







- Agricultural Knowledge and Technology Management(AKTM) Frame work
- **AKTM** in NARES and Others
- >>> What we have ....
- >>> Future plan and way Forward.....



# National Knowledge Commission (NKC)

- system, promote domestic research and innovation, facilitate knowledge application in sectors like health, agriculture, and industry.
- Leverage information and communication technologies to enhance governance and improve connectivity.
- Devise mechanisms for exchange and interaction between knowledge systems in the global arena.







# Towards a Knowledge led Agriculture.....

- An inclusive knowledge led agriculture requires an effective harnessing of ICTs
- >>> The issues of importance in AKM are
  - >>> Content
  - » Access
  - » Capacity Building
  - >>> Establishment of KCs





# Our Focus is on.....



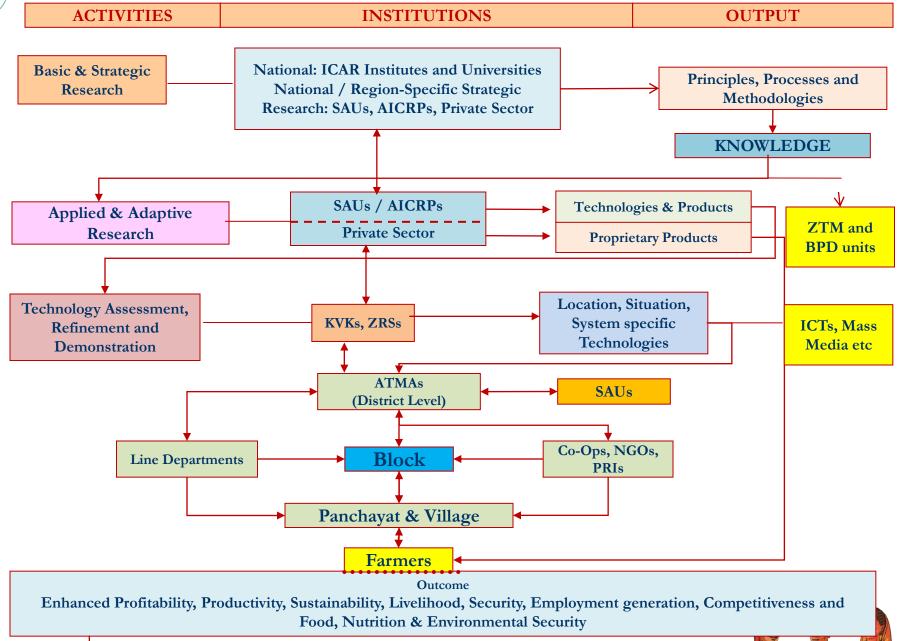
- Promotion of free exchange of knowledge
- Promoting diversity of content in the media and information networks
- Access to information and knowledge from a rich variety of sources
- As information streams become more globalised, it is imperative to share local cultural and linguistic expression through local content production
- To ensure a strong public domain of information which is readily accessible to all.







## Ag. Knowledge Management Framework in India





# AKS Management



#### **Knowledge Source**

National Agricultural Research System - NARS

- Deemed Universities (4)
- Institutions 45
- National Research Centres 17
- National Bureaux 6
- Directorates/Project Directorates 25

#### **Management Centres**

National Knowledge Management System

DKMA **IASRI IPR & TM**  **Knowledge Delivery** 

**DKMA IASRI IPR & TM** 

#### Zonal and Regional level

- **Central /State Agric. Universities(55)**
- Other organizations dealing with agricultural research
  - public and private,
  - national and international
- **Farmers**

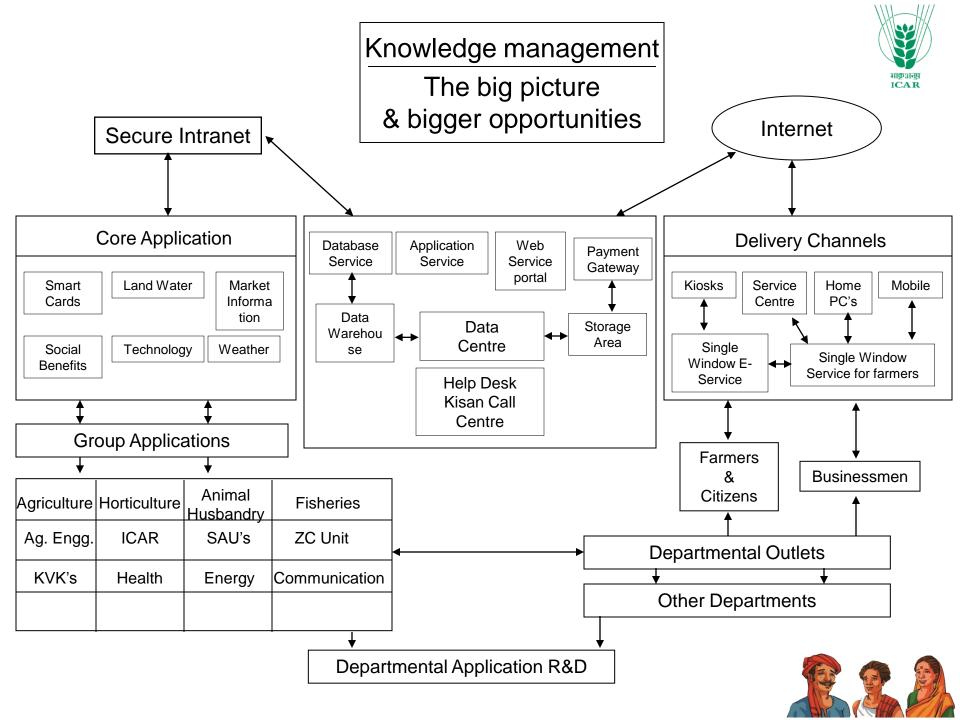
**ICAR Research Institutes/ Centres/ Directorates/ Bureaux and SAUs** 



