

INFORMATION TECHNOLOGY

The National Agriculture Policy lays emphasis on the use of Information Technology (IT) for achieving a more rapid development of agriculture in India. In pursuance thereof, the Department of Agriculture and Cooperation is in the process of preparing a National e-Governance Plan in Agriculture (NeGP-A) for a more focused implementation of e-governance activities in the agriculture sector. Phase I of the plan would identify the prioritised list of services to be provided to the farming community and the list of processes requiring re-engineering for the purpose. Phase I of the NeGP-A is nearing completion. Phase II will define the role of the private sector and civil society.

21.2 To promote e-governance in agriculture at the centre and provide support to states/UTs for the same, the Department is also implementing a central sector scheme, 'Strengthening/Promoting Agricultural Information Systems' during the Tenth Plan with a budgetary provision of Rs 100.00 crore. The scheme has the following components: (i) development of agricultural informatics and communication; (ii) strengthening of IT apparatus in agriculture and cooperation in states and UTs (AGRISNET); (iii) IT apparatus at Department headquarters and its field offices; (iv) Agricultural Resources Information Systems (AgRIS); and (v) Kisan Call Centres

21.3 **Development of Agricultural Informatics and Communication:** The Department has developed four portals and 40 websites covering both headquarters and its sub-formations under the component "Development of Agricultural Informatics and Communications". These portals are:

21.4 **AGMARKNET Portal (<http://agmarknet.nic.in>) :** The AGMARKNET portal provides information on (i) prices and arrivals of agricultural commodities at various mandis in eight Indian languages; (ii) trend analysis of prices and arrivals at market/district/state levels; and (iii) grading, packaging, standards, sanitary and phyto-sanitary requirements, and marketing charges. Over 300 commodities and 2000 varieties from 1500 markets are being covered. In all, 3700 markets are proposed to be covered during the Eleventh Plan. More commodities/varieties would be covered on a need basis. Information on prices and arrivals is updated on a daily basis. Conversion of this portal into other regional languages is in progress. A GIS-based National Agricultural Market Atlas for providing information on areas of production, movement, storage market/consumption centres, is also under development.

21.5 **DACNET Portal (<http://dacnet.nic.in>) :** The DACNET portal aims to provide information and services to the farming community on a number of specific subjects. It includes:

- A comprehensive portal on oilseeds which provides information on production programmes/schemes, varieties, crops, seeds availability, diseases related to oilseeds; progress of sowing of oilseed crops; rainfall, area, production and yield data for over a decade; and information on all-India prices of oilseeds, etc.

- Separate portals of Crops Directorates provide information on seed varieties, pest management, quality standards, production statistics, technology and governmental schemes relating to rice, wheat, sugarcane, millets, pulses, cotton, jute, tobacco and horticulture crops. Online weekly reports of area sown, crop condition, and trend analysis for each major crop state-wise are also available on this portal.
- A Pesticides Registration Information System provides a streamlined and simplified registration procedure through quality checks and online tracking of application status. Information on the Insecticides Act, registration procedure, minutes of the meeting of the Pesticides Registration Committee, list of banned products, pesticides statistics, product directory and recommendations on the use of pesticides is also disseminated through this portal.
- Plant Quarantine Information System provides online status of applications for import and export inspections; facilitates adoption of uniform procedures in issuance of phyto-sanitary certificates, import permits and import release orders; fast issuance of certificates on pre-printed stationery; monitoring of certificates issued; information dissemination on pests detected/ quantity imported/exported and revenue collected.
- Website concerning farm machinery provides information on machinery tested, training schedules and modules and application forms for training.
- Website on organic farming provides information on production, marketing, training, field demonstration, status of organic farming in different states and Frequently Asked Questions (FAQs) on bio-fertilizers/organic farming.

