

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

**REPORT OF THE SUB-REGIONAL
PREPARATORY MEETING FOR
EAST ASIA**

**Beijing, China
24-26 July 1995**



**Food
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Note by FAO

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INTRODUCTION

Representatives of the five countries of the East Asia sub-region --- China, Democratic People's Republic of Korea, Japan, Mongolia, and the Republic of Korea --- met in Beijing, China, 24-26 July 1995. Representatives of the International Plant Genetic Resources Institute (IPGRI) attended as observers.

OPENING CEREMONY

The meeting was opened by Mr Cary Fowler of FAO who expressed his thanks to the government of China for hosting the meeting. The contribution of the Department of International Cooperation of the Ministry of Agriculture, the Chinese Academy of Agricultural Sciences, the East Asia Office of the International Plant Genetic Resources Institute (IPGRI) and the FAO Office in China were recognized.

Mr Liu Congmeng, Director General of the Department of International Cooperation gave the opening presentation on behalf of China welcoming participants to the meeting. Mr Qureshi, FAO Representative in China expressed his appreciation to China and conveyed the importance which the Director General of FAO places on the meeting and on plant genetic resources (PGR).

PROCEDURAL MATTERS

Mr Liu Congmeng of China was elected Chairman of the meeting, Mr Moo Sang Lim of the Republic of Korea was elected Vice Chairman.

PRESENTATION OF COUNTRY REPORTS AND SUB-REGIONAL SYNTHESIS REPORT

Mr Cary Fowler of FAO gave a presentation on the Fourth International Technical Conference on PGR and on the principal documents to be



considered by the conference --- the Report of the State of the World's Plant Genetic Resources and the Global Plan of Action(GPA).

Mr Zhang Zongwen of IPGRI gave a presentation on the East Asia PGR Network.

A draft sub-regional synthesis report, based on country reports, and prepared largely by IPGRI, was distributed to participants, and introduced by Ms. Zhou Mingde of IPGRI. The meeting considered that the report was a valuable input to the preparatory process for the Fourth International Technical Conference on Plant Genetic Resources and would be particularly useful to the FAO Secretariat in preparing the Report of the State of the World's Plant Genetic Resources. The meeting expressed appreciation to IPGRI for its assistance.

Representatives of each country gave presentations on the situation of plant genetic resources in their countries. Each presentation was followed by a brief discussion.

RECOMMENDATION TO THE GLOBAL PLAN OF ACTION

Participants focused their attention on developing recommendations to be considered by the FAO Secretariat in drafting the Global Plan of Action. The meeting reached a number of conclusions and agreed to recommendations as follows.

Global food security depends on plant genetic resources for food and agriculture. The Global Plan of Action, therefore, should be prepared carefully and on a scientific basis to provide information about threats to plant genetic resources which necessarily undermine food security as well as to provide a sound basis for the global conservation of these resources.

Global food security depends on mutual cooperation and collaboration, and improved coordinating mechanisms -- values and strategies which should be reflected in the Global Plan of Action.

Collection, conservation, evaluation and use are key elements of an effective genetic resources program. Enhancement of linkages between these activities and between genetic resources workers, farmers, scientists, and plant breeders will strengthen national programmes and global food security.



Strong national programmes, and specifically the coordination of activities, would be beneficial for countries of the sub-region. Due to different government structures, genetic resources conservation activities are often under different ministries or sections of ministries. Coordination is not always easily facilitated in such situations.

The sustainability of conservation efforts depends on maintaining collections in a cost effective manner particularly in light of the funding constraints which affect a number of countries within and outside the region. Sustained minimum funding for such national programmes should be sought which does not threaten accessibility to genetic resources.

The importance of prioritization at the national, regional and global level is recognized. FAO and IPGRI are encouraged to develop scientifically sound methodologies for prioritization of plant genetic resources work. Such methodologies, with examples, should be prepared for next year's international conference with the objective of helping all nations realistically allocate scarce resources for an effective global system for plant genetic resources.

The meeting reaffirmed the recommendation of last year's East Asia coordinators meeting, that strengthening East Asia coordination for conservation and utilization of plant Genetic Resources would be beneficial.

