सीएबी कॉलिंग CAB Calling



Volume 40 Issue 1 January - June 2017



जनवरी-जून 2017/January-June 2017 Volume 40 Issue 1/2017 Regn. No. R.N.-31642/77

सीएबी कॉलिंग CAB Calling

कृषि बैंकिंग महाविद्यालय, पुणे की अर्धवार्षिक पत्रिका Half-Yearly Peer-reviewed Journal of the College of Agricultural Banking, Pune

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Prospective authors can submit signed manuscripts to the Editor, CAB Calling, College of Agricultural Banking, University Road, Pune - 411 016. Soft copies can be submitted by e-mail to cabcalling@rbi.org.in

Unpublished manuscripts will not be returned.

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Write to: The Editor, CAB Calling, College of Agricultural Banking, University Road, Pune- 411016

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Cover Design

Mohandas Karamchand Gandhi (fondly, Gandhiji) led the Dandi March from Sabarmati Ashram in Ahmedabad to Dandi, a small coastal village town in Navsari district of Gujarat. As Gandhiji and 78 other people who intend to walk 240 miles (390 kms.) to Dandi, growing numbers of Indians joined them along the way, ended after a 24-days march to produce salt without paying the tax. When Gandhiji broke the salt laws at 6:30 am on April 6, 1930, it sparked large scale acts of civil disobedience against the British Raj. The campaign had a significant effect on changing world and British attitudes towards Indian sovereignty and self-rule and caused large numbers of Indians to join the fight for the first time. The Great Dandi March that sought solution in salt emanated from 'helplessness' perpetrated by the British Raj. The salt was a deeply symbolic choice, an item of daily use could resonate more with all classes of citizens than an abstract demand for greater political rights.

Form IV: Statement about ownership and other particulars about 'CAB Calling'

| 1. | Place of Publication | Pune |
|----|----------------------------|--------------------------------------|
| 2. | Periodicity of Publication | Half-Yearly |
| 3. | Publisher's Name | Madhumita Sarkar Deb |
| | Nationality | Indian |
| | Address | Principal and Chief General Manager |
| | | College of Agricultural Banking |
| | | Reserve Bank of India, Pune - 411016 |
| 4. | Printer's Name | Anson Advertising & Marketing |
| | Nationality | Indian |
| | Address | Shahu College Road, Pune - 411009 |
| 5. | Names and addresses of | College of Agricultural Banking |
| | Individuals who own the | Reserve Bank of India, Pune - 411016 |
| | Journal | |
| | | |

I, Madhumita Sarkar Deb, hereby declare that the particulars given above are true to the best of my knowledge and belief.

Sd/-Signature of Publisher

Date: June 30, 2017

मुख्य संपादक की कलम से

From the Desk of Editor-in-Chief



प्रिय पाठकगण.

सीएबी कॉलिंग के इस अंक में पांच महत्वपूर्ण आलेख शामिल किए गए हैं। इन आलेखों की संक्षिप्त जानकारी देने की मुझे अनुमति दें।

भारत में कृषि और कृषि वित्तः समस्या और प्राथमिकताएं विषय पर आधारित पहले आलेख में हरित क्रांति के फायदे और नुकसान पर जानकारी दी गई है। इसमें देश की भावी कृषि रणनीति के लिए प्राथमिकताओं का भी उल्लेख किया गया है। हालांकि हरित क्रांति से कई लाभ हुए हैं, कम से कम हमारे लोगों को खाद्य सुरक्षा और पीएल 480 जैसे कार्यक्रमों से मुक्ति मिली है। हरित क्रांति का प्रभाव कृषि आबादी के विभिन्न वर्गों में असमान था और यही वजह है कि कृषि के लिए भावी रणनीति समावेशी और न्यायसंगत होनी चाहिए, साथ ही, प्रौद्योगिकीय सुधार पर उचित ध्यान देना चाहिए, जलवायु परिवर्तन के प्रभाव को कम करना चाहिए और पोषण सुरक्षा केंद्रीत होनी चाहिए।

सूक्ष्म उद्यमों को लगता है कि औपचारिक वित्तीय संस्थानों द्वारा अक्सर उनकी उपेक्षा की जाती है। इसका एक महत्वपूर्ण कारण यह है कि उनका क्रेडिट इतिहास स्थापित करना आसान नहीं होता है। HOPE ऋण पर द्वितीय लेख में तर्क दिया गया है कि कुछ सरोगेट (surrogates) की सहायता से ऋणदाताओं को ऐसे ऋण लेने वालों के क्रेडिट स्कोर प्राप्त करने में मदद मिल सकती है जिससे कि कर्ज देते समय चौकस निर्णय लेने हेतु उन्हें सहायता मिलेगी। HOPE यह ईमानदारी (Honesty), दृष्टिकोण (Outlook), व्यक्तित्व (Personality) और आर्थिक निर्णय लेने के विशिष्ट तत्व (Economic decision-making behaviour) का संक्षिप्ताक्षर है। इन दक्षताओं को मापने की इस नवोन्मेषी पद्धित से सूक्ष्म उद्यमों के वित्तपोषण में महत्वपूर्ण बदलाव हो सकता है।

Dear Readers,

This issue of CAB Calling contains five featurelength articles. Allow me to give you a brief preview of these articles.

