Seed System in Nepal

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Current Situation

World

- Seed is an international commodity and its use is moving:
  - Open pollinated – Hybrid – GMO – Terminator
- 10 big multinational companies hold 67% of the global seed trade.
- Monsanto, DuPont and Syngenta capture 47% of the world seed market.

Influence of global seed trade in Nepal

Multinational companies – Nepalese importers – Agrovets – DADO/SMS - ASC
Seed system in Nepal

Broadly, two types of seed system are recognized in Nepal
1. informal Seed System
2. formal seed system

Informal Seed System

- Characterized by farmers producing and preserving their own seeds for subsequent planting.
- Farmers exchange small amount of seeds with other farmers as gift, and for both monetary and non monetary value.
- Most traditional and local land races are product of such selection and maintenance process, these land races are important genetic resources for modern plant breeding.
Formal Seed System

- Characterized by a vertically organized production and distribution of tested and released/registered varieties by public and private organizations using agreed quality control mechanism.
- Comprises different phases of seed cycle: Breeder, Foundation, Certified and Improved seeds.

Agencies Involved in Seed Sector in Nepal

- **Public Sector-led** (NARC, DoA, NSC, STC...)
- **Community-led** (Cooperatives, DISSPRO, CBSP, CSB...)
- **Private agency-led** (SEAN, Seed Cos....)
- **I/NGOs-led** (HMRP, LIBIRD, CEAPRED, FORWARD...)
- **Import Led**
- **FMSP**
Seed Legislation & policy framework in Nepal

- Seed Act, 1988 (1st amendment, 2008)
- Seed Policy, 1999
- Seed Regulation, 2013
- National Seed Vision 2013-2025

SEED POLICY

Objectives

- Bio diversity conservation and promotion of local varieties, land races and their utilization for varietal development, research.
- Ensure production, processing, availability and supply of quality seeds.
- Quality control, regulation and monitoring in seed business.
- Promotion of seed business with collaboration and active participation of concerned stakeholders.
- Self sufficiency, import substitution and export promotion.
- Promotion of national seed industry for competitiveness with international seed business.
### Varietal development, Research and Conservation

- Varietal development and conservation through government, non-government, private, farmers, farmers group and co-operatives.
- Special priority for participatory plant breeding and participatory variety selection.
- Ensure availability and supply of quality seeds of released and registered varieties.
- Prohibition in use of such varieties which are harmful or detrimental effects in human being, living creatures, environment, religious and cultural aspects, and are technologically unsuitable.
- Introducing new laws and by-laws in plant variety protection and conservation of breeder, farmers, and researchers’ right who are involved in variety research and development, investment and technology transfer.
- Simplification in variety registration process for local varieties and land races and protection of farmers rights.
- Priority for local biodiversity conservation, improvement and promotion of local land races research and varietal development.

### Ensure production, processing, availability and supply of quality seeds

- Informal sector seed supply system, farm saved seed and exchange mechanism will be strengthened and protected.
- Production of foundation and other source seeds in non-government, private and co-operatives.
- Climate resilient, neglected, under-utilized, minor crops and important crops seeds production will be prioritized and export promotion of such crop species.
- Information of seed production, demand and supply with modern and sophisticated electronic media.
- Strengthening formal seed production system and maintenance of seed chain.
Promotion of national seed industry for competitiveness with international seed business

- Availability of government and semi-government storage and processing facilities with minimum price for private, groups and co-operatives.
- Promotion of private, co-operatives to collaborate for variety development, research and seed production with multi-national companies.

Seed Self-sufficiency Promotion

- Self sufficiency, import substitution and export promotion of internal seeds as Himalayan Brand.
- Encouragement for organically produced seeds.
- Prohibition/Restrict use of unregistered seeds production, multiplication and use.
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Biotechnology and its use

- Prohibition/Regulation of GMOs, LMOs according to bio-safety rules and regulations.
- Prohibition of terminator gene seed production, sales, use, import, export and registration.
Seed Act 1988

Main features of the Seed Act 1988

- Constitution/functions, duties and power of National Seed Board.
- Power to constitute sub committees under National Seed Board.
- Establishment/functions, duties and responsibilities of seed testing and certification organization.
- Power to notify the kind and varieties and prescribe the minimum level of purity and germination of notified kind varieties.
- Labeling of seed container of notified kind varieties is compulsory (Certification or Truthful label)
- Appointment/functions, duties and responsibility of CI, SS and SA in public and private sector
- Permission from NSB for import and export of notified kind varieties
- Licensing system to establish private seed testing laboratory.
- Permission from NSB is required for seed traders
- Restriction to sale un-notified kind and varieties of seeds
- Power to hear the cases.
बीउ बिजन नियमावली २०६९ थपिएका नयाँ नियमहर

☐ निजी क्षेत्रमा बीउ बिजन परिक्रण प्रयोगशाला स्थापना गर्न सकिने।

☐ गुणस्तरीय बीउ आपूर्तिका लागि दुई किसिमको गुणस्तर नियन्त्रण व्यवस्था:
  ➢ यथार्थ स्थितिक प्रदर्शक: प्रजनन बीउ - श्रेष्ठ बीउ - लेबल बीउ - उन्नत बीउ
  ➢ प्रमाणिकरण प्रदर्शक: प्रजनन बीउ - मूल बीउ - प्रमाणित बीउ - उन्नत बीउ

☐ केन्द्र र सरकारी प्रयोगशालामा कार्यरत प्राविधिक अधिकृतहरूले वाली
निरिक्षक, बीउ बिजन नमूना संकलक र बीउ बिजन विश्लेषक मै कार्य गर्न
सकेन।

☐ गलत विवरण विद्यालय बीउ बिजन विभिन्न भएको हानि नोक्सानीको क्षतिपूर्ति
दिनु पन्नै।

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☐ National Seed Vision 2013-2025
Seed Vision Purpose

- To increase crop productivity, raise income and generate employment opportunities through self sufficiency, import substitution and export promotion of good quality seeds
**Major Activities**

- Capital investment, human resources development, institutional arrangement, infrastructure development, international linkages and collaboration for:
  - variety development and maintenance,
  - seed multiplication,
  - seed processing and conditioning,
  - seed marketing, and
  - seed use
- The total proposed investment is NPR 827 million per annum.
- Harmonization of seed policies, rules and regulations.
- Adoption of public private partnership model in the seed sector development.
- Conservation and sustainable use of indigenous genetic resources.
- Protection of farmers’ rights and rewarding breeders.
- Ensure the supply of good quality seeds in the market.

**Major Outputs**

- Easy access to good quality seeds for one million farm families.
- 750 t of high quality seeds will have access to export market.
- SRR will reach above 25% for cereals and over 90% for vegetables.
- 423 open pollinated and 60 hybrid varieties will be released.
- Yield of rice and vegetable crops will be above 3.8 t/ha and 19 t/ha respectively.
- Private sector will establish or strengthen four big seed companies.
- 293 highly skilled seed specialists will be developed.
- 255 thousand people will get additional full time employment.
- Edible food availability will reach 8 million t, worth around NPR 200 billion at current price.
- Nepal’s seed sector will be able to share its experiences and knowledge to other countries.
Impact

- Food security and poverty reduction
- Employment generation
- Contribution in biodiversity conservation and adaptation to adverse impact of climate change
- Contribution in gender equity and social inclusion.