

Strengthening Farmer - Market Linkages

B.K. Paty¹, Shalendra² and K.C. Gummagolmath³

Abstract

The Government of India has introduced reforms to promote development of the agricultural marketing sector by encouraging private participation, infrastructure creation and establishment of institutions supporting integrated supply chain. The measures may be slow, sporadic and scanty, but have helped in bringing desired change in the sector as reflected by the progress, made under direct marketing, contract farming and establishment of farmer-consumer markets. The liberal environment of business and trade has led to the evolution of many institutions offering market access to small producers like cooperatives, farmers' organizations and organized retail. The increasing use of ICT in agriculture marketing has the potential to propel the small farmers placed at the bottom of the pyramid upward by enhancing their income through better dissemination of information and their direct interaction with consumers. The states should come forward to implement the identified reforms, in letter and spirit, of the provisions laid down in the Model Act circulated by the central government to benefit the small and marginal farmers.

Key words: integrated supply chain, infrastructure creation, private participation, ICT, e-marketing

Introduction

The dominance of small and marginal farmers (more than 85 per cent) in the agricultural economy of India is no doubt an important concern to be factored in for any policy formulation for the sector. With just 44 per cent of the total land, the smallholders are producing 70 per cent of vegetables, 55 per cent of fruits and 52 per cent of cereals. Thus, given the importance of the smallholders, their problems are of prime concern for the sector. The concern is even more pronounced on the marketing front, as an assurance of remunerative price to the smallholder is a formidable challenge due to typical factors prevailing in the agricultural marketing

¹Director (OSPM) Centre for Supply Chain Management and Marketing in Agricultural Extension, National Institute of Agricultural Extension Management (MANAGE) Hyderabad.

Email: bkpaty@manage.gov.in.

²Deputy Director (Behavioural Sciences) Centre for Supply Chain Management and Marketing in Agricultural Extension, National Institute of Agricultural Extension Management (MANAGE) Hyderabad.

³Deputy Director (M&E) Centre for Supply Chain Management and Marketing in Agricultural Extension, National Institute of Agricultural Extension Management (MANAGE) Hyderabad.

Received on: 16/02/2018 Accepted on: 24/02/2018

scenario of the sector. The smallholders are mainly producing for local markets as their access to more lucrative markets operating at national and global level is stymied by factors such as long marketing channel, poor value creation, lack of economies of scale, the absence of quality based pricing, responsive marketing information system to change, inability to eliminate redundant intermediaries, lack of information and horizontal coordination.

Instruments like contract farming, spot markets, direct marketing and different aggregation mechanisms such as FPCs, SHGs accompanied by requisite infrastructure have the potential to reduce marketing risk and transaction costs, thereby enhancing the access of the smallholders to market. However, what is much called for, is requisite reforms in the prevailing marketing system to facilitate the free play of market forces for these instruments to operate.

A number of reform measures have accordingly been introduced by the government to create an environment conducive for infrastructure creation, participation of private players and the development of institutions to help establish linkages between farmers and the market. This paper is a survey of the reforms introduced so far and their impact on the ground, in terms of introduction of new models to create hassle free producer-buyer linkages. Evolution of different institutions as an outcome of liberal reform measures and the opportunities created by the reforms for smallholders to interact directly with buyers have also been covered in the analysis.

When market information and markets themselves are not accessible to the smallholders, no amount of infrastructure facilities can be successful in adding any value to the farmers in their marketing efforts. ICT has the potential not only to deliver market information, but can also serve as a platform for performing various market functions more efficiently and thus establishing better producer-buyer linkage. As ICT has potential in many other sectors to provide last mile connectivity (Mammo, 2015), the paper also covers the importance of ICT application in enhancing market access to the small farmers.

Agricultural Marketing Reforms

Marketing of agricultural produce in India is under the ambit of regulation. The public control on all the agricultural marketing functions and functionaries was established by introducing the Agriculture Produce Marketing (Regulation) Act by various States and Union Territories during 1960s and 1970s. The regulations helped in getting rid of several malpractices and imperfections prevailing in agricultural markets and ensured a fairer deal to the farmers in selling their produce

(Acharya, 2004). The regulations, however, were considered to be relevant only when private trade was underdeveloped, exploitative and controlled by mercantile power (Chand, 2012). The atmosphere of control and licensing of a strict regulatory regime has, however, outlived its utility now, with increased account of liberalization, privatization and globalization (Kaplinsky and Morris, 2000).

