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*National Bank  
Staff College,  
Lucknow  
(NBSC)*

**'Shaping Minds to Excel'**



**GRAMIN VIKAS -  
EK KHOJ**

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## Vision of NBSC

To ignite, equip and sharpen minds to excel and enable recognition of NABARD as a knowledge driven development Bank of the nation.

राष्ट्र के “ज्ञान परक विकास बैंक” के रूप में नाबार्ड की पहचान की सुदृढ़ रखने हेतु मस्तिस्क को उत्कृष्ट, ऊर्जावान और कुशाग्र बनाना।

## Mission of NBSC

Driving competency of officers towards excellence in performance through quality training and research in collaboration with professionals and institutes with domain expertise, on-line access to knowledge, interchange of innovative ideas and field experiences, in Hi-tech environment and empowering them to lead rural prosperity.

ग्रामीण समृद्धि का मार्ग प्रशस्त करने लिए, संबन्धित क्षेत्रों के दक्ष विशेषज्ञों और संस्थानों के सहयोग से गुणवत्तायुक्त प्रशिक्षण एवं अध्ययन, ज्ञान की ऑन-लाइन उपलब्धता एवं विचारों और अनुभवों के आदान प्रदान के माध्यम से हाई-टेक वातावरण में, अधिकारियों के सामर्थ्य को बढ़ाना।

## From Editor-in-Chief's pen



This fifth issue of NBSC e-Journal is a culmination of the various studies conducted by Training establishments and ROs. The current issue covers the major findings/recommendations emanating from four studies undertaken by the FMs and ROs on varied areas like (i) Agri-Business Incubators (ABIs) (ii) Impact assessment of trainings (iii) NABARD's interventions in Digital FI (iv) Aadhar Enrolment Centres (AECs).

The views expressed in the articles published in the journal are those of contributors and neither NABARD nor NBSC are responsible for them.

I express sincere thanks for DFIBT, HO and Jaipur Regional Office for making contributions to the current issue and once again take this opportunity to request Faculty Members of Training Institutions of NABARD and Officers of NABARD to contribute articles, study briefs for subsequent issues of the journal and make this endeavour of NBSC a success.



***S K. Dora***

**Principal/Chief General Manager  
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# *Study of Select Agri-Business Incubators (ABIs) with special reference to Start-ups*

*Shri S.K.Nanda and Shri. A.K.Sarkar <sup>1</sup>*

## **1. Introduction**

Indian agriculture needs disruptive technologies/enablers which can lead to increase in efficient use of inputs in right quantity, farm mechanisation, application of drone technology, enhancing productivity through ICT based technology applications, farm data & analytics, information platform, farm management solutions, field monitoring, bringing in efficiency in the supply chain, ensuring food safety & traceability, better access to market, etc. The agri start-ups, driven by smart technological and effective business process solutions, have been trying to bring solutions to the contemporary problems of Indian agriculture. Some of them have shown great promise. As these start-ups need support in terms of physical infrastructure, mentoring, networking with investors, Government of India (GOI) has been promoting establishment of Agri Business Incubators (ABIs) and Technology Business Incubators (TBIs), both in public and private sectors.

Realising the need for supporting the agri start-up ecosystem, NABARD has started extending support to the ABIs. NABARD has also promoted establishment of NABVENTURE, a subsidiary which shall pool private investment and fund mainly in growth stage start-ups.

## **2. Study Objectives and Methodology**

Keeping in view the growing importance of agri start-ups, as solution providers and to understand the ecosystem in a better way, DEAR, H.O entrusted NBSC to conduct a study titled “Study of Select Agri-Business Incubators (ABIs) with special reference to Start-ups”. The objectives were to study;

- Role & functions of ABIs in mentoring of agri-entrepreneurs and Agri start-ups
- Examine the funding need of ABIs, Agri start-ups, keeping in view the existing funding mechanism of ABIs & agri-start-ups
- Examine the funding need of ABIs, Agri start-ups, keeping in view the existing funding mechanism of ABIs & Agri-start-ups
- To analyse the constraints encountered by ABIs and start-ups and suggests measures to overcome the same
- To suggest future role of NABARD
- Ways forward and action points

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<sup>4</sup>The Authors of the study are Deputy General Managers/Faculty Members in NBSC, Lucknow. The views expressed in this policy briefs are the views of the authors and do not necessarily reflect the views of NBSC or NABARD.

