

# **National Agro biodiversity Policy of Nepal**

# National Agro-biodiversity Policy

## 1. Background

Agro-biodiversity has a significant role for the food security and livelihood of human beings. Since time immemorial, our ancestors have been conserving, maintaining and developing this diversity. Though Nepal is rich in agro-biodiversity, the recent studies have revealed that the genetic resources are gradually disappearing over time and space. In an agro-based country like Nepal, where agrobiodiversity is the backbone for the sustainable development of agriculture, food security and poverty alleviation, it is the national responsibility to conserve, maintain and sustainable use of the available diversity. This necessitates effective institutional environments and programs to meet the needs and aspirations of the future generations.

Like all countries, Nepal makes widespread use of crops for food and forage that comes originally from other parts of the world. Therefore, it is in Nepal's interest to secure access to agrobiodiversity, and plant genetic resources for food agriculture in particular, from outside the country to integrate into its own research and development and development programs, as nationally appropriate.

Realizing the significance of agrobiodiversity and the national commitment in the Convention on Biological Diversity (CBD), 1992 and recognizing also that the International Treaty on Plant Genetic Resources for Food and Agriculture (PGRFA) came into force on June 29, 2004, and other international treaties and agreements, this National Agro-biodiversity policy has been formulated.

### **Vision**

The vision of National Agro-biodiversity Policy is to conserve and sustainable use of agricultural genetic resources / materials and associated traditional knowledge with the participation of concerned stakeholders for present and future generations. In national and international level, effort has been made to conserve biological diversity. The policy intends to recognize agrobiodiversity as an integral component of biodiversity based on the spirit of international treaties / agreements and national initiatives in order to ensure social, economic and environmental benefits to the Nepalese people.

### **Objectives**

- i. To enhance agricultural growth and ensure food security by conserving, promoting and sustainably using agro-biodiversity.
- ii. To protect and promote the rights and welfare of the farming

- communities for their indigenous knowledge, skills and techniques (IKT).
- iii. To develop options for a fair and equitable sharing of benefits arising from the access and use of agricultural genetic resources and materials.
  - iv. To create effective management, commercialization and use of agricultural genetic resources in the present context of exploiting local national and international markets and in international regulations on trade.
  - v. To contribute in maintaining sustainable ecological balances (ecosystems services) over time.
  - vi. To promote the conservation and use of agrobiodiversity in the contexts of national seed, food quality and safety, and product marketing regulations
  - vii. To promote inter-ministerial, inter-sectoral consultation, problem identification and regulation-development as far as agrobiodiversity is concerned

## 2. Definitions

- a. "Genetic material" refers to functional unit of local agricultural flora and fauna including crops, animals and microorganisms available in the kingdom of Nepal.
- b. "Genetic Resources" refers to local agricultural flora and fauna including crops, animals, microorganisms with actual and potential values conserved in *in-situ* and or *ex-situ* forms. It also includes the component of genetic resources, their derivatives and modified forms selected and developed by the farming communities.
- c. "Agro-biodiversity" refers to agricultural biodiversity at agro-ecosystem, species and genetic levels.
- d. "Agro-biodiversity Register" refers to a document of agricultural genetic resources, materials, and their components, derivatives and modifications and associated IKT of the indigenous farming communities in the Kingdom of Nepal.
- e. "Access" refers to collection and acquisitions of agricultural genetic resources / materials of actual and potential values conserved in *in-situ* and or *ex-situ* forms. It also includes collections and acquisitions of component of genetic resources, their derivatives and modified forms selected and developed by the farming communities.  
 Comment: This is a very bilateral/CBD kind of definition, regulating a protective fence put around Nepal's biodiversity. What about Nepal's interests in getting access to materials from other countries, networks, CG centres, etc? By this, I mean the kinds of activities that

would lead to ratifying the International Treaty?