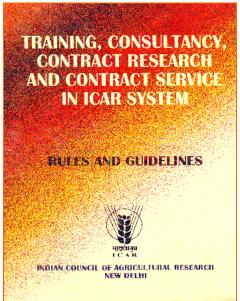
BPD & ZTM / ZPDs / ATIC/KVK/ ATMA/VKC

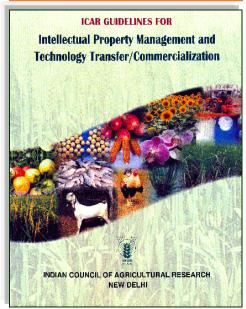
Centre for Development of Advanced Computer (C-DAC) National Informatics Centre (NIC) Education and Research Network (ERNET)



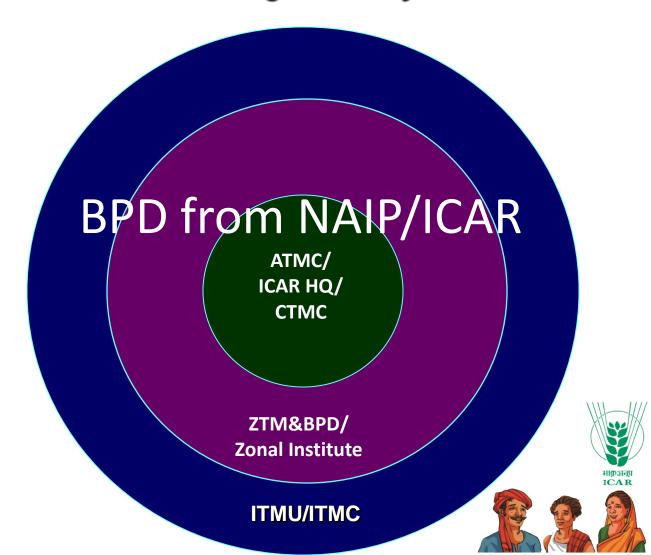


## The Policy Framework and Initiative from ICAR

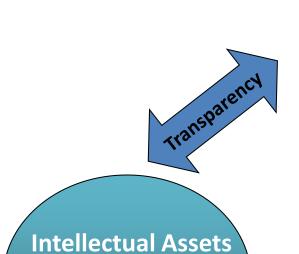




# **IP Management System**



## The Process of Knowledge Management



-Documentation

-Projection

- R&D Projects - Human Skills

**IP Auditing Up scaling** Commercialization **Consultancy, Contract** 

Research/Service, **Revenue generation** 

-Data bases

-Data books

-Other records

Performance linked

**Assessment Appraisal** / Reports





# **IPR and Technology Commercialization**

Patents (2008-09)				
Applications filed	55			
Cumulative	385			
Granted Patents	55			
Foreign Patent Applications	3 PCT + A few National Phase			
Plant Varieties				
Applications Filed	635 (577 extant and 58 new)			
Published Applications	301			
Registered / protected Varieties	63			
Trademarks				
"PUSA" by IARI, New Delhi				
"ARKA" by IIHR, Bengaluru				
"IISR" by IISR (Spices), Calicut				
"KNOCK WP" and "TRIVIR 1%" b	y DOR, Hyderabad			
"CIFAX", "CIFABROOD" "Jayanti	i Rohu" by CIFA, Bhubaneswar			
"Vanaraja" and "Gramapriya" by	PD Poultry, Hyderabad			
Copyrights				
Registered copyrights on	CIAE, Bhopal			
Software	DSR (Soybean), Indore			
	NBFGR, Lucknow			

