

राष्ट्रीय ग्रामीण विकास एवं पंचायती राज संस्थान NATION ALINSTITUTEOF RURAL DEVELOPMENTAND PANCHAYATIR AJ

















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ICTs for Rural Development



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## **ICTs for Rural Development**

We live in the era of 'Information Revolution'. Democratisation of information made ideas, opinions, knowledge and services accessible to everyone, everywhere at anytime. Information and Communication Technologies (ICTs) are facilitating faster sharing of knowledge and are acting as key agents for development across

the globe. The last decade witnessed rapid technological developments in the field of ICTs, particularly the internet and mobile phones. They have become affordable and accessible to everyone. No doubt, Information Technology (IT) revolution in India has made considerable impact on the country's economic

development and it is providing job opportunities to millions. But, at the same time, we failed to carry forward the benefits of ICT to rural India in the initial years of IT revolution (1995 –

2005), which created a digital divide of information 'haves' and 'have-nots'. Understanding the need for bridging this gap of 'digital divide' and to ensure social equality, the Government of India is making substantial efforts to create digital awareness and integrate ICTs for rural development.

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### **Need of ICTs for Rural Development**

ICTs can be considered as a fundamental element of any rural development activity as it addresses the design, delivery and utilisation of community information systems, which eventually guarantee empowerment of rural communities through addressing the following issues related to rural transformation:

- Strengthening rural governance (transparency, accountability, administrative efficiency and decision making)
  - Encouraging social transformation (increased flow of information and knowledge)
  - Ensuring better quality of life (improved access to markets, health and education)
  - Enhancing people's participation (mobilising people and seeking their willingness for participation in development process).

The Rural Development programmes (MGNREGA, DDU-GKY,





Mission Antyodaya, DAY-NRLM, PMAY, etc.) and the schemes for related sectors including Agriculture, Animal Husbandry, Fisheries, Rural Banking, Education, Health, Panchayati Raj, Governance and Disaster Management, could be effectively implemented and monitored by adopting appropriate ICT products and services.

The early successful experiments on 'ICT for Development', carried out between 1995 and 2005 by many organisations in selected locations, including MSSRF-Village Knowledge Centres (VKCs), ISRO-Village Resource Centres (VRCs), SATCOM Project, Community Information Centres (CICs) in Northeast region of India, ITCe-Choupal, Akshaya e-Literacy Project of Government of Kerala, e-Seva Project by Government of Andhra Pradesh, etc. paved way for launching of flagship programmes, 'National e-Governance Plan (NeGP)' in 2006 and later 'Digital India' in 2015.

#### **Digital India and Rural Development**

The Digital India to is a flagship programme launched by the Government of India in 2015 with a vision to transform India into a digitally empowered society and knowledge economy. Digital India consists of three core components, i.e., providing digital

infrastructure at rural level, delivering citizen-centric services and ensuring universal digital literacy. The 'e-Kranti', one of the key pillars of Digital India, ensures electronic delivery of services to the citizens through 44 Mission Mode Projects (MMPs), covering a wide range of domains, viz. agriculture, land records, health, education, banking, women empowerment, police, courts, panchayat management, etc.

- 1. Infrastructure: Core infrastructure components include State Data Centres (SDC) at State headquarters, State-Wide Area-Network (SWAN) at district-level and Common Service Centres (CSC) at panchayat-level. The CSC 2.0 scheme, launched in 2015, aims to expand the outreach of CSCs in all village panchayats across the country and ensure the delivery of citizen-centric services at their doorsteps. The key initiatives under infrastructure component include - Aadhaar, Mobile Seva, e-Sign, DigiLocker, Direct Benefit Transfer (DBT), Jeevan Pramaan, BharatNet, CSC 2.0, Digitise India, GeM, IRCTC Connect, Open Data, National Super Computing Mission, etc.
- **2. Delivery of Digital Services:** Key services include e-PDS, SWAYAM,

Passport Seva, Soil Health Card, National Voters Service Portal, National Scholarship Portal, Mother and Child Tracking System, mKisan, eNAM, ePathshala, Panchayat Enterprise Suite (PES), BHIM App, Nirbhaya App, Swachh Bharat App, etc.