The first article titled Agriculture and Agrifinance in India: Issues and Priorities, dwells on the pros and cons of the Green Revolution. It also mentions about the priorities for future agricultural strategy for the country. Although the Green Revolution brought numerous benefits, not the least of which was food security for our people and freedom from programmes like the PL480. The impact of the Green Revolution was uneven across various sections of the farming population, that is why, the future strategy for agriculture must be inclusive and equitable by design, while also giving due cognisance to technological improvement, mitigating the impact of climate change and aiming for nutritional security.

Micro enterprises frequently find themselves neglected by formal financial institutions. An important reason for this is that their credit history is not easy to establish. The second article, on HOPE Loans, argues that certain surrogates can help lenders derive credit scores of such borrowers and thus help them make informed decisions on extending loans. HOPE is an acronym for Honesty, Outlook, Personality and Economic decisionmaking behaviour. An innovative method of

तीसरे लेख में अंतर-राज्य और अंतर-क्षेत्र की असमानताएं जैसे विवादास्पद मुद्दे पर चर्चा की गई है। पिछले कुछ दशकों में अर्थव्यवस्था के उदारीकरण के साथ-साथ बाजार की ताकतों का प्रभाव बढ़ने के कारण यह समस्या अधिक तीव्र हुई है। लेखकों का मानना है कि मानव विकास और बुनियादी सेवाओं तथा बुनियादी ढांचे के बीच की दूरी समाप्त करने से इस दृढ समस्या का समाधान हो सकता है।

मान देशी महिला सहकारी बैंक समावेशी बैंकिंग क्षेत्र की एक प्रसिद्ध बैंक के रूप में उभरी है। इस भीड़ भरे बैंकिंग क्षेत्र से यह बैंक किस प्रकार से अलग है इसकी विस्तृत केस स्टडी आपकी सोच को एक नई दिशा से सोचने के लिए निश्चित ही प्रेरित करेगी। इस केस स्टडी से आपको पता चलेगा कि वित्तीय रूप से वंचित ग्राहकों के लिए ऋण की कीमत यह अन्य कारणों में से एक कारण है। उचित उत्पाद डिज़ाइन करने से और डिलीवरी मॉडल से एक छोटा बैंक भी ग्राहकों का दिल जीत सकता है।

पांचवां महत्वपूर्ण लेख हिंदी में है तथा इसमें भारतीय बैंकिंग में समेकन से संबंधित बहुत ही सामयिक मुद्दे पर जानाकारी दी गई है। लेखक ने इस मुद्दे की गहराई तक पहूँचकर भारतीय बैंकों के बीच समेकन के कई पहलुओं को उजागर किया है।

उपर्युक्त के अलावा दो संक्षिप्त लेख भी हैं, जो क्रमशः बैंकिंग में 'ग्राहक विश्लेषिकी' और देश में सहकारी बैंकों के SWOT विश्लेषण की उपयोगिता के बारे में हैं। तीन पुस्तकों की समीक्षा और हमारी नियमित मदें जैसे महाविद्यालय से जुड़े महत्वपूर्ण परिपत्रों का सारांश और 'कैंपस कैप्सूल' आपको निश्चित रूप से निरामय और परिपूर्ण पठन का अनुभव देंगे।

सुखद पठन की कामना के साथ।

measuring these competencies could well be the game-changer in financing of micro enterprises.

The third feature article delves into a vexed issues: that of continuing inter-state and interregional disparities in the economic sphere across the country. The problem may well have been exacerbated with the opening up of the economy and the greater play of market forces in the last couple of decades. The authors have opined that removal of gaps in human development and in basic services and infrastructure may be the key to resolving this persistent problem.

Mann Deshi Mahila Sahkari Bank has emerged as a well-known name in the field of inclusive banking. A detailed case-study on what differentiates this bank in the crowded banking space is sure to spur your thinking in a new direction. It has revealed, for instance, that price of credit is just one of the considerations of financially excluded customers. Judicious product design and delivery models can help even a small bank win the favour of customers.

The fifth feature-length article in Hindi deals with the very topical issue of consolidation in the banking in India. The author has gone into the depths of the issue and illuminated many aspects of the question of consolidation among Indian banks.