The study team covered three Agri Business Incubators (ABIs) viz, IIOR, Hyderabad, IVRI, Izatnagar and CARI, Izatnagar and three Technology Business Incubators (TBIs), viz, ICRISAT, Hyderabad, NAARM, Hyderabad and MANAGE, Hyderabad. The study team interacted with 30 agri start-ups, besides 5 agri-entrepreneurs.

### 3. Major findings

- The performance of TBIs belonging to ICRISAT, NAARM and MANAGE was found to be better as compared to the ABIs of ICAR like IIOR, IVRI and CARI. This is because ICAR-ABIs did not have independent legal status and they worked as a part of the host institute while the TBIs of ICRISAT, NAARM and MANAGE had an independent legal status.
- TBIs had established very good physical infrastructure and networking with leading investors, but there had not been good connect with govt line departments, other developmental agencies, NGOs, FPOs, SHGs, leading corporates, CSR foundations etc. This was hampering the efforts of start-ups in reaching out to the producers and intermediaries in the agri value-chain.
- ABIs of ICAR were structurally better suited for technology transfer to agri entrepreneurs related to the domain expertise of the host institution. Further, these ABIs were not so good in mentoring the agri start-ups for complex processes like; preparation of business plan, collaboration with developmental actors, private consultants, pitching for investors, bank finance etc.



#### Products manufactured by Agri Startups

- Most of the start-ups indicated that they struggled to establish last mile presence. They needed the support of grass root level organisations to establish connect with the farmers, in all the critical business processes viz, field testing of technology/ business model, feedbacks of customers, enhancing the customer base of producers/consumers/ intermediary players, etc. Further, start-ups whose business models passed through prototype development, faced difficulty in access to wet laboratories.

- One of the major reasons highlighted by the investors for lack of funding support to start-ups was inability of Agri start-ups to understand the complexities of rural ecosystem, especially the farming community, while developing a business idea or preparing a business plan.
- The Agri start-ups also indicated that the farmers were reluctant to pay the service charge under 'pay & use' models like hiring of farm machineries.
- There is increased need for the Agri-incubators to reach-out to the agri innovators based in rural and semi-urban centres, who can provide appropriate solutions to the problems being confronted by the farmers.
- All the ecosystem players viz, Agri start-ups, incubators and investors appreciated the pro-active role played by NABARD in supporting the incubators and also the establishment of NABVENTURE
- The study revealed that Agri start-ups have very little knowledge about NABVENTURE.

#### **4. Policy Recommendations**

- ✓ It is essential to have one-to-one mentoring with a subject matter expert for each start-up along with customised group mentoring sessions. The one-to-one mentoring is required in the areas of; technology development/ validation, business process validation, linking up with customers during validation stage, helping in partnering with grass root level organisations, creation of a potential customers base for commercial phase, filing of patents under IPR, market study, funding opportunities, apply for grant, equity & debt funding, etc.
- ✓ There is increased need for the Agri-incubators to reach-out to the agri innovators based in rural and semi-urban centres.
- ✓ ABIs/ TBIs may enter into strategic partnership with grass root level organisations like FPOs, NGOs, farmer clubs, CSR Foundations of select corporates-to enable the Agri start-ups to leverage the ability of grass root level organisations towards social mobilisation of rural customers
- ✓ More capacity building programs such as sensitisation workshops, technology fairs, ideation competitions, etc. may be organised by the ABIs/ TBIs for scouting and nurturing of potential entrepreneurs.
- ✓ ABIs under ICAR set-up may continue to focus on imparting training/ handholding to existing/ prospective agri entrepreneurs on commercialisation of technologies, while TBIs may focus on

mentoring the Agri start-ups through the complex process of preparation of business plan, collaboration with developmental actors, linking up with private consultants, pitching for investors, bank finance, etc.

- ✓ TBI is a better model, due to independent legal status and consequent autonomy, more and more Agri-incubators, both in public and private, may opt for this model.
- ✓ ABIs/ TBIs can become financially self-sustainable, provided they offer the right solutions to the start-ups, through mentoring and networking. However, they need to be financially supported till they achieve the break-even point.
- ✓ It is imperative that aspiring Agri start-ups may, at the beginning, study the contextual rural environment, much before the commencement of pilot testing/ validation of the technology/ business solutions. ABIs/ TBIs may depute the start-ups to the rural areas for at least one or two month, before embarking upon the other incubation based services. This would strengthen or reject or modify the Proof of concept (POC).
- ✓ Initially, Agri Start-up may start with free services to the farmers under B2C business model, as being done by NaPanta (not to charge the farmers but charge the agri-input suppliers, banks, Govt. line departments). Gradually, farmers may start paying for the services, when they see true value in them.
- ✓ The investors should be made more aware of the different business models of Agri start-ups, risks associated with these business models and mechanisms for mitigating the risks as well as success stories of scale up and viability. Success stories and case studies may be documented to boost confidence of investors which eventually leads to a better investment climate.
- ✓ Banks and financial organisations also need to offer creative models of financing for farmers, entrepreneurs, incubators, and accelerators.
- ✓ At state level, a nodal department may be identified to act as bridge among stakeholders like Agri start-ups, incubators, accelerators, various line departments, NABARD, leading banks and a few corporates (having interest in the agri value-chains), CSR foundations of corporates etc., for redressal of issues confronting the start-ups.
- ✓ NABARD may come out with a comprehensive Agri start-up policy with support to; Agri start-ups, incubators, accelerators et al. An