Digital Literacy and Digital **Empowerment:** Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMG-DISHA) scheme aims to make six crore people in rural areas digitally literate by reaching to around 40% of rural households, covering one member from every eligible household, by March 31, 2019 and bridge the digital divide. Other citizen empowerment related initiatives include Pradhan Mantri Kaushal Vikas Yojana (PMKVY), Pradhan Mantri Jan Dhan Yojana (PMJDY), Digi Dhan Abhiyan, Aadhaar Enabled Payment System, PAHAL (DBTL), NREGASoft, MyGov portal, etc.

### Mobile Phones: A Catalyst for Rural Transformation

Strategic reforms in telecommunications sector since 1990s have facilitated strong ICT infrastructure in India. In particular, it revolutionised the mobile penetration in rural India. As



on November 2017, the total number of telephone subscribers were 1185.88 million (1163 million mobile phone and 23.4 million landline subscribers) which included 497 million subscribers from rural areas, as estimated by the Telephone Regulatory Authority of India (TRAI). The mobile tele-density (number of mobile subscribers per 100 individuals) has reached 90% as on November 2017.

Mobile devices are handy and they facilitate content creation, storage, access and sharing of information anytime, anywhere. Moreover. technology advancement has led the usage of mobile phones from mere 'voice calls' to other useful services like messaging, internet-based data services and apps, making the community more connected and knowledge-empowered. Introduction of smart phones, competition among service providers, availability of a plethora of online services and policy support from the Government have made mobile phones affordable and acceptable by rural India in a shorter period than expected.

The success and failure of mobile-based services broadly depends on the target group, demand-driven content, mode of delivery (SMS, voice, video, etc.) and sustainability model. Some of the successful mobile-based services implemented in India are listed below:

- Agriculture and Allied Sectors:
  IFFCO Kisan Sanchar Ltd. (IKSL),
  Fisher Friend, mKisan, Reuters
  Market Light (RML), mKRISHI, Kisan
  Call Centre, Annapurna Krishi
  Prasaar Seva, eNAM, etc.
- **Banking:** Bharat Interface for Money (BHIM), PhonePe, Paytm, FreeCharge, Airtel Money and Idea Money
- Health: mSwasthya, MOTHER, Indian Blood Donors, Blood4India, eMamta, eAushadhi, Sanjeevani, 1mg App, mTIKKA
- Rural Development: Awaas App (PMAY-G), Mission Antyodaya App, My SHG App.

**Mobile Seva:** Understanding the need for promoting mobile-based services, the Ministry of Electronics and Information Technology (MeitY), Government of India has launched 'Mobile Seva' initiative for mainstreaming mobile governance in the country. It provides an integrated platform for all government departments and agencies in the country for delivery of public services to citizens over mobile devices using SMS, USSD, IVRS and mobile applications (Mobile Seva: www.mgov. gov.in).

#### **Adopting Suitable ICT Tools**

A number of ICT tools and technologies that can be customised

and used efficiently are available. Selection of suitable ICT tools should be through bottom-up approach and based on local conditions (awareness and adoption level of target group, resource availability, etc.).

- e-learning and MOOCs: Training and capacity building of rural functionaries are time-bound and continuous process. The e-learning platforms could be used for offering online courses for focused groups in a convenient and consistent manner. Massive Online Open Courses (MOOCs) are recent trends, adopted by many organisations to offer free online courses (e.g. SWAYAM platform, MHRD, Government of India).
- Social Media: With increasing reach among rural people, especially the youth, social media is the best tool as on today to reachout the target group in rural areas quickly and effectively. Social media includes social networking sites (Facebook, WhatsApp, LinkedIn), blogs (Blogger, Word Press), microblogs (Twitter), video sharing tools (YouTube) and podcasts, Wikis and many more.
- 3. Web-Portals: Web portals are digital platforms that provide organised

gateways to credible information and act as aggregators of knowledge from various stakeholders. In the era of new media, web-portals play a crucial role in empowering community with right information and knowledge (e.g. Wikipedia, Vikaspedia and Digital Green).

 Emerging technologies like Spoken Web, Augmented Reality, Internet of Things (IoT) and Machine Learning have potential applications in rural development process.