21.6 **DAC Portal (<http://agricoop.nic.in>):** This portal provides information on schemes and programmes of the Department, Acts, Rules, reports, publications, documents, conferences, seminars, crop condition, reservoir levels, weather forecast, minimum support prices, etc.

21.7 **INTRADAC (<http://intradac.nic.in>):** The INTRADAC portal facilitates information dissemination within the Department. In addition, information on the Department's personnel and administration, directorates, field units, conferences, seminars, office circulars/notices, agricultural news etc. is disseminated on this portal.

21.8 **SEEDNET (<http://seednet.gov.in>):** The SEEDNET India portal aims to bring all seeds users under a closed-user-group and establish 'Seed informatics online' and develop database on availability, supply and demand for different areas, facilitating the optimum utilisation of seeds in the country.

21.9 **Other Portals and IT Applications:** The details of the other portals and use of IT applications by different divisions are as follows:

- Web-based applications for monitoring project activities of watersheds under the NWDPRA, RVP and FPR programmes have been developed and are under implementation.
- A mass media portal for monitoring and disseminating agricultural programme schedules has been developed. A portal for monitoring of extension activities under extension reforms (ATMA) scheme is under implementation.
- A data-warehousing portal is under development. It aims to provide a repository of data related to agricultural statistics, land use, crop production and crop prices, etc., at one place.
- The All-India Soil and Land-use Survey, a subordinate office of the Department, has conducted soil and land-use survey of about 200 million hectares of land. Most of this data is in non-digital form. Its digitisation at 50,000 scale is in progress.
- Development of a web-based system has been taken up to facilitate the implementation of the National Horticulture Mission. A web-based system to facilitate monitoring of physical and financial progress of the Technology Mission on Horticulture in the North-Eastern region has also been developed.
- The first phase of the National Project on Computerization of Agricultural Census 2000-01 and Input Survey 2001-02 have been completed which provide information on the number of operational holdings and the area operated by the corresponding holders. The data for the earlier census at national, state, district and tehsil levels have been made available through the web for wider dissemination (<http://agcensus.nic.in>).

21.10 **AGRISNET:** The Department is supporting e-governance activities at the state agriculture and allied departments through AGRISNET, a state sector mission mode project, which aims at providing improved services to the farming community using Information and Communication Technology (ICT). Financial assistance to states is also available for the preparation of AGRISNET projects.

21.11 The Department so far, during 2006-07, has approved AGRISNET project proposals from the States of Uttarakhand, Meghalaya, Himachal Pradesh, Nagaland, Sikkim, Orissa, Maharashtra, Mizoram and Punjab. Funds for the implementation of the first phase of these projects have also been released to the State Governments concerned.

21.12 Typical services covered by State Governments in their AGRISNET projects include information on inputs, schemes of central and state governments, weather, land, crop management practices, agricultural markets, soil test results and weather and soil test-based agro-advisory services.

21.13 IT Apparatus at Department Headquarters and its Field Offices /Directorates: Necessary hardware support at the Department and its field offices is provided under this component of the scheme. Computers have been provided to officers and staff along with training, as needed. Video-conferencing facility has also been set up at the Department headquarters.

21.14 Agricultural Resources Information System (AgRIS): This project has been launched for implementation in two pilot districts of Rohtak (Dairy Typology) in Haryana and Banaskantha (Arid Typology) in Gujarat. It aims to develop decision support systems and advisories for the optimum utilisation of agricultural resources.

21.15 Kisan Call Centres: This initiative aims to provide information to the farming community through toll-free telephone lines.

21.16 Activities in the North-east Region: Under the IT apparatus at the field offices and Directorates of the Department (DACNET), the following offices in the North-Eastern region have been covered:

- Directorate of Marketing and Inspection at Guwahati and Shillong;
- CIPMCs at Guwahati, Aizwal, Dimapur and Gangtok;
- Regional Bio-fertiliser Development Centre at Imphal; and
- North-Eastern Regional FMTTI, Sonitpur, Assam.