Agricultural Mission Mode Project (National e-Governance Plan)

Prices and Arrivals   Procurement Points   e-Market

Service 5: (a) Providing Information on Prices, Arrivals, Procurement Points
(b) Providing Interaction Platform
(for agricultural commodities – Crop, Livestock, Dairy and Fisheries)

Department of Agriculture & Cooperation
Ministry of Agriculture
Government of India

Software Development Agency
Agricultural Informatics Division
National Informatics Centre
Ministry of Communications & Information Technology
Government of India

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AIMs at

1. Providing Information on prices, arrivals, procurement points

2. Providing interaction platform

1. Aim
2. Objectives
3. Implementation Strategy
4. System Characteristics
   - ❖ As-Is
   - ❖ To-Be
5. Stakeholders
6. Information Providers
7. Issues/Gaps/Challenges
8. Deliverables

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To develop, test and implement Application Software (Apps) and Portlet, for this Service, using ICT Technology:

1. Content Management– Service Portlet development
2. Database Development - Transaction-based & Workflow-based Applications
3. GIS and Data Analysis (Spatial and Non-Spatial)
4. Marketing Intelligence & Alert System
5. Information Service through various Delivery Channels (using end-user computing facilities – e.g. Mobile Applications etc)
6. Grievance Management & Redressal System
   - List of possible grievances
   - Mechanism to redress these grievances
   - Who will redress these grievances?

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- **Prices and arrivals of commodities** (complied to standards (?)) at market yards :
  - Capturing information from auction/market points
    (Clarifications : In Kerala, there is no regulated market).
  - Alerts on Prices (SMS/Email/Web)
  - Alerts on arrivals (SMS/Email/Web)
  - Alerts on Commodity indices (?) (SMS/Email/Web)

- **Minimum Support Price (MSP)**
  - Minimum Support Price (Central Government) + Support Prices declared by state Governments, commodity wise, season wise; year wise;
  - Crop quality (Measures as applicable and in operational)
  - Historic Prices - databases of MSP and related support prices announced earlier (from which cut-of-date) (past history);
  - SMS , email and web based alerts on MSP

- **Details of transporters**
  - Details of transporters - name, address, phone, mobile … including specialized refrigeration vans , rate of transportation, etc. Facilities of transportation from place of production to place of selling (http://www.bhuvan.nrsc.gov.in);
  - Details about subsidized transport and transport subsidy (?) provided by government to farmers;
  - transporters within the vicinity of place of production (e.g. farms);

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2. Providing interaction platform

- **Details of Government Procurement Points (GPPs)** (e.g. Local Markets or Co-Op Societies, …) - A <u>sound Database</u> on Government Procurement Points with all details ; - Crop commodity, livestock product, Dairy products, fishery products etc;

- **e-platform for marketing agricultural produces** (equivalent to matrimonial column)
  – **A**n integrated web-based platform
    - Which will have a business directory (Producer - Trader - Wholesaler - Buyer - Retailer),
    - Commodity, Variety Directory and Product catalogues,
    - Which will have a local search engine,
    - Which will have a Search Engine Optimization (SEO) tool,
    - Which will have customer relationship management (CRM) package , and
    - Which will have content management system (CMS) to store Agreements, terms of conditions etc
    - Match making

- **Estimation of demand for agricultural produces** (instead of issues related to Future prices and arrival trends) - one shall understand how demands for seeds and Fertilisers are projected to the MOA from district level) – Demand-Supply Model : econometric model ;
  – DMI to identify the Stakeholder

- **Grievances Management and Redressal** (related to agricultural marketing) – **Linking of CONFONET project, WTO issues; linking service-6 etc;**

- **International Market prices on agricultural commodities (linking of URLs of various identified websites of competitive Markets, FAO website etc).**

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The prices and arrivals of commodities would cover the following categories :-

- Agriculture Crops
- Horticulture crops
- Floriculture crops
- Plantation Crops
- Fish
- Livestock
- Milk
- Livestock Fodder
- Aromatic & Medicinal Plants
- Non-Timber Forest (NTF) Produces
- Minor Forest Produces

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2. Providing interaction platform

- Formulation of System Requirements Specifications (SRS);

- Design of solution components;

- Development of Application Software (Apps) of Service;

- Installation, Integration and Testing of Apps;

- Security Audit, Testing and Certification of Apps.