With an objective to overhaul the sector, Government of India introduced reforms by constituting an Inter-Ministerial Taskforce to review the existing marketing system and prepare a Model APMC Act in consultation with state governments and UTs in 2003. The same was circulated to all the states and UTs for introducing requisite reforms. Many leading states and UTs amended their acts as per the provisions suggested in the Model Act (Figure 1).

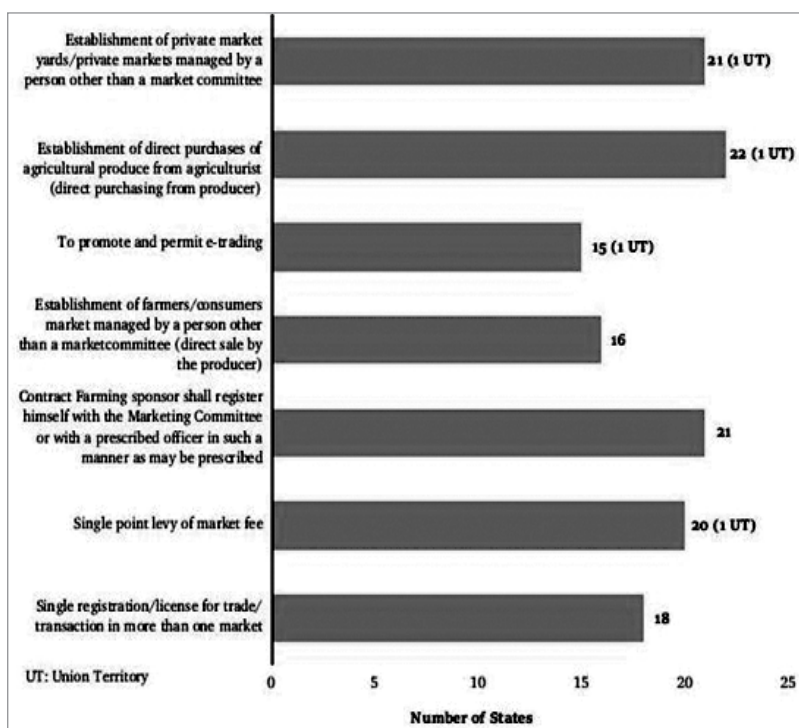


Figure 1. Status of Marketing Reforms with Reference to Seven Key Areas (as on 27.04.2017)

Source: Ministry of Agriculture and Farmers Welfare, GoI

Further, during discussions and consultations at various levels, there has been a persistent demand for expediting reforms in agricultural marketing in order to facilitate private sector investment in this important area. Accordingly, the Ministry of Agriculture, Govt. of India took this major initiative to set up an Empowered

Committee of State Ministers in-charge of Agricultural Marketing on 2nd March, 2010 to suggest further reforms, necessary to provide a barrier free national market for the benefit of farmers and consumers.

The implementation was, however, observed to be patchy, sporadic and cosmetic (Singh, 2017) and was not found to be sufficient as warranted by the dynamic nature of the sector. No state in the country implemented an entire set of market reforms (NITI). The same was reflected by a comprehensive index developed by NITI Aayog during 2016 covering Farmer Friendly Reforms across Indian states and UTs like agricultural market reforms, land lease reforms and reforms related to forestry on private land (Figure 2).

