

Seed System in Nepal



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.

<http://www.gmwatch.org/gm-firms/10558-the-worlds-top-ten-seed-companies-who-owns-nature>

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 ammendment,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.
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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.
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□ 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 नियमहरू

- निजी क्षेत्रमा बीउ बिजन परिक्षण प्रयोगशाला स्थापना गर्न सकिने ।
- गुणस्तरीय बीउ आपूर्तिका लागि दुई किसिमको गुणस्तर नियन्त्रण व्यवस्था :
 - यथार्थ संकेतपत्र पद्धति: प्रजनन् बीउ - श्रोत बीउ - लेवल बीउ - उन्नत बीउ
 - प्रमाणीकरण पद्धति: प्रजनन् बीउ - मूल बीउ - प्रमाणित बीउ - उन्नत बीउ
- केन्द्र र सरकारी प्रयोगशालामा कार्यरत प्राविधिक अधिकृतहरूले बाली निरिक्षक, बीउ बिजन नमूना संकलक र बीउ बिजन विश्लेषक भै कार्य गर्न सक्ने ।
- गलत विवरण दिई बीउ बिजन बिक्रीबाट भएको हानी नोक्सानीको क्षतिपूर्ति दिनु पर्ने ।

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
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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.
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