advisory board may be setup to fine-tune the Agri start-up policy framework of NABARD and provide inputs based on cross-learning experiences. Strategic MoUs with some of the key promoting agencies like Niti Aayog, DBT, ICAR etc. need to be explored.

For the full study document please log on to [www.nbsc.in](http://www.nbsc.in)

## *Study on Impact Assessment of Training - Programmes on Supervision for DoS and Non-DoS Officers*

*Shri S.K. Jahagirdar <sup>2</sup>*

### **1. Introduction**

Training is imparted to employees to facilitate the systematic development of the, knowledge, skills, attitude and behaviour pattern that is essentially required by an individual to perform effectively a given task or job. NBSC, Lucknow has been imparting training to NABARD Officers in five broad areas, namely, Development & Projects, Finance, HR, IT, Micro-finance and Business Initiatives covering the functioning of all the departments of NABARD. NABARD lays great emphasis on training and endeavors to provide an opportunity to every officer to attend at least one training programme each year.

### **2. Study Methodology and Objectives**

The existing system of obtaining feedback and evaluation of training programme assesses the incremental increase in the knowledge and skills at the point of completion of training intervention. There is no system to evaluate the impact of the programme after the participant leaves NBSC and resumes his duties. In view of this and in order to make training more effective, NBSC conducted a study with the following objectives:

- i. To examine the effectiveness of training on officers in improving their knowledge, skills and attitude.
- ii. To ascertain the satisfaction levels of the officers under the present system of training.
- iii. To evaluate the impact of the training on the actual performance of the trainees in the discharge of their duties.
- iv. To offer suggestions based on the findings of the Study.

The participants who had attended the training programmes on supervision, namely, Basic Programme on Bank Supervision for Non-DoS Officers and Programme on Supervision for DoS Officers conducted by the NBSC during 2017-18, 2018-19 and 2019-20 were administered a specially designed questionnaire. A questionnaire was also administered to the Reporting Officers of these participants to ascertain the visible impact of the training on the participants. The responses received from the participants of the programmes are tabulated and data analysed using weighted averages.

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<sup>2</sup>The Author of the study is Dy. General Manager/FM, NBSC. The views expressed in this policy brief are the views of the author and do not necessarily reflect the views of NBSC or NABARD.

## Major Findings

- The training programmes conducted by NBSC for DoS and Non-DoS officers with its pedagogy of classroom based lectures, and experiential learning through case studies and case exercises had a long-term positive and significant impact on the knowledge, skill acquisition and positive attitudinal changes of the participants. This consequently increased their job related efficiency and productivity.
- The training pedagogy consisting of classroom sessions and experiential learning case exercises and case studies is appropriate and had resulted in significant improvement in the knowledge, and skills endowment of the participants.
- The positive change in attitude of the participants post-training was comparatively less significant and could be attributed to absence of behavioural training interventions in the DoS related training programmes conducted by NBSC.

### 4. Policy Recommendations

- ✓ Instead of conducting two distinct programmes, one for officers working in DoS and another for those posted in other departments, NBSC may conduct two programmes, the first one titled, “Programme on Supervision” for those officers who have conducted say, less than 5 inspections either as PIO/ AIO and an “Advanced Programme on Supervision” for those officers who have conducted 5 inspections or more either as PIO/ AIO.
- ✓ Every officer who has undergone training in supervision should necessarily be deputed for inspection at least once every six months so that the knowledge obtained during training is applied and subsequently reinforced.
- ✓ Certain behavioural inputs may be provided in DoS related programmes to bring about positive attitudinal changes.