## Challenges and Way Forward in Adopting ICTs

The mobile phones and Internet have undoubtedly brought substantial changes in access to information, knowledge and services in rural India. At the same time, non-availability of credible localised content and capacity building of various stakeholders in the rural development sector to use ICTs are serious issues that need to be addressed. Instead of reinventing the wheel, convergence with other

institutions is the need of the hour to ensure the sustainability and scaling-up of ICT services. We should adopt ICTs as enablers for rural development and select them on the basis of local conditions. The support from Digital India programme, in terms of creating digital infrastructure, digital awareness and offering digital services, should be harnessed by the stakeholders involved in rural development.

**Dr C. Kathiresan,** Associate Professor, Centre for Panchayati Raj, NIRD&PR.



Training programme on ICT Applications for Management of Rural Development Programmes

The Centre for Information and Communication Technology (CICT) organised a training programme on 'ICT Applications for Management of Rural Development Programmes' from December 11 to 15, 2017 at NIRD&PR, Hyderabad. Thirty officials, majority representing departments such as Rural Development, Panchayati Raj, Zilla Parishad/Zilla Panchayat(ZP)s, DRDAs, SIRDs/ETCs, Agriculture, Forests & Environment, and academicians belonging to Assam, Bihar, Dadra and Nagar Haveli, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Odisha, Rajasthan, Tamil Nadu and Uttar Pradesh participated.

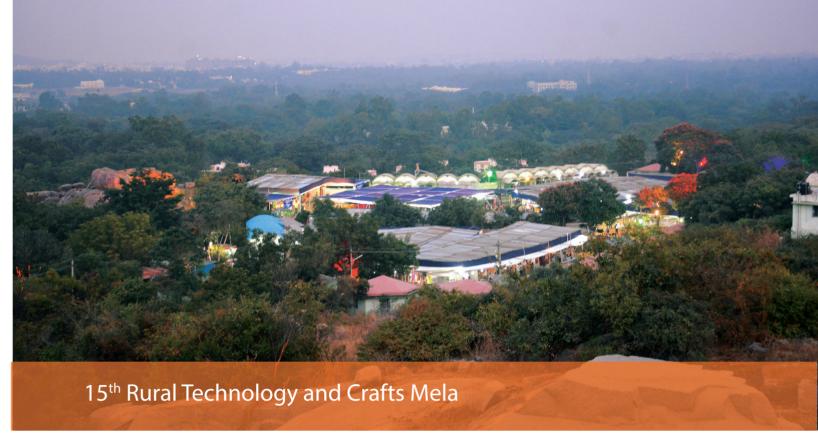
The main objective of the programme was to sensitise functionaries of Rural Development, Panchayati Raj, ZPs/DRDAs, SIRDs/ETCs and line departments about the potential of ICTs and its applications, e-governance, Digital India, Geo-Informatics, social audit for monitoring and evaluation, IEC (Information, Education and Communication), project management for effective management of rural development programmes and providing skills in development of information systems.

To meet the above objectives, discussions were held on application of ICTs for e-governance services in various sectors such as citizen-centric services, NSAP, MGNREGS and PMAY. In addition to the topics relating to information systems development, deliberations were also held on Geo-informatics, IEC, project management, Panchayat Enterprise Suite (PES) and soft skills such as leadership for conflict.

A visit to the National Informatics Centre in Hyderabad was arranged in order to give them more insights into aspects relating to cyber security in the context of Digital India and Public Financial Management System (PFMS).

The participants were provided an opportunity to visit the Rural Technology Park and learn about various activities. They also took advantage of the Art of Living module organised in consultation with Swami ji. The participants expressed their gratefulness to the Director General, NIRD&PR for the opportunity.

The programme was conducted by Shri G V Satya Narayana, Senior Assistant Professor of Centre for Information and Communication Technology (CICT).





The Rural Technology and Crafts Mela is an annual feature of the National Institute of Rural Development and Panchayati Raj at Rajendranagar, Hyderabad, which coincides with the Foundation Day celebrations of the Institute. Continuing this tradition, the 15<sup>th</sup> Rural Technology and Crafts Mela was held from November 30 to December 4, 2017 on the theme 'Skilling and Entrepreneurship – A Way Forward for Rural Transformation'.

