SeedNet India Portal - A National Initiative of Information Services on Quality Seeds to Indian Farmers for Agricultural Productivity Increase

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Abstract
The National Seeds Policy 2002 (NSP-2002) has suggested, among the others, to: (a) establish a computerised “National Seed Grid” to provide information availability of different varieties of seeds with production agencies, their location, quality etc., (ii) facilitate optimum utilization of available seeds in every region, (iii) prepare a National Seed Maps to identify potential, alternative and non-traditional areas for seed production of specific crops, (iv) provide information on the International Market and on export potential of Indian varieties in different parts of the world, and also (v) create a database on availability of seeds of different crops to assess impact of exports on domestic availability of seeds.

SeedNet India Portal (http://www.seednet.gov.in) is a step towards to achieve the above objectives, as laid down in the NSP-2002. This is a joint initiative of the Central Department of Agriculture and Cooperation (DAC), and National Informatics Centre (NIC). This Portal is a component of the DAC Scheme: “Development of Agricultural Informatics and Communication” of the XI Plan. This Paper discusses the e-Governance aspects of the Seed Sector in India and also how SeedNet India Portal facilitates and has emerged out as an e-Governance Model (G2G, G2B and G2C) for Agricultural Productivity Increase of the Indian farmers.

KEYWORDS
Seed, Variety, Recommended ecology, adaptation, indent, allocation, allotment, lifting resemblance, maturity, morphological characteristics, average yield, reaction to pests, reaction to stress, reaction to major diseases, agronomic features, field inspection, seed analysis, seed processing, tagging and bagging, area offered, class of seed, stage of seed, sowing, season, lot number, germination, seed moisture, genetic purity, BT, seed certification, export and import.

Introduction:
Development of Seed Informatics is one of the ICT initiative and a part of e-Governance implementation in the Department of Agriculture and Cooperation. Seed Informatics and Communication has been proposed in the DAIC component of Central Sector Scheme for making Comprehensive seeds information available on-line (24x7) to the Government and farming community.
Universities and Breeder seed producers also the availability of Foundation and Certified Seeds at different locations. All relevant government orders, Acts/Control Orders, Rules, Quality Control measures, details about extension services, data on export and import of seeds and programmes and schemes of the DAC have been provided on the Portal. The salient features of over 3500 varieties, notified/released are available online from 1966 till 2008. The complete Seed Supply Chain from Indent to Allocation is available online.

Different agencies can provide and update requisite information. Various users, particularly farmers will be able to access the information from a single source. Its outreach is all over India and the stakeholders are Department of agriculture and Cooperation, Government of India, ICAR, State Agriculture Departments, SAU’s, NSC, SFCI, SSC’s ,SCA’s,STL’s, seed Producers, seed Processors, Dealers, Private seed organisations, Researchers and Farming Community.

Services:
SeedNet India Portal provides G2G, G2C, G2B, G2F services with scope for B2B service also. The following online web enabled applications are available on the portal.
- Seed Varietals Information System
- Seed Management Information System
- Policy decision on Export and Import of Seeds
- Seed Certification Management System
- MIS for Seed Testing
- Registration of Seed Dealers

All relevant processes and procedures of seed certification, seed testing, seed processing etc. along with manuals have been made online. Databases have been created to facilitate the above listed online applications. The content available on the portal has been provided by the DAC. It is a one stop single window service for all matters related to seed sector. The applications are easy to use and are user friendly with proper documentation. The SeedNet India portal and applications are hosted on the central server at Internet Data Centre, NIC, New Delhi with full back up support, disaster recovery, high bandwidth, firewall and 24*7 availability.

**Accolades:** SeedNet India Portal was awarded the Best IT Implementation project of the Year -2007 by PC-Quest.

**OUTCOMES**
- Monitor the performance of various agencies involved in seed production and distribution
- Availability of salient features of varieties released/notified to all concerned
- Reduction in time and submission of accurate information to Central Government
- Avoid repetitive compilation
- Information on various organizations engaged in export/import
- Collaboration with foreign companies and quantity of seed proposed/recommended
- Proper Seed management and supply chain to fulfill quality seed requirement
- ICT saves time and money of farmers on acquiring information
- To make available timely and accurate information / status of the departmental activities (circulars, GO’s etc.)
- Reduction of uncertainty by helping to identify and analyze problems
- To bring in Transparency, efficient monitoring and Decision making
- To provide possible guidance / solution to farmers for the problems faced by them.
- Establishment of National Seed Grid

**CONCLUSION**
SeedNet India Portal is a “One-Stop Service” for all information related to Seeds. It integrates all seed players in the country. All the schemes launched by the Government of India are available online. Work flow applications for seed management, seed certification, seed testing etc have been developed. Trainings have been imparted to all concerned and the applications are being implemented. Data bases on seed varieties, seed producers, seed processing units, seed dealers, availability of seeds of different crops to assess impact of exports on domestic availability of seeds, etc. have been developed. Farmers would be richly benefited by the contents provided in the SeedNet portal.

**FUTURE SCOPE**
SeedNet has helped in developing various information systems for each of government agencies/organizations involved in the seed sector like Department of Agriculture and Cooperation, Ministry of Agriculture, State Department of Agriculture, SSCA, SSC, STL. Each of the organizations needs to actively take part in providing accurate and timely information.
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