NBPGR, New Delhi



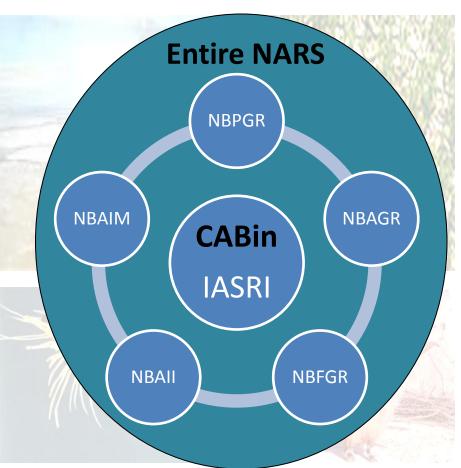
## **Bio-informatics GRID**

































# **Reaching the Unreached**











•295 in 2011-12 •667 during the 12<sup>th</sup> Plan





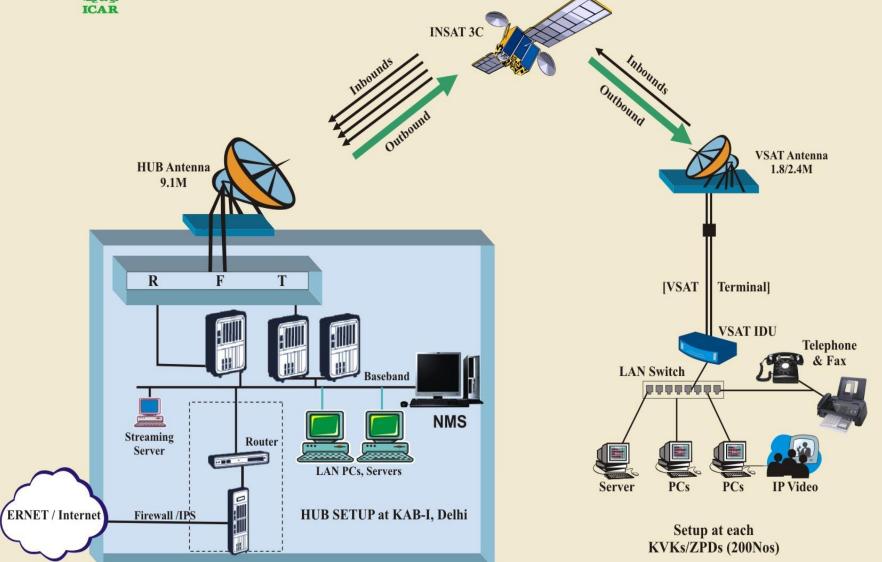
AT 200 KVK/ZPDs





# e-Linkage to KVKs through VSAT Network [Established and Operated by ERNET India]





# **KVK- Knowledge & Resource Centre**

- District database
- **Repository of agriculture** knowledge, technology and innovation

# Knowledge

Farming sys and **Production sys Agri. Technology Markets (Demand** and Prices) **Policy** 

#### **Organize farmers**

**Exchange of** information **Facilitating learning** from experience Support in decision making



#### Tech. Resources

**Frontier** technologies **Capacity Building Infrastructure** 

**Critical Technology Products & Problem Solving consultancy** 

Seed, Saplings, Bioagents etc.



Competency **Evaluating** 

**Technologies** Market intelligence

**Agro-logistics** 

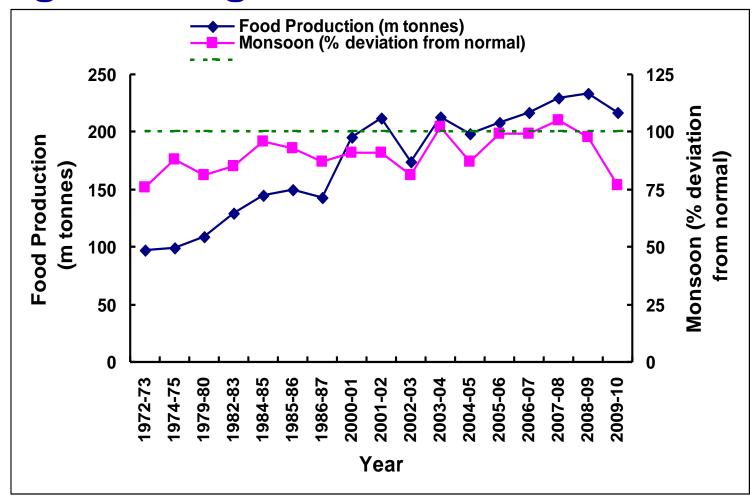
**Group dynamics** 

Threats and opportunities





## **Drought management - A case**



#### Monsoon 2009:

- Erratic and deficient
- 299 Districts encompassing 12 States declared drought hit
- 12 districts of Rajasthan were worst hit