Member of Parliament Shri Konda Vishweshwar Reddy, who was also the Chief Guest, inaugurated the event on November 30 in the presence of Shri T L Sankar and Shri Mathew C Kunnumkal, former Director Generals of NIRD&PR, Smt. Pausumi Basu, IAS, Chief Executive Officer, TSIPARD, Dr. Franklin Laltinkhuma, IAS, Registrar & Director (Admn.), Smt. Chanda Pandit, IA&AS, Financial Advisor and Dr. Y Gangi Reddy, former Prof. & Head (CIAT). Dr. W R Reddy, IAS, Director General, NIRD&PR, presided over the inaugural ceremony.

A curtain raiser of the event was held on November 28 by conducting a press meet jointly addressed by Dr. Franklin Laltinkhuma and Smt. Chanda Pandit.

The exhibition saw the participation of three groups viz. innovators, entrepreneurs and institutions belonging to Andhra Pradesh, Assam, Bihar, Chhattisgarh, Delhi, Haryana, Jammu & Kashmir, Karnataka, Maharashtra, Odisha, Puducherry, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal.

As many as 230 stalls were put up for display and demonstration-cum-sale of the technologies and products developed by innovators, self-help groups, rural artisans, etc.

The items put on display include organic millets, bamboo, solar, leather, handlooms, sanitation, ayurvedic and ethnic products, jute, pottery, besides sustainable housing



technologies, hydroponics and urban farming, handicrafts, sanitation models, etc.

The special stalls erected on skilling highlighted the NSDC, DDU-GKY, NRLM programmes, RTP technologies and Swachhata concept. Several project-implementing agencies of the Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) demonstrated their skilling programmes.

The Standard Operating Procedures (SOP) booklet on Swachh Bharat developed by the Centre for Rural Infrastructure, NIRD&PR and the compressed stabilised earthen floor and roof tiles developed by the RTP were launched on the occasion. Chief Guest Shri Konda Vishweshwar Reddy launched the home-based products developed by the trainees of RTP.

During the afternoons, panel discussions were organised on the topics like Swachhata – Health and Sanitation, Skilling and Entrepreneurship, and Education – Rural Transformation, which were attended by students in large numbers.

The event was supported by the National Skill Development Corporation, DDU-GKY (PIAs), SBI, NABARD, Syndicate Bank, UCO Bank and Andhra Bank.

The food courts arranged on the premises gave opportunity for the participants to savour the flavours from various regions.

Everyday, cultural programmes were held from 6 PM to 10 PM showcasing the traditional art forms and folk arts of States such as Tamil Nadu, Odisha, Andhra Pradesh and Telangana.

The dignitaries who visited the mela include Rajya Sabha MP from Odisha Shri A V Swamy and the senior officials of MoRD.

The print and electronic media extensively covered all aspects of the mela, which in turn attracted huge visitors that ranged from 10,000 to 12,000 per day.

On the concluding day, the best stalls and technology exhibitors were presented awards. Dr. W R Reddy, IAS, Director General, NIRD&PR, felicitated the sponsors too.

At the valedictory function, Mr. Mohammad Khan, Senior Consultant, welcomed the dignitaries and Dr. S Ramesh Sakthivel, Associate Professor, CIAT, proposed vote of thanks.

# 13<sup>th</sup> Convocation of Post Graduate Diploma in Rural Development Management

The 13th convocation ceremony of Post Graduate Diploma in Rural Development Management (PGDRDM) was held at NIRD&PR on December 27, 2017. A batch of 37 students, who successfully completed their course, received diploma certificates from the Chief Guest of the occasion, Shri M. K. Raut, IAS, State Chief Information Commissioner, Government of Chhattisgarh.



The gold medal for the best academic performance was awarded to G. Praveen Krishna, while the silver and bronze medals were awarded to second and third best performing students i.e., Lakshmi Aparna R and Shitiz Kashyap, respectively.

Speaking on the occasion, Shri M. K. Raut advised the students that rural development professionals should visit the villages, make night halts and interact with the people for a better output. He shared several success stories viz. 'open defecation-free Chhattisgarh model of rural development' in his speech.

Dr. W. R. Reddy, IAS, Director General, NIRD&PR, presided over the function. In his inaugural address, Dr. Reddy said that it is a new innings for students and advised them to work with commitment and passion. He also administered the oath to students and congratulated them.