- f. "Use" refers to the utilization of local agro-genetic resources/ materials for scientific studies, research and commercialization for industrial and or any other purposes.
- g. "Farming Community" refers to the indigenous and local communities conserving, maintaining and developing genetic resources based on traditional knowledge and techniques.
- h. "Benefit sharing" refers to sharing of benefits, both in monetary and or non- monetary forms arising from the access, use, trade and exchange of genetic resources / materials.
- i. "Fair and equitable benefit sharing" refers to the system of sharing of benefits in a fair and equitable manner arising after granting permission to access and use of agricultural genetic resources/ materials and traditional knowledge, skills and techniques associated with the conservation, management and use of genetic resources.
- j. "Agreement" refers to mutually agreed terms for the access, use and export of local agricultural genetic resources/ materials as determined by National Agro- biodiversity Conservation Committee (NABC) as per the National Agro- biodiversity Policy.
- k. "Prior informed consent" refers to the written approval order issued on the basis of application for the access, use and export of local agricultural genetic resources / materials.
- l. "Biosafety" refers to the practices adopted for the avoidance, reduction and elimination of the potential risks related to human health, agrobiodiversity and environmental management arising from the commercialization or scientific use of GMO ( Genetically Modified Organism), LMO ( Living modified Organism) and infectious organisms.

### 3. Policy

- i Prioritize and implement programs on scientific studies, research, extension and other programs for conservation, maintenance and sustainable use of agrobiodiversity.
- ii Rights to authorize ownership of the agricultural genetic resources of Kingdom of Nepal shall remain with the His Majesty's Government, Ministry of Agriculture and Cooperative.
- iii The ownership of local agricultural genetic resources shall remain with farmers, farming communities and the His Majesty's Government of Nepal for their roles in conservation, maintenance and sustainable use of genetic resources.

- iv The ownership of traditional knowledge, skills and techniques shall remain with farming communities.
- v Agrobiodiversity registration shall be initiated to prepare a document for which the ownership shall remain with the farming communities.
- vi Rights to grant prior informed consent (PIC) for accessing local agricultural genetic resources and traditional knowledge, skills and techniques for foreign institutions shall remain with the National Agrobiodiversity Conservation Committee of the Ministry of Agriculture and Cooperative, His Majesty's Government, Nepal. What is the good of the farmers' ownership if only the government, and NOT the farmers, has the right to grant (or not to grant) PIC? I can imagine farmers (and NGOs) not liking this part.
- vii Prior informed consent (PIC) shall not be required for the scientific studies and research at the national level. What happens if the research turns out later to lead to commercialization?
- viii Accessors/ users of genetic resources with the intention of export and commercialization shall apply to NABC for approval with the following details:-
  - a) Organization details
  - b) Objective of Access (Research/Commercialization)
  - c) Organizational commitment on the Convention on Biodiversity.
  - d) Organizational policy on farmer's right, sharing of benefits and intellectual property rights.
  - e) Organizational Policy on technology transfer.
  - f) Other necessary detail
- ix Institutions with prior informed consent for access to genetic resources and traditional knowledge shall undergo in the process of agreement for developing technology and commercialization of accessed genetic resources and knowledge. However, agreements shall not be allowed if it has an adverse effect on environment and biodiversity.
- x IPR for innovation on genetic resources and knowledge shall not be claimed inside or outside Nepal? without prior approval of the NABC.

- xi Traditional knowledge, skill and techniques on genetic resources / materials shall be protected as per the national IPR protection legislations.
- xii Benefits arising from use, commercialization and IP rights of agricultural genetic resources and IKT shall be based on the agreements made with the NABC .
- xiii One window policy shall be adopted for the registration, ownership, access, use, commercialization and IPR etc of the genetic resources/ materials.
- xiv Traditional seed system shall be strengthened to protect farmers to-farmers seed exchanges and their access to a wide diversity materials for inclusion in their innovation/production systems.
- xv The NABC shall approve and monitor scientific studies and research for import and innovation of GMO, LMOs and infectious organisms.

#### 4. Strategy

- i Create public awareness at local and central level for conservation, maintenance and sustainable utilization of agro- biodiversity.
- ii Prioritize employment and income generating activities that benefit farming communities by adopting participatory approaches.
- iii Promote the applications of scientific techniques and knowledge based on indigenous knowledge of farming communities.
- iv Adopt effective management systems for implementation and monitoring of short and long-term programs based on agro-ecosystem principles.
- v Enhance co-operation and co-ordination among diverse stakeholders of agrobiodiversity involving governmental, non- governmental, private sector and international organizations.
- vi Develop human resources and basic physical infrastructure facilities for the conservation, maintenance and utilization of agro-biodiversity at local, regional and national level.
- vii Generate internal and external resources for implementation of national agrobiodiversity programs.
- viii Develop mechanisms for a fair and equitable sharing of benefit by providing access and promoting use of agricultural genetic resources / materials or indigenous knowledge and techniques .