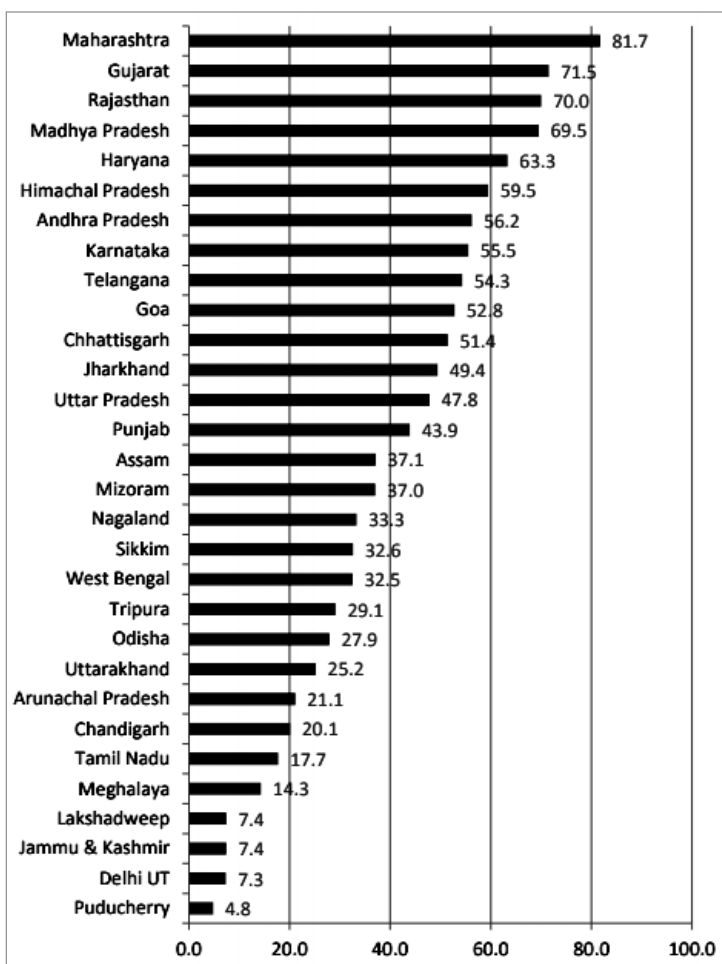


Figure 2. Agricultural Marketing and Farmer Friendly Reforms

Source: NITI Aayog

In order to enhance the pace of reforms in the sector and make it more dynamic and liberal, a more comprehensive Model Act called Model-State/UT Agricultural Produce and Livestock Marketing (Promotion & Facilitation) Act, 2017 was prepared and circulated by the Government to enhance the pace of market reforms and induce ability to push farm enterprise towards realizing the vision of doubling the income of farmers.

Reform Encouraged Alternative Models for Enhancing Producer-Buyer Linkages

Some of the provisions suggested in the Model Act to help farmers get integrated with the market are discussed below:

Farmer - Consumer Market - Traditional agricultural marketing chain in India is fairly long due to the presence of a large number of intermediaries adding up to the costs without much addition to the value (GoI, 2013). Retail oriented direct marketing facilitates farmers in getting a higher price and supply of fresh, high quality produce to consumers at reasonable prices (Gallons, 1997). Direct selling to consumers will increase the chance of attaining high income levels by farmers (Govindasamy, 199) as it allows farmers to retain a higher share of the final value of the produce (Aguglia, 2009) by eliminating numerous intermediaries and performing additional functions. High value crops like fruits and vegetables are more suitable for direct marketing. As diversification towards high value horticulture crops is emerging as a major growth factor in agriculture, direct marketing by establishing farmer-consumer markets will help farmers realize better price. Farmers' markets can play an important role in enhancing farm profitability mainly for farmers producing as per the preferences of the consumer (Conner, 2010). An appropriate model of farmers' market also has the potential to address various community based issues. But this concept is not free from challenges in terms of making sufficient infrastructure available and encouraging farmers to bring their produce as only limited growers have access to Apni Mandi in Punjab due to reasons like stay for long hours for sale of vegetables in such markets. The major share of vegetables cannot be sold through Apni Mandi because the traditional wholesalers and retailers have their dominance in vegetable marketing.

Contract Farming - Contract farming has the potential to address many challenges faced by smallholders like access to technology, capital, inputs and market. Contract farming offers benefits by reducing marketing cost,

transaction cost, production cost and improving yield. The small scale producer is benefitted by such arrangements by overcoming constraints like higher transaction costs (Birthal, 2009). Contract farming helps in lowering down the risks and improving expected returns, productivity and farm income (Ramaswami, 2006 & Sharma, 2008). Contract Farming is significantly more profitable (81 per cent higher net income) than independent production, the main pathway being yield and higher price realization (Kumar, 2016). The Model Act circulated in 2017 has advocated for the need of a separate Act for contract Farming. However, so far only 21 states have amended their act as per the provisions prescribed for contract farming in the Model Act circulated in 2003 by the Government of India.