Earlier, Dr. Franklin Laltinkhuma, IAS, Registrar, NIRD&PR, welcomed the Chief Guest and the audience.

While presenting the course report of PGDRDM, Dr. C. S. Singhal, Professor and Head, Centre for PG Studies



and Distance Education, shared the programme's objectives and main highlights of the 13<sup>th</sup> batch. He informed that 99 per cent of students have secured placement in development organisations.

Dr. A. Debapriya, Associate Professor, Centre for PG Studies and Distance Education, proposed vote of thanks.

The PGDRDM was coordinated by Dr. C. S. Singhal, Prof. & Head, Dr. A. Debapriya Dr. Akanksha Shukla, both Associate Professors, and Dr. Sonal Mobar Roy, Assistant Professor, Centre for PG Studies and Distance Education.

# International Training Programme on Good Governance for Management of Rural Development Programmes



An international training programme on 'Good Governance for Management of Rural Development Programmes' was organised by the Centre for Good Governance and Policy Analysis (CGGPA) from November 29 to December 26, 2017 at NIRD&PR. As many as 22 international delegates from 14 developing countries, who were part

of the ITEC programme sponsored by the Ministry of External Affairs, Government of India participated.

The international programme aimed at addressing the following objectives:

- To explain the context of governance, theory and practice
- To teach international perspectives of good governance
- To appreciate the ethics and values of governance
- To experience the good practices of good governance
- To make the participants familiar with rural development programmes in India

#### • To prepare a plan of action

The training programmes aimed to cover modules like Good Governance: An International disciplinary transformative concepts; Good Governance: A significant transformative contemporary society; Good Governance: Grassroots initiatives and leading to best practices; Leadership Governance as an empirical factors of State performance; and Flagship programmes- role of governance in effective implementation.

As a beginning, the programme designed to cover Good Governance-International Perspectives, Devolutionary Process; Good Governance - Indian Perspectives; Significance of Good Governance in Rural Development; Good Governance as essential indicator

To strengthen the participants' knowledge on Good Governance practise, lectures on different social accountability tools like Community Score Cards (CSC), Citizen Repot Cards (CRC), Social Audits, PRA, etc., were also delivered.

The role of ICT and IT in governance was also covered in training programme mainly focusing on e-Governance India: concept, initiatives and success stories; IT agriculture- rural development; information aeo technology in rural development; rural livelihood opportunities through extension services and financial inclusion: emerging issues for rural development.

Dr. W.R.Reddy, IAS, Director General, NIRD&PR, had an interaction session with the participants. During the

idea about better water management practices available locally.

As part of the field training in Karnataka State, the participants visited RUDSETI, Arasinakunte branch for understanding and learning about the initiatives of MoRD as well as NIRD&PR in promoting skill development and gender entrepreneurship. Participants interacted with Tumkur district Zilla Panchayat CEO to know in detail on how effectively Panchayti Raj Institutes (PRI) are delivering their services especially focusing on rural India.

They also visited two other village panchayats where team attended meetings, engaged in information sharing and also went on a walkabout to see the developmental activities



of Change Management; Gender Concerns in Service Delivery; Role of PRIs in practising Good Governance; Results-Based Management (RBM) for Rural Development; Appropriate Technologies for Rural Development and Good Governance-Disaster Management, etc.

This was followed by lectures delivered by eminent persons on flagship programmes such as IWMP, MGNREGA, SAGY, DDU-GKY, NRLM, Swachh Bharat, etc., which are aimed at achieving sustainable development. The participants made a visit to Rural Technology Park (RTP) and realised its vision of accelerating wide dissemination of appropriate and affordable technologies to the rural poor for increasing productivity and enhancing their quality of life.

session, he said that if governance is happening as expected, there is no need for prefix "good" and also talked about lack of good governance initiatives in implementation of rural development programmes. In his closing remarks, he said that the only way of achieving a successful living is to do the job passionately, with interest, love, full energy and passion.

As part of the exposure visit, the participants visited the Centre for Good Governance (CGG) for discussion on 'Good Governance as essential indicator of Change Management and visited ICRISAT for the discussion on' inclusive market-oriented development and RKVY. The participants were exposed to different water harvesting structures at JNTU, Hyderabad to give them an

within the community like road construction, water and sanitation facilities for water harvesting, storage and housing projects that are operated by the panchayat Institutions. They also met the council members as well as the village panchayat president. Participants further made a visit to the Mysuru City Corporation to learn about how the solid waste management is being implemented. Participants were also introduced to some of the e-governance initiatives undertaken by the Mysuru Zilla Panchayat for improved service delivery in terms of transparency and accountability.