			24.7				24.7							* 01.Jun-	13.Jul
S. No	Meteorological Sub Division	(June - Sep)	01.Jun To 09.Jun	01.Jun to 16.Jun	01.Jun to 23.Jun	01.Jun to 30.Jun	01.Jun to 07.Jul	01.Jun to 08.Jul	01.Jun to 09.Jul	01.Jun to 10.Jul	01.Jun to 11.Jul	01.Jun to 12.Jul	*01.Jun to 13.Jul	ACT (mm)	NOR (mm)
1	Andam & Nico Islands	1755	-48	-43	4	-6	15	14	12	11	12	11	10	683	620
2	Arunachal Pradesh	1835	39	-13	-11	-19	-14	-14	-14	-14	-14	-14	-15	584	687
3	Assam & Meghalaya	1885	17	-15	-21	-18	-23	-23	-24	-24	-24	-24	-24	647	851
4	Nag, Mani, Mizo, Trip.	1241	53	4	-7	-4	-8	-10	-13	-14	-15	-13	-15	498	583
5	Sub-Himal W.Bengal	1955	-16	-18	-5	13	12	11	11	11	17	14	17	875	746
6	Gangetic W. Bengal	1136	-34	-45	-32	-17	-26	-27	-30	-31	-29	-28	-27	281	383
7	Orissa	1165	-76	-46	-49	-25	-23	-23	-25	-28	-28	-24	-25	267	356
8	Jharkhand	1093	-86	-83	-73	-45	-49	-51	-53	-55	-56	-50	-48	169	327
9	Bihar Plains	1039	-88	-80	-38	-36	-39	-43	-46	-45	-39	-29	-24	237	313
10	Pradesh	914	-99	-84	-82	-72	-67	-69	-70	-70	-66	-60	-58	93	223
11	Plains of West UP	773	-83	-82	-85	-82	-32	-36	-39	-43	-42	-38	-30	120	172
12	Uttarakhand	1223	0	-30	-38	-30	-4	-5	-6	-10	-12	-13	-14	282	328
13	Hary, Chandi &	470	107	2	-35	-53	34	30	22	17	11	7	12	120	107
14	Punjab	502	223	40	-9	-15	21	20	13	6	2	9	17	132	113
15	Himachal Pradesh	774	421	142	82	40	79	71	62	55	51	44	40	264	189
16	Jammu & Kashmir	514	90	50	40	58	24	19	13	11	13	12	9	130	119
17	West Rajasthan	263	925	404	214	78	57	62	59	53	45	36	31	85	65
18	East Rajasthan	624	-14	-43	-61	-56	-13	-10	-13	-16	-19	-23	-27	103	142
19	W. Madhya Pradesh	904	-95	-50	-68	-50	-24	-19	-20	-22	-25	-27	-31	159	228
20	Pradesh	1097	-95	-70	-55	-61	-42	-39	-40	-42	-42	-33	-31	207	299
21	(DD & N.Hal.)	934	18	2	-28	-49	-31	-32	-33	-35	-35	-37	-38	169	272
22	Saurashtra & Kutch	486	428	177	42	-11	19	19	29	32	29	25	22	199	164
23	Konkan & Goa	2802	-61	-1	8	-1	-5	-4	-4	-5	-5	-7	-9	1036	1136
24	Madhya Maharashtra	700	-55	97	84	37	22	20	17	13	9	7	6	253	240
25	Marathwada	704	-83	-15	-16	-18	61	64	63	58	54	54	51	321	212
26	Vidarbha	976	-86	-32	3	-14	7	10	13	10	7	9	11	346	310
27	Chhattisgarh	1206	-82	-62	-46	-52	-38	-36	-37	-39	-38	-33	-31	246	354
28	Coastal AP	575	-32	82	80	39	54	66	63	59	57	58	57	256	163
29	Telangana	767	-81	-21	-9	-24	13	20	20	18	19	24	22	272	222
30	Rayalaseema	381	19	101	82	56	54	54	53	53	74	70	71	155	91
31	T. Nadu&	316	44	93	99	90	55	56	69	70	80	76	84	128	70
32	Coastal Karnataka	3174	-71	-21	-23	-16	-11	-12	-13	-16	-18	-20	-21	1104	1396
33	North Int. Karnataka	491	-33	49	52	18	29	27	25	22	21	17	16	168	145
34	South Int. Karnataka	659	8	30	14	0	-9	-11	-13	-13	-9	-12	-14	205	239
35	Kerala	2143	-56	16	-5	-1	-7	-9	-10	-12	-14	-15	-17	861	1035
36	Lakshadweep	985	-40	8	-23	-2	9	8	12	10	8	6	4	454	438

#### Seasonal rainfall situation (% Departure from normal) in India (01.June-13.July 2010)

## Regional rainfall situation (01st June -13th July)

COUNTRY AS A WHOLE	-12
NORTH	-14
	-15
	8
NORTH	-20

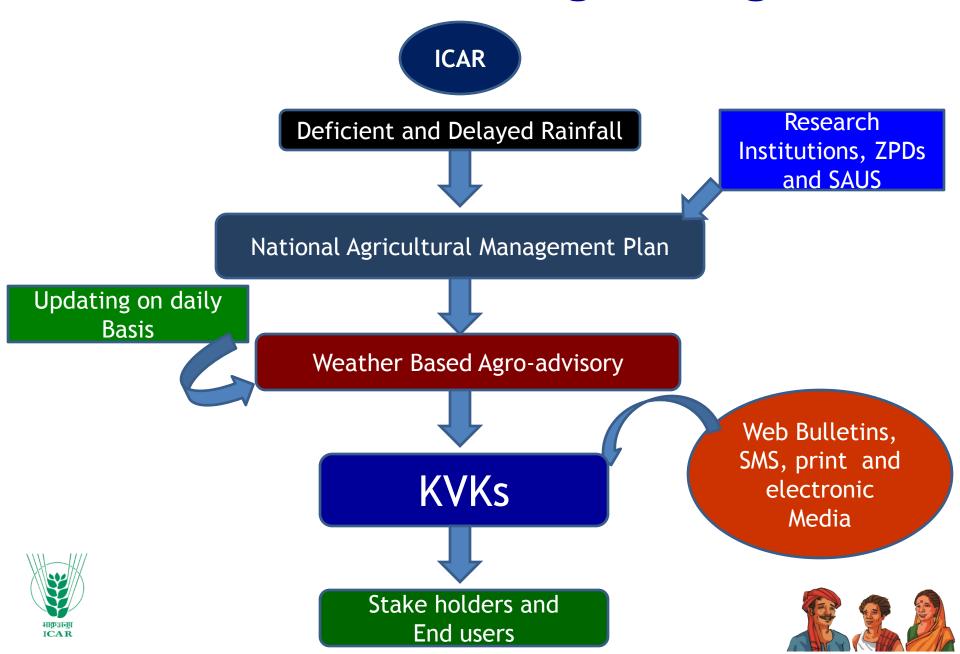
\*These bar diagrams have been prepared based on the data supplied by IMD.