- Pilot Run, User Acceptance, Testing and Stabilization of Apps;

- Documentation of Apps (Software and Services)

- Handholding and Maintenance Support of Apps;

- Capacity Building (through Training) for Operationalisation of Apps;

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2. Providing interaction platform

Prices and arrivals of Commodities

– **AGMARKNET project (http://agmarknet.nic.in)**

- Collection of market prices and arrivals from ~ 3300 market nodes (7500 Wholesale Markets; 22000 Rural Markets)
- Dissemination of market prices and arrivals through portal, SMS and email alerts

– **Integration of AGMARKNET with the following agencies for dissemination** of prices and arrivals through various delivery channels

- IFFCO through Kiosks
- Forwards Markets Commission through Digital Display board
- Doordarshan regional channels under Mass Media scheme of Ministry of Agriculture
- Digital Mandi, IIT Kanpur (http://digitalmandi.iitk.ac.in/ new/registration/) through mobile phones
- DeitY Project: Automatic Speech Recognition (ASR) System on AGMARKNET (Research Project by IIT Consortium)

– Agricultural Marketing Boards/Directorates of few states have launched their own web sites. List available at http://agmarknet.nic.in/borddirsites1.htm [Harmonization with AGMARKNET in the NeGP AMMP context should be incorporated i.e. Single source of data entry in states to be enforced]

– Harmonization of following Market Information Systems with AGMARKNET :

- National Horticulture Board (NHB) [Retail and Wholesale Prices] (http://www.nhb.gov.in/OnlineClient/MISDailyReport.aspx)
- Directorate of Economics & Statistics (DES) [Retail Prices]
- Department of Consumer Affairs (DCA) [Retail Prices]

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e-mandi system : to look into projects implemented in Raichur and Mysore (Karnataka) , which have the following features :-

- Capturing of information such as Farmer's name, Commodity Name, Approximate Quantity etc. , at market entry gate;
- Quoting of the commodity price by the traders / Farmers;
- Declaration of auction awardees, based on quotes;
- Weighing of commodity after completion of auction process

Minimum Support Price (MSP)

MSP is announced well before the commencement of the crop seasons every year by the Central Government and State Governments declare incentives / Bonus on this MSP based on the level of acceptable moisture and prescribed quality standards.

System Characteristics (As-Is)

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Government Procurement Points (GPPs)

– Paddy procurement system implemented in Chhatisgarh
– Electronic Warehousing Receipt System of NCDEX

e-platform to be studied for marketing agricultural produces

– Agro Telemarketing Centre platform for phone and SMS based interaction among buyers and sellers (NIC, Bolangir, Orissa) http://as1.ori.nic.in/agrotelemark
– National Spot Exchange Model enables e-trade in a host of commodities to market participants, including farmers, traders, processors, warehouse service providers and banks.
– e-Krishi (http://www.e-krishi.org) of Kerala
– Rural Bazaar – e-Commerce solution that allows the efficient and cost-effective showcasing and marketing of rural products
– e-Choupal (http://www.echoupal.com)
– Tihar Bazar (http://tihartj.nic.in)

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Comparison of e-interaction platforms

