) to provide additional financial resources to national, regional and international PGR activities research agencies for documentation, characterization and evaluation of germplasm and to provide for the safe storage of germplasm collections; and strengthening of national programmes; and
- iv) to promote the marketing and consumption of products from traditional-based farming systems.

An international fund under the Global Plan of Action should be established for (ii), (iii) and (iv) of the above. An internationally agreed formula shall need to be established to apportion the tax revenue for (i), (ii), (iii) and (iv) of the above and also in cases where the country of origin of the genetic material cannot be established.

The meeting recommended that the proposed international taxation system on patented natural products of plant origin or "protected" plant varieties shall be based on differentiated but common responsibilities of developing and developed countries

- where the patented product or "protected" plant variety is developed and produced in a developed country, the taxation rate shall be 30% of the sale value ex-factory or ex-farm;
- where the patented product or "protected" plant variety is developed in a developed country but produced in a developing country, the taxation rate shall be 15% of the sale value ex-factory or ex-farm;



- where the patented product or "protected" variety is developed and produced in a developing country, the taxation rate shall be 15% of the sale value ex-factory or ex-farm;
- where the patented product or "protected" variety is developed in developed or developing countries but is produced in a least developing country, the taxation rate shall be 7 1/2% of the sale value ex-factory or ex-farm;
- where the patented product of "protected" variety is developed and produced in a least developing country, the taxation rate shall be 7 1/2% of the sale value ex-factory or ex-farm.

The meeting noted that the design and implementation of an international taxation and payment system is not an easy task. However, the proposed international taxation and payment system is essential to provide for an equitable sharing of benefits arising from the conservation and commercial utilization of PGR for food and agriculture; to bring about increased and more effective conservation and utilization of PGR; and to minimize redundancies in national and international collections of PGR. The proposed incentive payment systems will also bring about increased international cooperation and exchange of germplasm and remove the fear of developing countries that their ideas or genetic materials will be patented or misappropriated by others without payment.

(4) Addressing the Causes of Genetic Erosion

The meeting recommended that research, including socio-economic and policy research, be carried out to determine the underlying causes of genetic erosion to enable the countries to monitor and take appropriate action to prevent the loss of valuable PGR for food and agriculture. Some of the causes, e.g. sea level rise, flooding, and stormy seas threaten the very existence of low-lying areas, especially atoll countries which urgently require especially adapted PGR.

(5) Strengthening of National Programmes

The meeting recommended that appropriate and adequate resources be allocated in national budgets to assess and prioritize actions required for conservation and utilization of PGR. These include documentation, inventory of resources, human resource development, capacity building, complementary *in situ* and *ex situ* conservation, characterization, evaluation and use of PGR and promotion of public education and awareness of the importance of PGR for livelihood security.



(6) Regional Cooperation

The meeting noted that regional networking is a potentially effective vehicle for sharing of information, implementing cost-effective conservation methods and carrying out research and development of relevant technologies. The group recommended that the present regional sub-networks in South Asia and Southeast Asia require strengthening to include coordination and secretariat functions and necessary resources to carry out specific agreed activities. In addition, a Pacific Sub-network should be established. The meeting strongly recommended that an Asia-Pacific Regional PGR be established which would include these sub-networks. The East-Asia Network would also be invited to join this Programme. Such a Programme will have its own Secretariat, Steering Committee, Working Groups etc. to increase the collective capability of the Region. Adequate funding support, including those from multilateral systems, should be ensured. In doing so, the topical needs of specific countries and sub-regions should not be ignored.

Keeping in mind the ongoing efforts of national, regional and international programmes, including those of the IARCS, and also considering prospects of development and diversification of agriculture in the region through improving and conserving PGR of veritable underexploited commodities in the region, the group identified the following commodities of future work. In order to share the responsibility among the countries, the groups recommended that identification of a facilitator country to be responsible for orchestrating the work on a specific commodity. Suggested networks are as follows:

Crop/crop commodity	Facilitator country (countries)
1. Medicinal plants	India; Indonesia; Nepal; Vietnam
2. Root/tuber crops (taro, sweet potato, yam)	Pacific countries
3. Fruit/nut species - durian/rambutan/lansium/ mangosteen/rose apple - jackfruit, citrus, mango	Thailand; Indonesia; Malaysia India; Philippines; Vietnam
4. Plantation crops - rubber, oil palm, cocoa, coffee - coconut	Malaysia; Indonesia Indonesia; Philippines; Vietnam
5. Fibre crops - jute - pandanus, mulberry - <i>Musa textilis</i>	Bangladesh Pacific countries Philippines



Crop/crop commodity	Facilitator country (countries)
6. Vegetable crops	Bangladesh; Indonesia; India; Vietnam
7. Ornamental plants	Malaysia; Thailand; Sri Lanka; Vietnam
8. Spices	Indonesia; Philippines; Malaysia; Thailand
9. Other Underutilized crops	Pacific countries
10. Forest species (including bamboo & rattans)	Indonesia; Malaysia; Philippines; Myanmar

Besides the above programmes/activities based on commodities, the region proposes the following programmes to be part of the GPA:

- a) To have duplicate regional collections of the following crops:
 - banana *in vitro* collection in India
 - taro in PNG
- b) To undertake strategic research programmes on the following:
 - taro lethal virus
 - taro leaf blight
 - bunchy top of banana
 - cadang-cadang of coconut
 - Tristeza virus of citrus
 - use of biotechnology/*in vitro*/cryo-preservation for conservation of specific crops which are vegetatively propagated or have recalcitrant seeds.
 - on-farm conservation
 - management of *ex situ* conserved PGR, including the use of new technologies
 - efficacy of core collections
 - rationalizing of genepool sampling
 - new technologies for enhancing PGR conservation and utilization
- c) To establish centres of excellence in the region for human resource development at all levels in the following institutions:
 - UPLB, Philippines



- UKM, Malaysia
 - IARI/NBPGR, India; and
 - IPB Indonesia
 - USP, Western Samoa
- d) The regional programme will serve as the regional database and information centre and shall facilitate free and prompt sharing of the information.
- e) The group greatly appreciated the offer of India to provide safe long term storage of duplicate or otherwise collections of other countries in the region and recommended that such offers should be fully made use of under the international network of *ex situ* collection under the auspices of FAO and as agreed international rules and provisions.
- f) The groups recognized the following: UNCED, Biodiversity Convention etc. the countries in the region are readjusting their PGR activities through several national and international efforts. Such efforts should be duly taken note of and synthesized and submitted as a unified document to FAO for its inclusion in the GPA. This called for a linkage among the various programmes which could best be handled by the proposed regional commission.
- g) International funding support for activities listed under a) to f) above and other programmes must be provided from international funds created for the purpose. The regional secretariat should work out the budget detail and submit the same to FAO.

(7) Biosafety

The meeting recognized the urgent need to established or maintain means to regulate, manage, or control the risks associated with the use and release of living modified organisms resulting from biotechnology which are likely to have adverse environmental impacts that could affect the conservation and sustainable use of biological diversity, also taking into account the risks to human health. In this connection, the meeting recommended the necessary amendments and harmonization of existing quarantine and food safety regulations, to regulate and manage the introduction, release, transfer,



handling and use of living modified organisms and products containing or consisting of products derived from living modified organisms that may have adverse effects on the conservation and sustainable use of biological diversity for food and agriculture and on human health. Legal and technical expertise is required for the formulation of biosafety regulations as well as human resources development, capacity building and infrastructure for the enforcement of such legislations.

The meeting also noted that in many countries, quarantine systems are not in place. The countries are recommended to strengthen their respective systems for quarantine in food and agriculture.