Direct Sale - The traditional regulated system restricts procurement of the produce directly from the farmers by players like processor/manufacturer/exporter, retailer as sourcing has to be done in regulated markets. Such barriers limit the access of small farmers to alternative marketing models. Sourcing of produce from regulated markets will only add to the cost due to multiple intermediaries. Direct marketing may act as one of the potential alternatives of marketing which can benefit both the producer and consumer. This arrangement will not only help in bringing down the marketing cost, but will also help in avoiding the multiple handling of the commodities and thus leading to a reduction in post harvest losses.

Impact of Reforms

The reform process, has, no doubt had its impact on the ground, but it has not been able to keep pace with the rate warranted by the rising production and diversification experienced by the sector. As per the report of the Committee of Ministers In-charge of agricultural marketing, more than 350 farmer consumer markets have been established by different states with different names like Rythu Bazar in Andhra Pradesh, Apni Mandi in Haryana and Punjab and Uzhavar Santhai in Tamil Nadu. The same has also been the case with contract farming as suggested by 31 cases of registration of contract farming. About 2.87 lakh farmers have been benefitted under contract farming across different states and different crops. More than 400 licenses have also been issued for direct sourcing from the producer (Table 1).

Table 1. Status of Performance of different States with reference to different Provisions of Reforms

States	No. of Farmer-Consumer Markets	No. of Direct Marketing Licenses issued for Direct sourcing from farmers	No. of Licenses to Private Markets issued	No of Contract Farming (CF) Cases Registered	Farmers Covered under CF (in 000)
Maharashtra	--	107	26	7	26.87
Andhra Pradesh	107	171	4	1	250.00
Gujarat	--	17	13	2	1.60
Karnataka	15	9	3	--	0.00
Madhya Pradesh	--	2	--	1	2.17
Rajasthan	--	76	2	--	0.00
Haryana	37	--	--	6	2.70
Rajasthan	26	22	--	9	3.75
Tamil Nadu	179	--	6	5	0.00

Source: GoI (2013)

Agricultural Marketing Institutions

Institution is the structure of relations between individuals within the system of market interactions, which include players like producers, consumers and the state. Institutions play five potential roles in strengthening the markets for the commodities produced, bought and sold by smallholders i.e. reducing transaction costs, managing risk, building social capital, enabling collective action and enhancing access to market. The liberal policy regime has also helped in ushering in many institutional arrangements, such as cooperatives, producer companies and organized retail providing farmers better access to inputs, information, credit and assured market.

Cooperatives

Cooperative model has demonstrated its potential in linking farmers with markets. Cooperatives have been helpful to small farmers not only in providing assured market with higher returns, but also provide credit, inputs and extension services. Grape Marketing Cooperatives in Maharashtra (MAHAGRAPES), Mulukanoor Cooperative Society, Telangana and HOPCOMS model of Karnataka are ideal examples of offering benefits to farmers through cooperatives. Such examples

operating under the Cooperative system have helped in achieving economics of scale, access to domestic and international markets, supply of quality inputs, development of infrastructure, quality enhancement and better returns to the farmers.

Producer Companies

The instrument of the Farmer Producer Company, registered under the Companies Act, is emerging as the most effective model for linking farmers to market. It offers a wide range of benefits compared to other formats of aggregation of the farmers. FPC members can collectively tap high value markets and enter into partnerships with private entities on equitable terms. Most of the FPCs remain focused on addressing issues of crop planning, technology infusion, input supply and primary marketing. However, there is a need for such organizations to leverage their presence further up the value chain, entering into direct retailing, value addition, storage and processing and engage in contract production of primary and processed agricultural produce.

There are more than 1000 such producer companies in India now. FPCs have performed well in states like Maharashtra, Madhya Pradesh and Kerala and farmers have been able to realize higher returns for their produce. Some successful examples of producer companies are; Sahyadri Farmer Producer Company Ltd., Nasik, Vegetable Growers Association of India, Pune, Jagannath Crop Producers Company Ltd., Chetna Organic Agriculture Produce Company (COAPCL), Chetna Organic Farmers Association (COFA), Pashusamvardhan Producers Company Ltd., Dhari Krushak Vikash Producer Company Limited, VAMCOL, VANILCO, BIPCL, Rangсутra, Fab India, etc.