Finally, participants came up with their own plan of action based on their learning from the one-month training programme. The consolidated plan of action is as follows:

- Information sharing knowledge with colleagues and other stakeholders
- To promote good governance initiatives at local-level platforms like inter-governmental meetings and integrated development plan sessions
- To evaluate what is possible and not possible for both department/ Institution and the country as a whole
- To establish networks and liaison with other government and private institutions or officials involved in good governance and rural development for partnerships
- To lay the groundwork for possible research topics in areas such as Good Governance, Rural Development, Sustainable Development Goals, Citizen Report Card and Community Score Card, and Social Audit Practices.

The training programme was a judicious mix of lecture-cum-discussion, role playing, debate, exposure visits, group exercises, mock panchayats, presentation by groups and individual, and report submission.

Dr.K.Prabhakar, Assistant Professor & Course Director and Dr. Jyothis, Professor & Head (i/c) Centre for Good Governance & Policy Analysis (CGGPA) organised the training programme.



s part of the ITEC/SCCAP sponsored training programmes for the year 2017-18, the NIRD&PR conducted an international training programme on Planning and Management of Rural Development Programmes from December 27, 2017 to January 23, 2018. A total of 27 participants, representing 18 countries from Africa, Asia and South American continents, attended the programme. The programme aimed at providing an overview of the policies and programmes being implemented in developing countries and also to examine the possibility of their replication, basic understanding about the concepts, methods and approaches in planning and formulation of projects relevant to the rural development context, skills and knowledge on implementation and management of projects for effective delivery and achieving the intended results and tools and techniques for application in monitoring and evaluation of rural development projects.

After two days of interaction on the country presentations by the participants, they were introduced to PME tools such as logical framework analysis, sustainable livelihoods and results-based management. The presentations on planning and management of different rural development programmes being implemented in India gave the participants ample opportunities to understand the innovations with regard to rural issues and also provided them space for cross country interactions. Later, the participants in groups were given hands-on training to execute the above-mentioned tools in their country. The presentations on exercises undertaken on specific projects turned out to be a learning experience for them.

In addition to their visits to local institutions like International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) and Indian National Centre for Ocean Information Services (INCOIS), a five-day study tour was organised to Visakhapatnam district in coordination with the district administration, covering various aspects of rural development interventions focusing on rural context of tribal, plain and coastal areas. The interactions arranged at district federation of SHG women at Pendurthi was a special attraction as a successful model of women empowerment and also for its income generation activities.



The programme was concluded with the feedback of participants and valedictory remarks of Director General.

The CPME team led by Dr. G Venkata Raju, Prof. & Head, CPME, NIRD&PR coordinated the programme.



An international conference on Geospatial Technology Applications on Natural Resources Management and Climate Change was organised by the Centre for Geoinformatics Applications in Rural Development (CGARD) on December 21 and 22, 2017 at NIRD&PR.

The conference was conducted with the objectives of bringing together scientists, researchers and practitioners from different streams of knowledge, addressing the advancement in spatial technology and innovative applications in natural resources management and climate change, providing the inter-disciplinary and multi-disciplinary forum to present and discuss the most recent innovations, trends, concerns and solutions adopted in field of natural resources management

and climate change, and sharing the best and innovative practices on geo-informatics applications in programmes and policies of natural resources management and adaptive strategies on climate change.

The conference aptly chose four thematic areas namely, the Smart Technologies for Smart Agriculture, Next Generation Spatial Infrastructure and Analytics, UAV Application for Sustainable Rural Development and Infrastructure Monitoring and Remote Sensing for achieving Sustainable Development Goals.