In addition to the above, there are also two articles-in-brief, which briefly describe the use of 'customer analytics' in banking and a SWOT analysis of cooperative banks in the country, respectively. Three book reviews and our regular items such as gist of important circulars related to the College and the 'campus capsule' are sure to give you a wholesome and fulfilling reading experience.

Happy reading!

🖦 ाळकळा 🗀 – मधुमिता सरकार देब

- Madhumita Sarkar Deb



Agriculture and Agrifinance in India: Issues and Priorities

K. C. Badatya*

Green revolution brought sufficiency in food production due to a combination of technologies viz., high yielding varieties, fertilizers, improved agronomic practices, assured irrigation and price support policy. However, the interventions mainly benefited irrigated regions and resourceful farmers, bypassing the larger segment of rainfed farming and resource poor farmers. The future agricultural strategies need to stress upon agricultural development that aims at greater inclusiveness and equitable transformation, whereby all farmers are able to reap economic benefits with greater thrust on technology applications, mitigating climate change impact and addressing nutritional security.

Introduction

Indian agriculture is witnessing radical changes and challenges. Agriculture is the pivotal sector for ensuring food and nutritional security, sustainable inclusive development and alleviation of poverty. It is a key sector generating employment opportunities for the vast majority of the population. However, for some time now, agriculture sector, as a whole, has been confronted with numerous challenges linked to food and energy crisis coupled with climate change and degradation of natural resources. While, on the one hand, the demand for agricultural commodities is rising steeply in tandem with the change in lifestyle, change in food preferences of the consumers, the agriculture sector is struggling with decelerating profitability with gradual decline in net return to the farmer, on the other. The emerging opportunities and challenges call for a paradigm shift in policy actions to be taken up by all the stakeholders in the entire food supply chain to gear up agriculture and agrifinance.

Since the beginning of the 21st century, Indian economy experienced two contrasting trends: (i) India is being recognized as the global power in the key economic sectors with consistent high economic growth; and (ii) its slow growth observed in the agriculture sector is causing concerns for future food and nutritional security of the country (ICAR, 2011). Indian agriculture contributes to 8 per cent global agricultural GDP to support 18 per cent of world population with only 9 per cent of world's arable land and 2.3 per cent of geographical area. About 22 per cent of the

^{*}Deputy General Manager and Member of Faculty, College of Agricultural Banking, Reserve Bank of India, University Road, Pune - 411016. The views expressed in the article are those of the author and not necessarily represent the views of the institution which he belongs. The usual disclaimer applies.

country's population lives below poverty line, and about 80 per cent of the landmass is highly vulnerable to drought, floods and cyclones. On the brighter side, India possesses substantial biodiversity - nearly 8 per cent of the world's documented animal and plant species are in India and many of these are considered crucial for livelihood security of poor and vulnerable. Therefore, conservation of natural resources, maintenance of biological wealth and acceleration of agricultural growth are considered of paramount importance in the context of the future. Mainstreaming ecology for prosperity of agriculture need to be propagated on the lines of 'Evergreen Revolution'.

However, the decelerating profitability with gradual decline in net return to the farmer poses a serious challenge before the Government in meeting the target of "Doubling of Farmers Income (DFI) in next six years (2017-22). Agrifinance would play an important role in making future agriculture more inclusive, remunerative and sustainable. This paper is an attempt in a small way to enlist a few issues, challenges and opportunities to gear up agriculture and agrilending to the next decade. The first section presents in brief the Seven-point strategy evolved by Government for doubling farmers' income. The second and third sections elucidate the issues and priorities on agriculture and agrifinance separately and fourth section concludes the paper.

I. Doubling Farmers' Income (DFI)

Government of India (GoI) unveiled a sevenpoint strategy to double the income of farmers in six years (2017-22). "In the past, the emphasis has been on agricultural output, rather than on farmers' incomes. I've set the objective of doubling the farmers' income by 2022", Prime Minister addressed in the Bloomberg India Economic Forum, (GoI 2016). He also emphasized that the target is achievable through a combination of (i) growth in production, (ii) more efficient input use, (iii) reduction in post-harvest losses, (iv) higher value addition and agro-processing, (v) reduced marketing margins, (vi) risk mitigation and (vii) ancillary activities.

(i) Growth in production and productivity

India has 142 million ha. of net cropped area, out of which only 46 per cent land is under institutional irrigation. With the objective of providing water to every field, Pradhan Mantri Krishi Sinchai Yojana (PMKSY) has been launched. With the objective 'Per Drop More Crop' to provide an end-to-end solution in irrigation supply chains, water resources, network distribution as well as farm level application, an overall approach combining irrigation with water preservation is being adopted. In addition, the aim is to complete pending medium and large irrigation projects on a priority basis. Water harvesting, management, and watershed development projects are being put on the fast track.