Organized Retail

The retail sector is gaining popularity in most of the cities today. The price-sensitive Indian shopper has reached out to stores such as ITC, Reliance, More, Food World, Spencer's, Big Bazaar mainly for the steep discounts and bulk prices. Metro, Wal-Mart and Carrefour have already entered the market through their partnership with Indian firms, and gained opportunity for some early observations. This would lead to a greater demand for graded quality produce in the requisite lot sizes through a transparent and competitive system. Modern retailing can bring in new technology and reduce consumer's prices, thereby, stimulating demand and enhancing employment in production. With the increasing tendency of organized retailing (like supermarkets), farmers' organizations should be provided support

in the form of necessary infrastructure of grading, sorting and packaging that will help in strengthening farm-to-fork linkages.

Opportunities for smallholders under New Regime of Reforms

The Government of India expects state governments to encourage holistic development of the sector through the reform measures with a focus on making the agricultural market system liberal, efficient and uniform for interstate trade. One of the important aspects is to encourage models/ institutions that facilitate direct linkage between producers and consumers either individually or through bulk buyers. The new Model Agricultural Produce and Livestock Marketing (Promotion and Facilitation) Act, 2017, has certain legal provisions to enable farmers avail opportunities for linking directly to consumer.

Function	Player	Allowed	Tax/Fee	• Mean	• Remark
Retail	Farmer	Yes	Nil	• Farmers Market • Consumers • Bulk Buyers	• Tax structure may change after standardized packing and branding
Procurement	Organized bulk buyers	Yes	Fee as prescribed	• License for direct procurement	
Marketing of F&V	All	Yes	Nil	• Outside market	• Deregulation of Marketing of F&V • Marketing of F&V outside the market yard deregulated while allowing regulation when traded inside the market yard

ICT as a Tool to link Farmers with Markets

The measures taken up by the government through reforms have opened up the marketing system and made it more liberal for participation of private player. There is need to strengthen farmers to avail themselves of these opportunities, so as to speed up the process of integration of smallholders with the market. ICT will help farmers in better price realization and enhance market access as has been observed in many other sectors like finance and insurance.

Information Dissemination

Several ICT based initiatives are being utilized in India under different ownership to provide information to the farmers using a number of approaches ranging from

text to voice SMS, digital videos, tele-infrastructure, internet, social media, etc., to get the information delivered to the end users effectively. A matrix of initiatives, their ownership and means used to deliver information is presented in Table 2.

Table 2. Categorization of ICT Initiatives in Indian Agriculture

Ownership/ Delivery Mechanism	Government	Non-Government	Cooperative/ Private/ Consortium
Web-based	AGRISNET, eKrishi, AGMARKNET	-	Pravara, Akashganga, iKisan, aAQUA, Mahindra Kisan Mitra, Haryali Kisan Bazar
Sanchalak (Facilitator between the user and service provider)	-	-	Warana, eSagu, iKisan, e-Choupal
Mobile/ Mixed Approach	KCC, e-Arik, Digital Mandi, e-Agri Kiosk	Fisher Friend Mobile Advisory, Digital green, MSSRF FFMA	IKSL, Reuters Market Light

Wholesale Marketing

ICT has also been used as a platform for wholesale marketing. Electronic National Agricultural Market (e-NAM) or Rashtriya e-market Services Ltd. (ReMS) are examples of ICT based initiatives taken up by the government to enhance market access to the farmers. Both the initiatives provide a virtual market operating on an electronic trading portal, but supported by physical markets at the backend. It has the potential to bring in better price discovery, transparency, competitiveness, efficiency and better participation of farmers by integrating a wide range of functions and functionaries like farmers, commission agents, traders, electronic auction, clearing and settlement, payment gateway, logistics, warehousing, banking with facilities for grading and assaying. The concepts like e-NAM and ReMS operating at national and state level will help in ensuring remunerative price to the farmers on one hand and reasonable cost to the consumers on the other.

ICT as a Platform for Marketing

There are private initiatives as well using ICT as a platform for providing market solutions to farmers like Farmer Friend, an online portal bringing producers and consumers together. The initiative facilitates linking of farmers directly with the consumer. Such models help in bridging the gap between the farmers and the consumers by providing a platform wherein farmers can contact the end-customer directly and vice-versa.