Guest of Honour Dr. Y V N Krishna Murthy, Director, NRSC, ISRO, Hyderabad, delivered the inaugural address. Keynote lectures were given by Dr. Kasturi Kannaiah, University



of Technology, Malaysia (UTM), on 'Remote Sensing for Achieving Sustainable Development Goals', Dr. Zaffar Sadiq Mohamed, University of New South Wales, Australia, on 'Next Generation Spatial Infrastructure & Analytics' (via Skype), Dr. J Adinarayana, Professor & Head (CSRE), IIT Bombay, on 'ICT Application in Sustainable Rural Development and Agriculture' and Dr. Kamal Jain, Professor, IIT Roorkee, on 'UAV Application for Sustainable Rural Development & Infrastructure Motioning.'

The entire conference process was done through online system. About 190 abstracts were received of which nearly 130 were accepted for submission of full papers. Of the nearly 80 full papers received, around 60 were accepted after each one was reviewed by two experts. Around 70 reviewers from various institutions such as IITs, NITs, Central/State Universities, ISRO, National and State institutions reviewed the conference papers.

About 28 international participants from more than 17 countries attended the conference. A total of 62 papers from IITs, NITs, Central/State Universities, National, State and Central Government Departments were selected for presentation in 10 technical sessions in two days. Each paper was run through plagiarism software and papers complying with the plagiarism norms were selected for further peer review by the experts.

The technical session on Agriculture and Allied Resources stressed the use of Geospatial Technology and other modern tools like IOT and Analytics for precise decision making for sustainable agriculture practices. The technical session on water resources raised concerns over exploitation of water resources and underlined the need for creating awareness on judicious and optimum use of water resources and its conservation, water potential and water balance estimation measures to optimise the water conservation and flood mitigation. The technical session on disaster management and mitigation highlighted the need for establishing proven Disaster Support System in India to confront natural disasters, NRM monitoring and assessment, climate change impact and strategies to minimise its impact on communities and

infrastructure, using Geospatial Technology in Disaster Management and Mitigation. The session on the theme IT, e-Governance and LBS, Energy Resources, Alternative Energy, Energy and Water Resources Development and Management stressed the need for using Big Data Analytics, Location-based Services (LBS), education and capacity/skill development, and energy economy models using Geospatial Technology applications.

NIRD&PR Director General Dr. W R Reddy, IAS, delivered the valedictory address and urged the delegates to prepare themselves for technology leap by updating continuously. He also distributed Best Paper awards to researchers, government departments and enterprises and wished that all the delegates would work for the benefit of society and reach out to the last mile using Geospatial Technology.

Dr. V Raghavaswamy, former DD, NRSC, suggested incorporation of SDG 2030. Prof. I V Muralikrishna, Advisor, Smart Villages, Government of AP, stressed the need for business model, measurable indicator and disruptive technology.



# Training Programme on Investment Credit in Agriculture & Allied Sectors



five-day training programme on 'Investment Credit in Agriculture and Allied Sectors and Monitoring and Followup of Advances' was organised by the Centre for Financial Inclusion and Entrepreneurship (CFIE) from December 11 to 15, 2017. The main objective of the programme was to enhance the credit appraisal skills of the bank officials working in the rural sector and dealing with agriculture and other priority sector loans. Though there has been a tremendous growth in crop loans issued from the banking system, investment credit in the form of term lending is growing at a snail's pace almost in all banks. Lack of appraisal skills on the part of field officers and other bank officials is found to be one of the main reasons for such poor performance. As a result, capital formation in the agricultural sector continues to be low and the farmers' distress is a common phenomenon across the country. Besides, there has been an increasing emphasis on monitoring and follow-up of advances in the banks' credit due to uptick in bad loans.

Starting with an overview of lending to agriculture by banks, the programme included presentations and discussions on technical and financial appraisal of projects in specific sectors such as dairy, poultry, micro and minor irrigation and greenhouse cultivation. There were discussions on emerging areas in agriculture, including contract farming and supply chain finance, as also financing of micro, small and medium enterprises, including loans under MUDRA scheme, and the Self-Help Group-Bank Linkage Programme. In some

sessions, the participants were given case studies to augment their credit skills. They were also taken on a field visit to the Poultry and Livestock Centre, where the interactions covered various aspects of the poultry sector, including bank finance

A major highlight of the programme was the focus on Non-Performing Assets (NPA) and recovery management, including physical and financial follow-up of advances. The participants were introduced to prudential norms relating to agricultural finance, and were taken through different soft and hard methods of recovery of advances in agriculture and allied sectors. In view of the present focus in the banking sector on managing and reducing the NPAs, inclusion of this topic was well appreciated by the participants. The programme also included two sessions on Soft Skills and Leadership Development.