#### **LEGEND:**

Excess: (+20 or more)	
Normal:(+19 to -19)	
Deficient:(-20 to -59)	
Scanty:(-60 to -99)	
No Rain:(-100)	



# **Action Plan on Drought Mitigation**



# KISAN MOBILE ADVISORY (KMA)

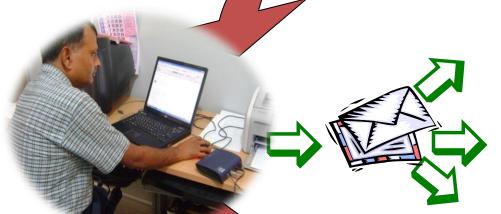
**KVKs Using KMA** 

## भाकु अनुप LCA R

#### **Schedule for sending message**

- **•Every Tuesday and Friday**
- •2 message per farmer in a week.
- •104 message per farmer in a year.

Total expenditure per beneficiary / year – Rs. 46.80



- Comprehensive weather based agroadvisory services
- Benefits to farmers in saving on input cost, time of spraying, irrigation scheduling and crop harvesting



**Selected Farmers Group** 



**Selected Extension functionaries** 



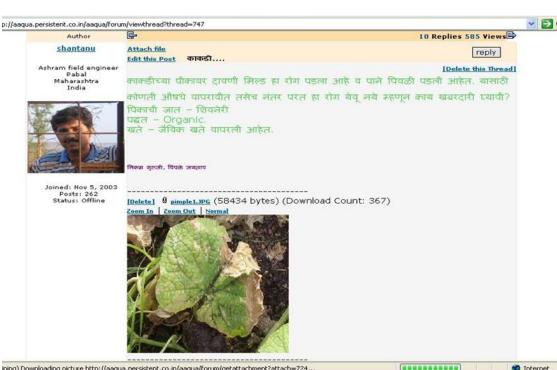
Selected agro clinics & dealers



## **aAqua** – A Bilingual Portal, a virtual university model by KVK Pune, Maharastra

- aAqua A Bilingual Portal, a virtual university model was developed jointly by KVK, Pune and IIT, Mumbai.
- The KVK is responsible for content development while IIT is associated in software development and maintenance of the site.
- Broad based digital content on agro technologies for various crops grown in the state was made.
- Expert and decision support systems, and query based redressal in local language and keyword browsing.
- The KVK recently started providing mobile SMS services called agro-advisory services to the villages.





# Innovative model of ICT in Agriculture

## Krishi Vigyan Vahini

"Centralized Data
Communication System (CDCS)
Through Dialup
Lines for Farmers"

## **Computer-Telephony Interface**

- Out reach in 823 (935) VPT villages
- Prompt delivery of location specific messages
- Delivery of message in local language.
- Digitization of the content



# **ATICs** - Single Window Delivery System of agriculture technology and products



"ATIC is a "single window" support system linking various units of a research institution with intermediary users and end users (farmers) in decision making and problem solving exercise"

- Direct access to institutional resources
- Mechanism of feedback



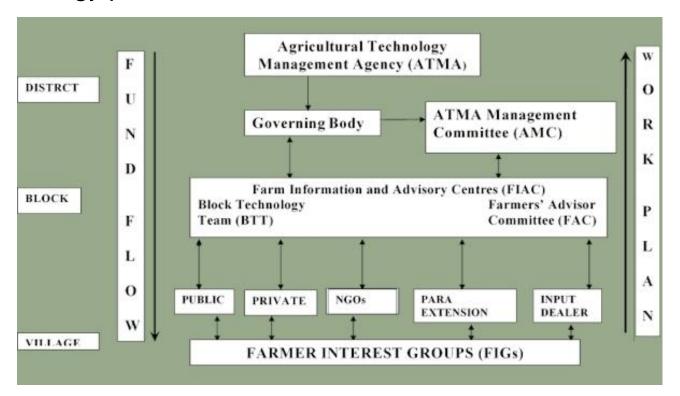






## **ATMA** — Agriculture Technology Management Agency (in 593 districts)

District level agency to bring convergence among agricultural knowledge and technology providers in a district



- 32 Kisan Call Centres (toll free number 1800 180 1551): in operation since 2004, 24x7
  - Total Calls answered during the year 2010-11: 2043636
  - Total calls answered during last 5 years : 6247911
  - Call escalation at 3 levels KVKs/SAUs, ICAR centres/State and national centres

# **DISK** – Dairy Information & Services Kiosks: Decision support system

- Information communication centre initiatives and knowledge centre eg. VIJAYA DAIRY
- Rural automation, smart card, AMCs, ERP implementation
- Provides database
- Internet connectivity
- »» DCS
- >>> Farmer with ID code/ smart card
- Disk database contains

Breed and history of disease

Al and pregnancy

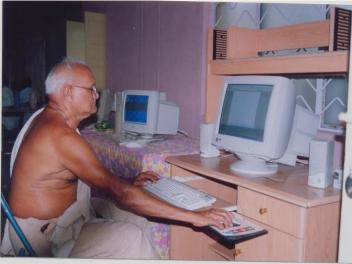
Data on milk production by individual farmers

Forecasting of milk collection and provide feed back to farmers











## **NAIP** Initiatives

भाकुअनुप

- Development of 10 crop knowledge models
- » Portal based decision support services
- Advanced Q&A forum designed. 2.2 million SMS texts transacted with over 26,000 farmers
- Adjudged best ICT- enabled agri project in 2010
- »» Rice knowledge management portal
  - single gateway for info sharing and aggregation
  - web-based KMS & MIS for ACRIP

- ASRB on line examination system- fast & efficient
- Re-usable learning objects (RLOs) in ODL
- 9 communication centres set up to enhance public awareness of ICAR
- >>> FMS/MIS