Recommendations

Some of the recommendations to enhance small farmers' access to market are discussed below:

- Some of the obvious measures to enable the smallholders to overcome the disadvantages of the present system are aggregation at the grass-root level, direct marketing through linkages with consumers / exporters / processors / retail chain, shortening the traditional long channels through ICT (e-NAM), etc. Apart from these measures, enhancing processing / export / value addition, and participation of farmers in the modern instruments like Futures Market, Spot market etc., will ensure better returns to the farmers.
- There is a need to set up a marketing cell in every line department of State governments to bring about the perspective of market driven production in agriculture and allied sector. The cell should promote all the modern instruments of marketing on the extension platform such as contract farming, retail chain linkages, farmers-exports / processor linkages, spot markets, direct marketing, aggregation mechanisms such as FPCs, SHGs, cooperatives etc., for their respective commodities.
- The unemployed youth in rural areas have to be incentivized to set up enterprises to directly supply different agriculture/horticultural produce to households, hotels, restaurants, hospitals, etc. This will go a long way towards bringing about direct linkages and shortening of long marketing chains.
- The states should come forward to implement the identified reforms, in letter and spirit of the provisions laid down in the Model Act circulated by the central government to benefit the small and marginal farmers.

References

- Acharya, S S (2004). State of the Indian Farmers: A Millennium Study, Agricultural Marketing, Department of Agriculture and Cooperation, Ministry of Agriculture and Academic Foundation, New Delhi.
- Aguglia Laura, Francesco De Santis, Cristina Salvioni (2009). Direct Selling: a Marketing Strategy to Shorten Distances between Production and Consumption. Paper prepared for presentation at the 113th EAAE Seminar "A resilient European food industry and food chain in a challenging world", Chania, Crete, Greece, date as in: September 3 - 6, 2009.
- Birthal Pratap S., Awadhesh K. Jha, Marites M. Tiongco and Clare Narrod (2009). Farm-Level Impacts of Vertical Coordination of the Food Supply Chain: Evidence from Contract Farming of Milk in India. *Ind. Jn. of Agri. Econ.* Vol. 64, No. 3, July-Sept. 2009: 481-496.

- Chand, Ramesh (2012). Development Policies and Agricultural Market. *Economic and Political Weekly*, XLVII (52): 53-63 (December 29, 2012).
- Conner David S., Susan B. Smalley, Kathryn J. A. Colasanti and R. Brent Ross (2010). Increasing Farmers Market Patronage: A Michigan Survey. *Journal of Food Distribution Research* 41(2): 26-35.
- Gallons James, U.C. Toensmeyer, J. Richard Bacon and Carl. L. German (1997). An Analysis of Consumer Characteristics Concerning Direct Marketing of Fresh Produce in Delaware: A Case Study. Accessed through <https://ageconsearch.umn.edu/record/26603/files/28010098.pdf>
- GoI (2013). Final Report of Committee of State Ministers, In-charge of Agriculture Marketing to Promote Reforms, Ministry of Agriculture and Farmers Welfare, New Delhi.
- Govindasamy Ramu, Ferdaus Hossain and Adesoji Adelaja (1999). Income of Farmers who Use Direct Marketing. *Agricultural and Resource Economics Review*. Accessed through <https://ageconsearch.umn.edu/record/31493/files/28010076.pdf>
- Kaplinsky, R and M Morris (2000). A handbook for value chain research, IDRC.
- Kumar Anjani, Devesh Roy, P K Joshi, Gaurav Tripathi and Rajendra P. Adhikari (2016). Selected Paper prepared for presentation at the 2016 Agricultural & Applied Economics Association Annual Meeting, Boston, Massachusetts, July 31-August 2, 2016.
- Mammo Yared (2015). ICTs in Linking Farmers to Markets: Innovative Mobile Applications and Lessons Learned from the Past and the Future. The Technical Centre for Agricultural and Rural Cooperation (CTA) Working Paper 15/11 | November 2015.
- Ramaswami Bharat, P S BIRTHAL and P K Joshi (2006). Efficiency and Distribution in Contract Farming: The Case of Indian Poultry Growers. MTID Discussion Paper No. 91. International Food Policy Research Institute.
- Sharma Vijay Paul (2008). India's Agrarian Crisis and Corporate-Led Contract Farming: Socio-economic Implications for Smallholder Producers. *International Food and Agribusiness Management Review* Volume 11, Issue 4, 2008 pp: 25-48.
- Singh S K (2017). The Model APML Act 2017. Presentation made in the training program organized by NIAM on eNAM, NIAM, Jaipur.