Buyer/Seller Platform	URL	Brief Description	Business directory	Local search engine	Search Engine Optimization Tool	customer relationship management package	content management system (CMS)
e-Krishi	http://www.e-krishi.org	The vision of the project is to establish a connected farmers community throughout Kerala who have access to information on Market Demand, Prices, Good Agricultural practices, Quality Agricultural Inputs supported by a technology enabled robust transaction platform that facilitates all their offline activities.	Yes	Yes	Yes	Yes	Yes
Rural Bazaar	Intra Portal of NIC	It is e-Commerce solution that allows the efficient and cost-effective showcasing and marketing of rural products. The foremost idea behind the RuralBazar solution is to showcase the products developed by rural communities. Also by simply showcasing the rural products with rich content are good enough for making their presence feel in global community.	Yes	Yes	Yes	No	No
e-Choupal	http://www.echoupal.com	It is the unique Web based initiatives of ITC's Agri Business Division, offers the farmers of India all the information, products and services they need to enhance farm productivity. Farmers can access latest local and global information on weather, scientific farming practices as well as market prices at the village itself through this web portal in regional languages, Choupal also facilitates supply of high quality farm inputs as well as purchase of commodities at their doorstep.	Yes	No	No	No	No
Tihar Bazar	http://tihartj.nic.in	Tihar Prison is the largest prison complex of Asia. It houses as many as 11,000 inmates. A diverse range of products are manufactured in the factory with the use of best quality ingredients.	No	No	No	No	No
Agro Telemarketing Centre	http://as1.ori.nic.in/agrotelemark	Agro Telemarketing Centre, to facilitate farmers and traders to sell and buy various agro products.	Yes	No	No	No	No

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- **Application systems**

  - Capturing of prices and arrivals from auction points
    (Pilot Markets identified by State Government: Assam: Hojai Gandhi Market, Himachal Pradesh: Solan Market, Jharkhand: Ranchi Market, Karnataka: Davangere Market, Kerala: Maradu Market, Ernakulam, Madhya Pradesh: Indore Market, Maharastara: Rahata Market, Ahmednagar)
  - e-platform for marketing agricultural produces
  - Data Mining Application – Prices & Arrivals
  - Estimation of demand for agricultural produces
  - Grievance Management Application
    - User Module, Status Tracking, reports, email, etc.

- **Database Requirements**

  - Database on commodity prices & arrivals
  - Database on Government Procurement Points
  - Database on Minimum support price and add-on bonus by States
  - Database on buyers & sellers of agricultural produce
  - Database on transport service provider
  - National Farmers Database
  - Database on Arthiyas (Licensed Middleware)
  - Importers & Exporters Database
  - Database of District Regulatory Market Committees, co-operative societies and the details of marketing inspector

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Information on prices, arrivals, procurement points and providing interaction platform
(for agricultural commodities)

- **Content Creation Requirement**

  - Packing materials provided by Government agencies
  - Government Procurement Points policy and agreement
  - Best practices for agricultural marketing (Linkage to Service 3A) – IndiaGAP
  - Grading and Standardization
  - Commodity profiles
  - Contract farming
  - Details of Agro Processing Centres
  - Details of Food Processing Centres, practices, technology and supply chain
  - Searchable information on regulated/terminal/rural markets
  - Searchable information on storage structures

- **GIS Requirements**

  - Government Procurement Points locations within the vicinity of markets/villages , Distance, Rail/Road network …
  - Transporter details including transporter locations, connecting roads, distance, mode of transports, cost ……
  - Location of the markets, rail/road/water network ……

Service3A- Providing Information on Good Agricultural Practices

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Central Level Organizations

- Department of Agriculture & Corporation (DAC)
- Ministry of Communications & Information Technology
- DE&IT, Deptt of Post-e-Post, NIC, NKN, NeGP, SWAN
- Deptt. Of Telecommunication-BSNL, MTNL
- Ministry of Commerce (Wholesale price index)
- Food Corporation of India (FCI)
- Commission for Agricultural Costs & Prices (CACP)
- Food Consumer Affairs
- Forward Markets Commission (FMC)
- Directorate of Economics and Statistics (DES)
- Directorate of Marketing & Inspection (DMI)
- Agricultural and Processed Food Products Export Development Authority (APEDA)
- Marine Products Export Development Authority (MPEDA)
- Food & Civil Supply Departments
- Agro Industries Corporations
- Fertilizer consumption (Fertilizer Association of India)
- Commodity Exchanges
- Import and Export (DGC & IS)
- Krishi Vigyan Kendras (KVKs)
- Cooperatives (IFFCO, KRIBHCO…)
- Commodity Directorates/Boards (NHB, CDB….)
- Cotton Corporation of India (CCI)
- Jute Corporation of India (JCI)
- Tobacco Board
- Coffee Board
- ……