#### **Consortium for e-Resources in Agriculture: CeRA**

- Covers 120+ libraries in NARS (Institutes, SAUs, NRCs, PDs, NB and Hqrs.)
- Journals in CeRA from Publishers 2917





# Agropedia & Krishiprabha



- Innovative KM portal conceptualized, created and released
- Tremendous international curiosity: over 230,000 visitors from 196 countries, 84,225 unique, 70.6% new





- Digitization of full text of over 6,000 PhD theses submitted during 2000-2007 completed and hosted on the internet.
   IP password basis given to all libraries
- Google, proposes to index the contents of Krishiprabha database in Google Scholar





- Online access to over 2,000 journals to 124 libraries in NARS
- Over 800,000 articles downloaded; Investment of nearly Rs. 8 crores paid back

## **Data Processing:**

- Statistical Computing
- Bioinformatics platform



# **AKS National Projects**



Project	Major Focus						
FERTNET	Network for Integrating Nutrient Management						
VISTARNET	Agricultural Extension Information System Network						
PPIN	Plant Protection Informatics Network						
APHNET	Animal Production and Health Informatics Network of 42000						
	Animal Primary Health Centers						
FISHNET	Fisheries Informatics Network						
LISNET	Land Information System Network						
AFPINET	Agricultural and Food Processing Industries Informatics						
	Network						
ARINET	Agricultural and Rural Industries Information System Network						
NDMNET	Natural Disaster Management Knowledge Network						
Weather NET	Weather Resource System of India						
AGRISNET	Network of Agricultural Offices for Extension & agribusiness						
	Activities						



# **AKS National Projects**

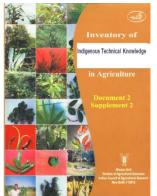


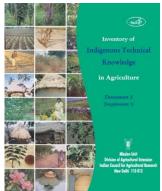
Project	Major Focus						
AGMARKNET	Network of Agricultural Produce Wholesale Markets (7000) & Rural Markets (32000)						
ARISNET	Agricultural Research Information System Network						
SeedNET	Seed Informatics Network						
CoopNet	A Network of Agricultural Primary Credit Societies (PACS) and Agricultural Cooperative Marketing Societies (93000)						
HORTNET	Horticultural Informatics Network						

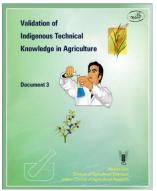


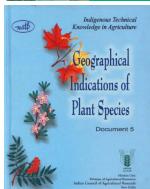
# "Collection, Documentation and Validation of Indigenous Technical Knowledge (ITK)" under NATP

- 33 thematic areas
- Validation of 111 ITKs and Cross-sectoral validation of 37 ITKs.
- Geographical indications of 224 plant species. ITKs documents in 7 Volumes,
- 7 ITK e-Book and Resource Book on training on ITK.









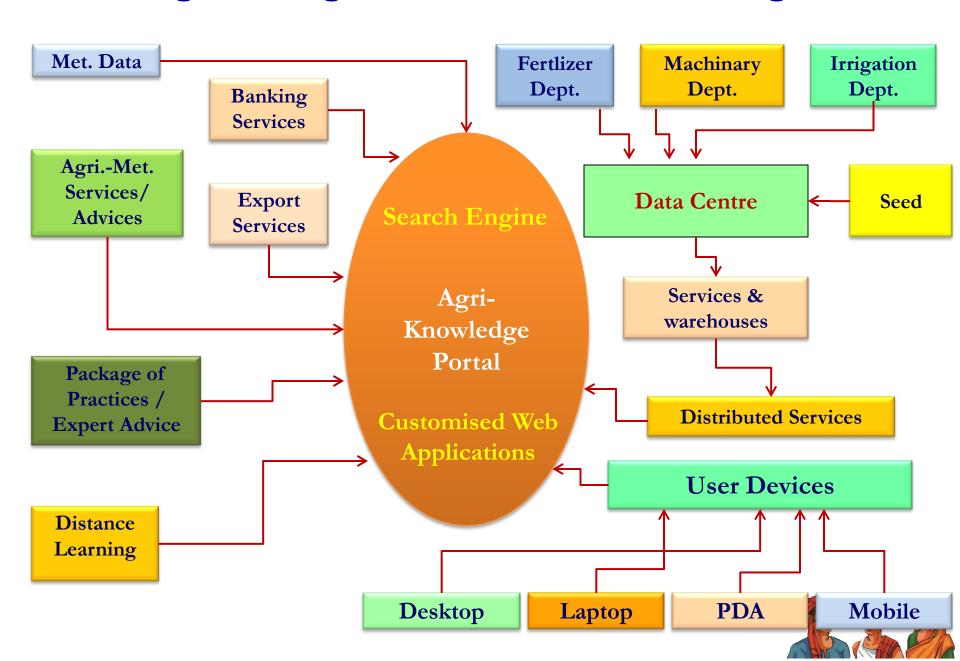
### **Farm Innovations**

- Analyzed, categorized and documented 139 innovations
- Brought out publication –Farm Innovators 2010
- Organized National Farm Innovators Meet – 2010





## **Knowledge Management Portal in Indian Agriculture**





# Regional and State

- >>> To create a knowledge and technology repository for NE region.
- Act as an information, knowledge and technology gateway.
- Provide a platform for interface among stakeholders in agricultural development.
- To foster linkage among partners and collaboration with State and regional organizations.
- Act as a catalyst to strengthen the existing institutional capacity through convergence and networking.
- Provide Technology and Development consultancy along with the details of technology dynamics and kinetics.
- Programming a sustainable agriculture development in the region and provide support for strategy formulation for research and extension.

