

“Knowledge Based Information” To Farmers: Technology Based Initiatives in Agriculture Sector

Feature
Ministry of Agriculture

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The Government is implementing a Centrally Sponsored Scheme “**National e-Governance Plan in Agriculture (NeGP-A)**” in the entire country. This centrally sponsored Mission Mode Project (MMP) was introduced during the last quarter of the 11th Plan Period from 2010-11 in 07 selected States (Assam, Himachal Pradesh, Jharkhand, Kerala, Karnataka, Maharashtra & Madhya Pradesh) in Phase-I of this Project and have now been extended to cover all the remaining 22 States and 07 UTs during the current Plan Period starting from 2014-15. The Programme aims to achieve **rapid development of agriculture in India** through **ICT enabled multiple delivery channels such as Internet, Government Offices, Touch Screen Kiosks, Krishi Vigyan Kendras , Kisan Call Centres, Agri-Clinics, Common Service Centers, Mobile Phones (Broadcast, IVRS, interactive messaging using unstructured Supplementary Service Data and Voice Recognition** for ensuring timely access to agriculture related information for the farmers of the country. A number of applications in agriculture and allied sector have been developed under the project for providing integrated ICT based services to farmers.

Knowledge based information is being provided to farmers through a number of **web and mobile based applications** including the Farmers’ Portal (www.farmer.gov.in) (in beta version at present), mKisan Portal (www.mkisan.gov.in) and Kisan Call Centres (KCC). These Portals are facilitating knowledge based information and advisories to farmers through an integrated web portal and mobile based platforms respectively.

Details of the activities in these applications include:

Information and Communication Technology (ICT) Interventions:

Department of Agriculture & Cooperation has developed 80 portals, applications and websites (primarily in collaboration with the National

Informatics Centre) covering both the headquarters and its field offices/directorates. The important portals include SEEDNET, DACNET, AGMARKNET (prices and arrivals in Mandis), RKVY (Rashtriya Krishi Vikas Yojana), ATMA, NHM (National Horticulture Mission), INTRADAC, NFSM (National Food Security Mission) and APY (Acreage, Productivity and Yield).

SMS Portal/mKisan Portal

Officers, Scientists and Experts from all over the country are using this Portal for disseminating information on various agricultural activities, giving topical & seasonal advisories and providing services through SMSs to farmers in their local languages. SMSs classified into three categories, viz. information, services and advisories. The content may include information about the Schemes, Advisories from Experts, Market Prices, Weather Reports, Soil Test Reports etc. The farmers registered for receiving SMS messages have been grouped based on the State, District, Block and the Crops/Activities selected by respective farmers. The SMS Portal provides a platform for integration of service delivery under different sectors viz. Agriculture, Horticulture, Animal Husbandry and Fisheries.

Mobile based services for farmers and other stakeholders being delivered through organisations, Departments and offices of Central & State Govts. down to the Block level (including State Agriculture Universities, Krishi Vigyan Kendras, Agro-Meteorological Field Units) have been brought together under a single umbrella viz. mKisan portal of the Ministry of Agriculture, Government of India. The URL is www.mkisan.gov.in. mKisan Portal subsumes all mobile based initiatives in the field of Agriculture & allied sectors.

Interactive Voice Response System, Unstructured Supplementary Services of Data or USSD (which is essentially Interactive SMS and can facilitate data entry and query on Web Portals without internet), Mobile Apps and Services.

Kisan Call Centres

Kisan Call Centres have been functioning since 21 January, 2004 and working in 14 different locations covering almost all the states. All KCC locations are accessible by dialing single toll free number 1800-180-1551 from 6.00 AM to 10.00 PM on all 7 days a week nationwide. With the improvement in the quality of KCC services due to state of the art infrastructure and new technological features such as Voice Media Gateway, Dedicated Internet Bandwidth, Provision of Voice Mail during call waiting period and SMS to farmers (conveying gist of advisories given), number of calls flowing in to the Kisan Call Centres has increased.

Strengthening of IT Apparatus in Agriculture and Cooperation in the States and Union Territories of which one of the component is AGRISNET.

Department of Agriculture & Cooperation, Ministry of Agriculture, Government of India is implementing a Central Sector Plan Scheme “Strengthening/ Promoting Agricultural Informatics & Communications” of which one of the component is AGRISNET. The objective of AGRISNET is to provide improved services to the farming community through use of Information & Communication Technology(ICT).

As has been informed in a written reply in Rajya Sabha on 20th March 2015 by Minister of State for Agriculture, Shri Mohanbhai Kundaria, information on natural calamities, weather forecast and agromet advisories is being disseminated to farmers through multiple delivery channels including mKisan Portal(through SMSs), Kisan Call Centres (KCCs) of the Department of Agriculture and Cooperation and Gramin Krishi Mausam of the India Meteorological Department.

Information relating to the natural calamities are being provided to district level under a number of initiatives taken by the Ministry and the India Meteorological Department (IMD):

Weather based Information regarding natural calamities disseminated to farmers under different programmes.

- ✓ Weather based information on natural calamities like drought etc. is one of the identified services under NeGP-A pertains to “Providing information on Forecasted Weather” and aims at providing disaggregated District level information in each agro-ecological sub-region on forecasted weather and agro-met advisories through multiple service delivery channels to the farmers (including SMS) .
- ✓ Weather related advisory service to farmers under Gramin Krishi Mausam Sewa (GKMS) is being implemented by the Department of Agriculture, Government of Maharashtra and India Meteorological Department (IMD), Ministry of Earth Services (MoES), Govt. of India.
- ✓ Development of need based content on weather information and advisories to farmers has been initiated by IMD, Department of Agriculture, Government of Maharashtra and GIZ, New Delhi under the project on “Climate Change Knowledge Network – Indian Agriculture (CCKN-IA)”.
- ✓ Mahalanobis National Crop Forecast Centre (MNCFC) regularly (on

monthly basis) carries out drought assessment at District/sub-district level using satellite based remote sensing data, rainfall data and ground information with respect to sowing progression, irrigation percentage, under the National Agricultural Drought Assessment and Monitoring System (NADAMS) programme etc. These assessments are communicated to concerned Departments in States including Maharashtra and are also available online on MNCFC website (www.ncfc.gov.in).

- ✓ IMD in consultation with SAUs, State Department of Agriculture (including Maharashtra) carries out monitoring of drought and other calamities at district level based on the observed rainfall and other parameters like Aridity Index, Standardised Precipitation Index, NDVI etc.

Under the National Agricultural Drought Assessment and Monitoring System (NADAMS) programme, the Mahalanobis National Crop Forecast Centre (MNCFC) carries out drought assessment at District/sub-district level using satellite based remote sensing data, rainfall data and ground information with respect to sowing progression, irrigation percentage, etc. These assessments are communicated to concerned Departments in States and are also available online on MNCFC website (www.ncfc.gov.in).

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