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- **State Level Organizations**

  – State Agriculture Marketing Boards
  – State Transport Authority
  – State APMCs/RMCs
  – State Agricultural Universities/Colleges
  – State Procurement Agencies
  – Regional Transport Unions
  – ICAR Institutes
  – Labour Bureau, Shimla ……

- **Private Sectors**

  – Farmers, Traders, Exporters, Importers, etc.
  – Importers and exporters of agriculture produce
  – Agri-business firms/consultants
  – SHGs (Self Help Groups) & Apex Bodies ……

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2. Providing interaction platform

- Prices and arrivals of commodities: AGMARKNET (http://agmarknet.nic.in)
  – Fish prices (Fisheries Co-operative Societies, National Fisheries Development Board (NFDB), etc.)
  – Livestock Prices (Central Livestock Organizations and its allied institutions, etc.)
  – Milk Prices (Primary Village Dairy Co-operatives etc.)
- Minimum Support Price (MSP): Commission for Agricultural Costs & Prices (CACP)
- Government Procurement Points (GPPs): State Government's Agriculture Marketing Boards, Food and Civil Supply Departments, Agro Industries Corporations, FCI, etc.
- Transport Service Providers: State Transport Authority, Regional Transport Unions, APMCs
- e-platform for marketing agricultural produces : User's registration interface to build database on buyers & sellers, Agricultural Markets
- Estimation of demand for agricultural produces: DES, DMI, FMC etc.

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2. Providing interaction platform

- Prices and arrivals of commodities:
  - Inconsistency and Irregularity in Data Reporting (AGMARKNET) (http://agmarknet.nic.in)
  - Standardization of local names of commodities/varieties (Very Imp)
  - Localization of contents
  - Auction level process may vary from state to state (In Kerala, there is no regulated market)

- Minimum Support Price (MSP):
  - non-availability of information on "Add on Bonus" declared and acceptable moisture level for procurement of commodity at Government Procurement Points by State Government
  - No local language publishing of MSP except for Hindi
  - Need for regular updation of the data by the concerned departments as soon as the MSP is declared

- Fixing responsibility of concerned state departments /agencies for regular updation of data with respect to Government Procurement Points (GPPs) and transport service providers to make it more useful and cost effective to farmers

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2. Providing interaction platform

- e-platform for marketing agricultural produces :

  – Large scale replication of models like Agro Telemarketing Centre in Orissa. In this model, buyers/sellers have to make a call at the call centre and provide their details which is used by the call centre to facilitate interaction.

- DMI has to identify the central/state departments/ institutes etc which will be responsible to provide procedure/mechanism for calculating the estimation of demand of agricultural produces.

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- Detailed Enhanced SRS Document
- Detailed Technical Requirements Specifications Document
- Systems Design Document (SDD)
- Software Test Plan Document
- Software Acceptance Plan Document
- Project Reviews and Progress Reporting
- Manuals (Operations, User, System Administration)
- Training Plan
- Training
- Software on CD with Manuals
- Warranty Support for Six months
- Change Management Documents

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1.
2.
3.

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Presentation slides at http://ammp.dacnet.nic.in/service-05.pptx

Service Project Team :-

A. **Central Team**
   1. Smt. Pratibha Lokhande, Technical Director & National Project Coordinator (NeGP-AMMP)
   2. Shri Rakesh Kumar Goel, Technical Director (Cluster Coordinator)
   3. Shri. Rajesh Kumar Srivastava, PSA (Service Coordinator)

B. **State Level team**
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Thank You