For the full study document please log on to [www.nbsc.in](http://www.nbsc.in)

# *Study on Impact of NABARD's Interventions in Rural Digital Economy and Way Forward for New India*

*Shri. Ashutosh V. Jadhav and Shri. Puneet Harit<sup>3</sup>*

## **1. Introduction**

The digital India campaign, launched in 2015 by the Government of India, aims to provide Government's services electronically to citizens through development of secure and stable digital infrastructure, delivering government services digitally and universal digital literacy. Financial Inclusion is a pre-requisite for digital economy. A committee headed by Dr. C. Rangrajan in 2010 had highlighted that a vast majority of farmer households access credit through non- institutional sources and financial inclusion should be improved. JAM (Jandhan, Aadhar & Mobile) Trinity strives to achieve financial inclusion for Digital India initiative through large-scale, technology-enabled, real time Direct Benefit Transfers to poor in far-flung areas of the country.

## **2. Study methodology and Objectives**

The major objective of this study was to assess the impact of interventions made by NABARD in Rajasthan State for furthering the objective of promoting a digital economy. The objective also includes identifying present roadblocks in implementation of current interventions for deepening financial literacy & migrating to a digital economy and suggestions for improving the schemes.

The methodology adopted for the study involved analysis of various outcome parameters to assess the success in implementation of projects supported under the FIF. Further, detailed discussions were held with senior officials / nodal officers of banks in various fora and at individual level to understand the impact of NABARDs interventions and solutions for overcoming the roadblocks in implementing interventions for promoting a digital economy

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<sup>3</sup>The Authors of the study are Manager with Rajasthan Regional Office, Jaipur. The views expressed in this policy brief are the views of the authors and do not necessarily reflect the views of NBSC or NABARD

### 3. Major findings

- Initiatives of NABARD have resulted in greater involvement of RRBs and Cooperative Banks in implementation of various State sponsored Financial Inclusion programmes such as PMJDY, Bhamashah Yojana, Jansuraksha Schemes, DBT, PMFBY, RuPay Debit / Kisan Cards, etc. Enrolment of the rural populace under these schemes is the first step in bridging the gap between the formal banking system and the excluded population with effective use of technology towards a digital economy.
- Grant support provided by NABARD under FIF has enabled RRBs and Cooperative Banks to on board various cost intensive digital banking platforms without any significant financial burden.
- Establishment of digital payment infrastructure such as ATMs, micro-ATMs, mobile banking, UPI, e-KYC, PoS/mPoS, aadhaar authentication, etc. was instrumental in providing door-step services to the unreached population in rural areas in a cost effective manner.
- The initiative of implementing the Pilot Project for use of Technology in 1459 PACS has created a positive environment for adoption of technology by the PACS. This has opened new gateways for utilizing the network of over 6400 PACS in the state as acceptance points for digital transactions by way of micro ATMs. Further, installation of ATMs at branches of Cooperative Banks have improved their image among the rural customers.
- Effective utilization of the support available under FIF for conduct of digital literacy camps through Rural Branches and Financial Literacy Centres of RRBs and Cooperative Banks clubbed with other literacy initiatives such as demonstration vans can prove to be effective tool for propagating literacy on digital platforms amongst the rural masses

### 4. Policy Recommendations

- ✓ In order to expedite the early roll-out of entire bouquet of digital financial services, a time-bound action plan may be charted out by the RRBs in consultation with their sponsor banks. The progress under the action plan may be reviewed regularly by their Top management and as a regular agenda in the Board meetings and Empowered Meeting of RRBs convened by RBI on quarterly basis.

- ✓ NABARD has taken an initiative of rating of the Cooperative Banks based on the technology adoption parameters. Rural StCB & RCS, GoR need to prepare a time bound action plan on improving the rating of the DCCBs. The action plan can be reviewed in various fora such as Board meetings, SLTF meetings and monthly review meetings of MDs of Cooperative Banks.
- ✓ There is a need for Up-scaling of the Pilot project for supporting DCCBs in Financial Inclusion through use of technology in PACS/ Other Multipurpose Cooperative Societies. All the 6400+ PACS affiliated with the DCCBs may be provided with micro ATMs. Further, a commission based incentive scheme for conduct of various banking transactions such as opening of accounts, remittance, activation of cards, deposit/withdrawal transactions, enrolment under Jansuraksha Schemes on the lines of the incentive given to e-mitra centres may be introduced to promote the digital transactions through PACS and supplement the income of PACS
- ✓ The setting up of e-mitras /Common service centres in rural areas by Village Level Entrepreneurs (VLEs) and PACS. Commercial Banks and RRBs can consider providing soft loans to such VLEs to setup e-mitras for providing banking services in allocated SSAs.
- ✓ There is a need for standardization of services to be offered through the Business Correspondent Agents (e-KYC, AEPS & OFF-US transactions). The issue can be taken up in SLBC Sub-Committee on Financial Inclusion and suitable suggestion can be forwarded to RBI.
- ✓ The RRBs and DCCBs may effectively utilize ‘on going digital’ camps conducted by branches and FLCs to target use initiation of the RuPay Debit Cards and RuPay Kisan Cards. Demonstration vans and micro ATMs/Kiosk need to be deployed with PACS/BCAs for reaching out to the beneficiaries to promote use initiation of the cards.
- ✓ For expansion of the ATM Network in rural areas, potential unreached areas without bank branches may be prioritised for deployment of ATMs and this information may be shared with the officials of DoIT&C, GoR and operators of White-label ATMs for expeditious deployment of ATMs