- ix Adopt programs for the assessment of environmental impacts in formulating agricultural programs.

## 5. Working Policy

### 1. Situation Analysis

- 1.1. Explore, evaluate and monitor the status of genetic resources.
- 1.2. Prepare inventory of genetic resources.
  - 1.2.1. Conduct scientific studies
  - 1.2.2. Use bio-technological tools
  - 1.2.3. Analyze nutrient status
  - 1.2.4. Analyze market and non market economic values of different forms of agrobiodiversity

### 2. *In-situ* Conservation

- 2.1. Create public awareness through biodiversity fairs and other mass mobilization programs
- 2.2. Initiate program planning in participatory approach at the local level.
- 2.3. Explore the level of diversity and prepare catalogues and maintain herbariums.
- 2.4. Adopt community biodiversity registration programs at the national level.
- 2.5. Undertake socio-economic programs that benefit the farming communities.
- 2.6. Implement programs for sustainable agricultural production systems by integrating sectoral and inter-sectoral activities.
- 2.7. Adopt participatory breeding programs for the improvement local genetic resources.
- 2.8. Promote utilization of genetic resources for accelerating economic growth through programs like eco-farm park, eco-tourism and marketing of local products.

### 3. *Ex-situ* Conservation

- 3.1. Continue exploration and, maintenance of genetic resources including rejuvenation of threatened genetic resources

- 3.2. Establish national gene bank to carry out management and use of genetic resources.
- 3.3. Initiate acquisition of national genetic resources preserved at international institutions.
- 3.4. Promote breeding and improvement programs at the national level based on local genetic resources /traditional knowledge.
- 3.5. Promote links between international collections of ex situ genetic resources, national gene banks, public and private national research institutions, seed multipliers, extension agents and farmers engaged in *in situ* conservation and use

#### **4. Utilization of Agro- biodiversity**

- 4.1. Conduct technology generation / technology transfer programs that benefit farming communities.
- 4.2. Identify a focal point to increase coordination and exchange of information with the concerned stakeholders
- 4.3. Initiate short and long-term training programs for human resources development.

#### **5. Benefit sharing**

- 5.1. Promote national capacity strengthening through working relationships, training, and technology transfers from partners both inside and outside Nepal
- 5.2. Adopt benefit sharing systems based on mutually agreed terms by developing national legislation and regulations.
- 5.3. Develop and implement legislation on *suigeneris* systems to ensure Farmers' Rights.

#### **6. Bio safety**

- 6.1. Create public awareness on biosafety
- 6.2. Develop human resources and infrastructure facilities for implementing bio safety programs
- 6.3. Develop national policy, legislation and regulations on biosafety to regulate GMOs, LMOs etc. with particular emphasis on the conservation and promotion of agrobiodiversity.

#### **7. Economic and Financial Management**

- 7.1. Mobilize internal resources for conservation and management of agrobiodiversity by increasing the participation of community level stakeholders and provide

economic incentives for a certain period of time.

- 7.2. Encourage private sector, non governmental, governmental or international organizations for the implementation of agrobiodiversity projects.
- 7.3. Adopt transparent and effective financial management and monitoring systems.

#### **8. Regulatory Measures**

- 8.1. Develop relevant setoral policies, legislations, regulations, working strategies etc. by involving relevant stakeholders.

#### **9. Governance**

- 9.1. [I am not sure if there is room here to mention something specific about the active multisectoral, multidisciplinary, multistakeholder convening role that the NABC should play in the future. If there is room for such a statement, it would be positive, I think, in terms of justifying fulfilling that role down the road with donors]
- 9.2. Provide opportunities for farmers to be consulted and to participate in the future for decision-making with respect to agrobiodiversity management and use.