## Successful AKS cases from India

- >>> ITC E chaupal and I–Kisan of Nagarjuna
- AKS on 'Cattle health' and information Kiosk of RAGACOVAS and TANUVAS
- MSSRF information village, VRCs, VKCs.
- Warna wired village project (WWV)
- Gyandoot project purveyor of knowledge
- Project AKSHAYA of Kerala govt.





# E – chaupal

www.echaupal. com	Wheat, pulses, rice	Hindi	UP, MP, Rajasthan
www.soyachou pal.com	Soyabean	Hindi Marathi	MP, UP, Rajasthan, Maharashtra
www.plantersne t. com	Coffee	English Kanada	Karnataka
www.aquachau pal.com	Shrimp	Telugu	AP

## **I-Kisan**

- भाकुअनुम ICAR
- Agri Portal of Nagarjuna Fertilizers
- Online Information to Farmers,Trade Channel Partners andAgri Input/Output Companies
- >>> Focus on 20 Crops
- Forecasting, Current Events in Agriculture, Input and Output Suppliers' Directory

Online Chatting With Experts



# **Regional and State**



## Drishtee Tele-centers (State govt.)

- Initiative of Govt. of Rajasthan
- Network of 200 Tele-centers & 45,000 Kiosks For Knowledge Management

## TNAU Agritech Portal (SAU system)

- Initiative of Tamil Nadu Agricultural University, Coimbatore
- Single Window Information Delivery on Production Technologies, Inputs, Diagnostic Facilitation



## TNAU AGRITECH PORTAL transforming the lives of farmers...



English | தமிழ்

Home | About Us | Success Stories | Farmers' Association | Farmers' Innovation | TNAU Publications | FAQs | Contact



#### Agriculture



SRI, Rice, Pulses, Oil Seeds, Forage, Millets, Cereals, Season, Irrigation, Weed, Pest, Disease, read more...

#### Horticulture



Nursery, Fruits, Vegetables, Flowers, Spices, Plantation, Medicinal, Aromatic Crops, Landscaping, read more...

#### Agrl. Marketing



Commodity Boards, Schemes, Food Processing, Value Addition, Markets, read more...

### Agrl. Engineering



Farm Machinary, Bio-energy, Processing, PHT, Machinary, Equipment, Conservation, read more...

#### Seed



Seed Production, Seed Certification, Processing, Breeder, Foundation, Seed Law, Seed Act, read more...



#### Organic Certification



Organic, Certification, Accreditation, Vermicompost, Pseudomonas, Panchagavya, read more...

#### Sericulture



Mulbery, Silk worm Rearing, Cacoon, Sericulture, read more...

#### Forestry



Agro Forestry, Social Forestry, Silviculture, Timber, Wildlife, Contract Farming, read more...

#### Fishery



Fresh water Fish, Marine Fish, Prawn, Fish Species, Riverine Fishery, Ornamental Fish, read more...

#### Animal Husbandry



Cattle, Livestock, Poultry, Piggery, Veterinary Services, Goat, Pig, read more...

# citations for AWard WINNERS 2011

## TNAU Weather



#### TECHNOLOGIES

Crop Production
Crop Protection

Crop Improvement

Seed Technology

Bio Technology

Post Harvest Technology

Bio-Fuels

Mealybug Biological Control

#### SPECIAL TECHNOLOGIES

Rajarajan 1000
Precision Farming
Sustainable Sugarcane Intiative
Good Agricultural Practices
Good Laboratory Practices
Good Manufacturing Practices
Canopy Management in Mango
Ultra High Density in Mango

#### **SCHEMES & SERVICES**

Govt. Schemes & Services
Development Blocks
Banking & Credit
Crop Insurance
KVK | ATMA | NGOs & SHGs
Agri Clinics
Kisan Call Centre
MDG-2015

#### DAILY EVENTS

TN-Uzhavar Sandhai
TNAU-DEMIC
TNAU Community e-Radio
THE HINDU - Podcast
Television Programs
Farm Radio Programs
Farm Magazines
Water Level (Dams)

## What we have from ICAR ...



## **Information System - 63 +**

- >>> Plant Variety Information System
- Plant Variety Germplasm Registration System
- "NORV" Notified and released varieties of India
- IINDUS, Indian Information System as per DUS guidelines
- National Information System for PestManagement (Bt –Cotton)
- Phenotypic Characterization of Animal Genetic Resources of India (AGRI-IS)
- Water bodies information systems for West Bengal.
- E-Pest: Awareness-cum-surveillance programme for the management of major pests
- Digital Herbarium of Medicinal & Aromatic plants

- >>> Networking of herbal gardens in India
- Fodder Resources and Waste land of Bay Islands
- NISM, National Information Sharing Mechanism for the PGR –GPVR (Germplasm and Plant Varieties Registration)
- National Information System on Long Term Fertilizer Experiments
- Project Information & Management System Network for NATP
- Personnel Information Management System Network (PERMISnet)
- National Information System on Agricultural Education Network in India (NISAGENET)



## What we have from ICAR ...



## **Decision Support Systems/ES – 21 +**

- Wheat Crop Management
- Marine Fisheries Management
- Advisory System for Potato crop Scheduling
- Nutrient Management in Tuber Crops
- GIS Based Decision Support System for Aquaculture in Cold Water Region
- Rice-Crop Doctor
- Expert System for SERICULTURE
- Expert System for GROUND NUT CROP
- KMART: Decision support system for farmers, researchers, policy makers and development officials
- PES is Poultry Expert System of poultry farming.