For the full study document please log on to [www.nbsc.in](http://www.nbsc.in)

## *Study on Aadhaar Enrolment and Update Centres (AECs)*

DFIBT, HO <sup>4</sup>

### **1. Introduction**

The UIDAI has directed the Schedule Commercial Banks to set up Aadhaar Enrolment and Update Centres to their customers in at least 10% of their branches. Consequent to this, centres were opened by the various Schedule Commercial Banks (SCBs) and Regional Rural Banks (RRBs) throughout the country. NABARD has extended the financial support under FIF towards the setting up of AECs, out of funds provided by GOI.

### **2. Study methodology and Objectives**

In order to assess the functioning of Aadhaar Enrolment and Update Centres (AECs) set up by the various SCBs and RRBs, a quick study has been undertaken by the Head Office in Madhya Pradesh and Uttar Pradesh and by the various Regional Offices viz., Tamilnadu, West Bengal and Bihar Regional Office respectively. DFIBT, HO had devised a data collection format to capture the basic information, infrastructure available at AEC, manpower, customer service and aspects related to day to day operations of the AEC.

The methodology adopted for gathering the information was by visiting the bank branches and interviewing the branch manager, supervisors, operators and residents with regards to the various parameters as detailed in the prescribed format. The study sample comprised of 44 AECs located in Bank branches in the identified States in five regions of the country.

### **3.0 Major findings**

- The AECs are equipped with the basic hardware prescribed by UIDAI. 75% of the AECs have also deployed extra monitor for the convenience of the customers. Dual power backup viz UPS and generator was also available at most of these centres.
- All the centres are located inside the branch. A notable aspect is that more than half of the AECs had exclusive waiting area for the customers. 84% of the centres had display board outside the centre informing about the AEC.

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- <sup>4</sup> An interstate study conducted by Department of Financial Inclusion and Banking Technologies, NABARD,HO, Mumbai and select ROs. The views expressed in this policy brief are the views of the authors and do not necessarily reflect the views of NBSC or NABARD.

- In order to capture good quality picture UIDAI has prescribed a white background. 11% of the branches spread across rural, semi urban and urban areas didn't have the white background and they were using other alternatives for the purpose.



- In order for the centre to work effectively, 64 kbps connectivity speed is required. 93% of the AEC had the desired speed.
- The AEC are being managed by maximum two persons with three fourth of the centres run by single staff. In almost half of the branches the staff was outsourced. This staff has been trained by UIDAI or other agencies and in 60% of the cases they have received more than 7 days training. State Bank of India centre in Bihar and Union Bank of India, Uttar Pradesh centres had untrained staff managing AEC.
- Most of the AECs are open for 7 hours every working day during working hours of the Bank. Some of the AECs were working beyond banking hours and offering services on non-banking days also.
- Puduvai Bharathiar Grama Bank, Tamil Nadu and Axis Bank, Uttar Pradesh are charging upto Rs.25/- for Aadhaar Enrollment which is against the UIDAI guidelines. All the AEC are charging upto Rs.50/- for updation.
- AEC have reported to service 2 to 40 persons per day generally with average being 14 persons per day.

#### **4. Policy Recommendations**

- ✓ Creating awareness among the AEC customers both about existence of AEC and documents required for enrolment/updation will increase the efficiency of AEC.
- ✓ A system of alert from UIDAI to towards status of acceptance or rejection of the applications need to be developed, so as to facilitate AEC to track the status of the customers' applications.
- ✓ There is a need for adequate staffing and improvements in the internet connectivity for smooth functioning of the AECs.

For the full study document please log on to [www.nbsc.in](http://www.nbsc.in)

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