The programme was attended by twelve officers from seven banks, including public and private sector commercial banks, regional rural banks and state cooperative banks. Apart from the faculty members of NIRD&PR, sessions were handled by subject matter experts from State Bank of India and State Bank Institute of Rural Development (SBIRD). The programme was coordinated by Shri V. Rama Mohan Rao, Project Consultant, and Shri R N Dash, Consultant under the overall guidance of Dr. M. Srikanth, Associate Professor & Head, Centre for Financial Inclusion and Entrepreneurship.



### Orientation Programme on Gender Mainstreaming

he National Rural Livelihood Mission (NRLM) believes that gender mainstreaming should feature in its framework, systems, institutions and processes to achieve sustainable social, economic and political goals that have direct/indirect impact on the quality of life indicators of the community. NRLM mobilises poor women in general and also undertakes special mobilisation efforts for reaching out to women in exploitative situations/occupations (like single women, divorced, separated, survivors of violence, trafficked women, Devdasis, HIV+ve women, etc) in particular. In this regard, Gender Operational Strategy was developed which encompasses the strategy, the key action areas, the institutional mechanisms and the outcome indicators. Gender component has to be integrated into all components of NRLM. It has to become an inevitable aspect of Institution Building, Capacity Building, Financial Inclusion and Livelihoods. This can be achieved by sensitisation and orientation of all SMMU, DMMU and BMMU staff on gender concepts and integration of gender in all aspects of NRLM.

An orientation programme for the SPMs and SRPs of IB CB & SI SD on Gender Operational Strategies and Mainstreaming Gender under NRLM was organised by Ms. P. Usha Rani, Lead – Gender, NMMU, MoRD, National Mission Manager - NRLM and



Gender NRPs from December 11 to 13, 2017 at NIRD&PR. Ms. K. Surekha, National Mission Manager (Gender & FNH WASH), NRLM (RC) was the Course Director. Around 50 participants attended this orientation programme. The training enabled SMMU to integrate gender into all aspects of NRLM and in achieving goals of Social Development and Financial Empowerment. The prime objectives of the orientation programme were:

- To equip NRLM trainers/beneficiaries with knowledge of concepts and issues on gender and social development themes
- Enable them to understand gender issues so as to integrate it, in all aspects of the NRLM and to analyse the shifts in policies, constitutional provisions and programmes relating to gender issues in the country.
- Develop an understanding of structures that perpetuate gender inequalities, both in the private and public spheres - in the family, community, workplace and State.

The participants were oriented on the basic concepts of Gender, the State-specific women-related issues, the Gender Operational Strategies and Gender Protocols. The gender operational strategy is the guiding document for integration of gender within NRLM. It gives clear guidelines about the framework within which gender is being integrated, approach, readiness factors, institutional framework, action points and outcome indicators. Every State developed their State-specific action plan for mainstreaming Gender under NRLM activities. The sessions were interactive and the methodologies used were sub-group discussions, role play and interactive lecture method.

## Orientation-cum-Exposure Visit on SHG Best Practices for Women SHG members from Harisal, Maharashtra

An orientation-cum-exposure visit on SHG Best Practices was organised for the women SHG members from Harisal, Maharashtra from December 11 to 15, 2017 at NIRD&PR.



Shri T. Ravinder Rao, National Mission Manager (IB & CB), NRLM (RC) was the Course Director. The Maharashtra Government had selected this village with an objective of making it a Model Digital Village in Amaravathi District. About 33 SHG members, who participated in this orientation programme, were educated on the basic concepts of DAY-NRLM and different components under NRLM like social mobilisation, social inclusion, financial inclusion and food, nutrition, health & WASH, etc. They were taken for a three-day exposure visit to Orugallu Maha Samakhya, Warangal to understand the

formation, functioning and services of various community Institutions like SHG, VO & MS and Gangadevipally National Model Village. The participants had interactions with the leaders, office-bearers, community cadres, project staff and elected public representatives. They were also taken to Rural Technology Park (RTP) to interact with women entrepreneurs. The participants prepared an action plan for the development of their village through Community Institutions and presented it before the Director General, NIRD&PR.

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