## What we have from ICAR ...



## E-Advisory/E-Learning Resources – 22+

- Geospatial Village Knowledge Management System (GVKMS) (Web Based)
- Knowledge Management for Agricultural Research and TechnologiesKMART (Web Based)
- Strengthening of Digital Library and Information Management under NARS: e-GRANTH
- Consortium for e-Resources in Agriculture: CeRA

## Data Warehouse - 01 (59 + databases)

Integrated National Agricultural Resources Information System (Web Based)



## **Online Wheat Expert System**



Introduction

History

**Botanical Desc** 

**Growing Areas** 

**Cultural Practices** 

Wheat Pest

General IPM

Wheat Species

Machineries

Harvest Tech

**Current Trends** 

New Horizon

Statistical Info

Institutions

Site Map

Contact Us



**EXOWHEM** is a web based Expert System developed for the wheat growing farmers of India. It provides the complete information about the Wheat Crop Management in the country. It advises wheat varieties on the basis of area, cultural and climatic conditions and other characteristics of farmer's interest. It also suggests the





## **Online Expert System of Extension**





Home | Introduction | Objectives | Research | Design Techniques | About Us | Help | Contact Us

EXPERT SYSTEM OF EXTENSION

#### Lead Institute

IARI

Core Groups

Collaborating Institute

**IASRI** 

#### **Resource Institutes**

**IIPR** 

NRC Rapeseed & Mustard
IIVR

CCS HAU

IRRI

CIMMYT

#### Online Agriculture Expert that Works!

It has been experienced that many times the extension workers who are less educated are not in a position to advice the farmers according to their needs and available resources for maximum profit. It is also not possible that one can adopt the same practices which others are doing with similar resources, because their needs and situation may be different. Therefore, their is a great need for an intuitive knowledge based system, which may suggest suitable crop or agro-enterprise looking some basic needs and resources of the farmers. The expert system of extention is only appropriate answer in the present circumstances.



This site is visited 3743 times since 10.12.2004.

Farmers / Extension Workers Click Here To Enter In The System



Indian Agricultural Research Institute
Indian Agricultural Statistics Research Institute

Contact ADMIN with queries and suggessions. ©2003 IARI & IASRI

## Online Horticultural Information Sys.



## **Horticultural Information System**

#### Horticulture Scenario

Horticulture includes fruits, vegetables, floriculture, medicinal and aromatic plants. The sector has established its importance in improving land use, promoting crop diversification, generating employment and above all providing nutritional security to the people. India has made a fairly good progress on the horticulture scenario of the world. The major crops in case of fruits are mango, banana, citrus, apple, pineapple and in case of vegetables are potato, onion, tomato and other seasonal vegetables. Approximately, 60% of the horticultural crops are consumed by the local population or marketed in the nearby markets and only 40% of the produce is channelised in the regulated markets for the consumption of urban population in big cities.

Out of the total percentage of Agro Exports, fruits, vegetables, flowers and processed products contributes only 5.59%. It has been estimated that the post harvest losses of horticulture produce are very substantial which needs urgent attention. Though the country is the second largest producer of horticulture produce in the world, our per capita consumption of fruits and vegetables for one billion population is very low.



Home

## Online Expert System Indiakisan.net















A collaborative Project of Andhra

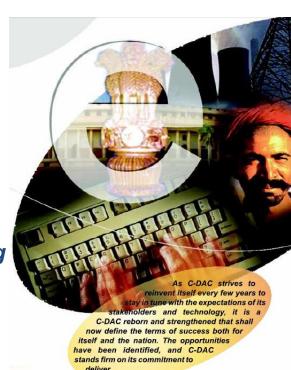
http://indiakisan.net/web/home.html





- SMART Small and Medium Applications of Rural Technicalization helps to link the developed technology with well identified end user requirements
- Bharateeyaoo, Matrubhasa, DAAL, ECKO, e-kamps, Vyapar and multilingual Virtual class room.
- DAAL Document Access Across Languages

CDAC: Centre for development of advanced computing



## **Data Centre of ICAR**

### Some facilities that will be available:

- Gateway of agricultural resources for research, management, and development
- Platform for data integration, data sharing, data management
- Repository of data bases/data warehouse in the ICAR required for DSS/ES/Modelling etc.
- Web services including MIS
- Common E-mail Id for all ICAR personnel
- >>> Portal of ICAR
- >>> Content dissemination
- Availability of software tools



## **Issues & way forward**

- by 2007 60th anniversary of our independence. But still long way to go.....
- Domestic Software Development and Application: Reaching the unreached possible only through the integrated ICT system
- Consortium of content providers will have to be developed for each agro climatic zones.
- Participatory knowledge system management:
  - Farmer Participatory Knowledge System (FPKS) could replace the existing beneficiary and patronage approach to knowledge dissemination.
  - Need for promoting participatory methodologies of content creation & knowledge management.
  - Approach is of partnership and not patronage.
  - Virtual Academy for Food Security and Rural Prosperity.

## **Issues & way forward**



## Sustainability and replicability

Should be the bottom line in the development of National Action Plan for the every village a knowledge centre movement.