As countries in the sub-region face funding constraints, strategies, methodologies, and technologies to make conservation and evaluation of plant genetic resources cost effective are needed.

Genebank maintenance and operation, appropriate regeneration, evaluation and characterization, and field genebank maintenance, are costly operations which need to be made less costly. Among ways of reducing costs in the Global Plan of Action, the sub-regional meeting wishes to highlight the importance of avoiding needless or excessive duplication of activities and germplasm, and measures to reduce the costs of conversion whilst not compromising the genetic foundation of plants for food and agriculture. In addition, FAO and IPGRI are requested to support research work, including that designed to establish optimum moisture contents for seed storage and cryopreservation, which will lead to more cost efficient conservation. Countries should be provided with information needed to make their genetic resources program efficient and comprehensive.

Regarding the countries of this region, capacity building is needed at all levels for the national programmes in Mongolia and DPR Korea; China needs more training and operational funds for its medium-term collections and for



regeneration and multiplication, and the Republic of Korea requires a widening of crops covered by the programme.

National planning and training is an integral part of national and institutional capacity building. Management training for leaders of national programmes is required. Leaders and mid-level managers of national programmes would benefit from developing skills to improve strategic planning, identify and overcome constraints, and enhance inter-institutional and inter-country cooperation. Most countries agreed that training/education in negotiation and policy analysis was also needed.

In situ conservation is a valuable component of an effective plant genetic resources programme. Some stressed on-farm conservation. Methodologies and approaches to such conservation are underdeveloped and should be further elaborated.

A major gap relates to minor crops and underutilized species, even though some are known to have potential in rural development. Research on such, including plants related to indigenous cultures, requires more attention.

Additionally, it is important to identify rare and endangered plant species with economic and potential value related to food and agriculture, especially in the areas of rapid economic development and industrialization. A comprehensive programme is required to deal with marginalized species despite the fact that they fall outside of governments' agreed priorities for commercial production.

Insufficient attention is given to PGR for food and agriculture of forests, drylands and other marginalized environments, and to the direct use and enhancement of landraces for these and other environments.

An integrated approach to conservation might be beneficial. It would treat *in situ* conservation as complementary to *ex situ* conservation.

Strategic plans need to be developed in relation to wild species of crops and their conservation and use. Many problems exist in this area, not least, inadequate knowledge of the distribution of wild relatives, lack of clear priorities, and inadequate methodologies and management tools for *in situ* conservation to ensure viable population sizes of target species. Difficulties also exist which hamper greater use of these wild relatives. The sub-region is not unique in this regard. These needs are apparent world-wide.

In this region, consideration should be given to *in situ* conservation for wild relatives of rice, soybean, tea, *Amphicaipaea* bean, some wheat grasses, leek and buckwheat. Reserves for conservation of certain tree species, such as mulberry, should be considered.



Further information is needed concerning pasture plants, their conservation, development and use.

While the meeting did not concentrate on forest genetic resources for food and agriculture, some countries consider that a sub-regional programme including technical workshops is needed to discuss forest genetic resources and to develop an appropriate blueprint for action in regard to capacity building, training and research. This would cover forest products (for food and agriculture) any medicinal plants associated with forest areas, and also identify training needs. It would require an assessment of existing activities.

Technology needs/gaps and corresponding appropriate technologies should be identified. Consideration should be given to how transfer of such technologies could be accomplished.

Proposals for enhanced cooperation at the sub-regional level, as made by East Asia PGR coordinators in 1994, were noted.

The importance of greatly strengthened documentation and information systems to the conservation and use of PGR was stressed. Each country should have adequate capacity in this regard. Information exchange and availability is a constraint to collaboration. Language barriers represent an additional constraint. Lack of knowledge of who is doing what and where is also a problem.

Access to germplasm and information on germplasm in genebanks should be encouraged.

The meeting, recognizing funding constraints, asks the FAO Secretariat to include in the Global Plan of Action information on existing funding mechanisms and explore possible new funding mechanisms for PGR activities.

The report of the meeting was adopted.