(ii) Effective use of Inputs

The 'Effective use of inputs' can lead to increase in production and productivity through use of improved seeds, planting materials, organic farming, soil health, etc. Government puts thrust on use of improved seeds and nutrients, promoting organic farming, curbing illegal use of urea and ensuring its adequate supply through Neem Coated Urea scheme. Soil Health Card

Scheme has helped in reducing the cultivation cost and increased the production by curbing misuse of fertilizers. Farmers are also getting timely information and advisory services through new technologies.

(iii) Reducing Post-Harvest Losses

One of the biggest problems faced by the farmers pertain to storage and post-harvest losses. The farmers are being encouraged to use warehouses and avoid distressed sales. Loans against negotiable warehouse receipts are being provided with interest subvention benefits. To protect farmers from losses, the government is focusing on development of storage infrastructure and integrated cold chains in rural areas.

(iv) Value Addition and Agro-processing

The government also puts emphasis on value addition, promoting quality and improving food-processing capabilities through developing forward and backward linkage of agro processing clusters, thus benefitting farmers and creating employment opportunities.

(v) Reforms in Agriculture Marketing and e-NAM

Reforms in agriculture marketing has been initiated to ensure that a large part of the profit reaches the farmer and the role of intermediaries is minimized. The e-NAM has been launched with three-pronged strategy, i.e., three I's as institutional reforms, incentives and infrastructure. Online trading has begun on various mandis. Farmers are organized as Collectives, i.e., Farmer Producer Organizations (FPOs) which will not only

help them in achieving economy of scale but also increase their bargaining power.

(vi) Risk, Security, and Assistance

The Pradhan Mantri Fasal Bima Yojana (PMFBY), as a security shield for farmers' income, has been under implementation since Kharif 2016 with the lowest premium rates fixed for Kharif (2%) and Rabi (1.5%) crops covering both standing crops as well as pre-sowing to post-harvesting losses. Twenty-five per cent of the claim is settled immediately online. The scheme has been making a significant effect on derisking agriculture. The remote sensing technology and drones to estimate crop losses and settle claims without much delay, new technologies like smartphones are also being used for harvesting. The Government has also revised the norms for assistance from State Disaster Relief Fund (SDRF) and National Disaster Relief Fund (NDRF) with providing compensation if at least 33 per cent of the crop is damaged and raising the compensation amount to 1.5 times of damage.

(vii) Allied and Ancillary Activities

In order to increase the income of the farmers, Government also puts thrust on development of allied and ancillary activities, including horticulture, dairy, poultry, beekeeping, fisheries, agroforestry, integrated farming and development of rural backyard poultry, etc. Adequate focus is given to allied activities like poultry, beekeeping, animal husbandry, dairy development, and fishery. Farmers are encouraged to adopt integrated agriculture, thus ushering in "Rainbow Revolution" in order to increase the income of the farmers.

II. Agriculture: Approaching the Next Decade: Meeting Challenges

1. Agriculture and Indian Economy

The contribution of agriculture to the Gross Domestic Product (GDP) is declined, which touched 15.7 per cent from about 30 per cent in 1990-91. During the last two and a half decades, the average annual growth of agriculture sector was less than half (3.0%) of the overall average growth of the economy (6% - 7%) and industrial and service sectors have outpaced performance of agriculture sector. But the decrease in the proportion of workforce engaged in agriculture did not commensurate with the decline in share of agriculture to the total GDP. Agriculture sector still provides employment to about 52 per cent of the workforce that used to be about 61 per cent in 1990-91. These starkly different trends reveal that incomes in nonagriculture sector are growing faster than agriculture sector and a sizable workforce from agriculture needs to be shifted to nonagriculture sector for income and livelihood opportunities. New avenues, activities, subsectors, sectors, technologies need to be

promoted that raise agricultural income and ensure employment opportunities in the agri-supply chain to a majority of the workforce.

2. Growing food demand

Total production of foodgrain during 2015-16 is reported at 251.6 million tonnes and it is estimated to grow to 273 million tonnes during 2016-17 (GoI, 2017). There are projections that demand for foodgrains would increase to 345 million tonnes by 2030 (ICAR, 2011), means in the next 13 years, production of foodgrains needs to be increased at the rate of 5.5 million tonnes, annually. The demand for high-value commodities (such as horticulture, dairy, livestock and fish) is increasing faster than foodgrains. For most of the high-value food commodities demand is expected to increase by more than 100 per cent by 2030 (Table 1). These commodities are perishable in nature and require appropriate infrastructure for handling, value-addition, processing and marketing. This will be a challenge as well as an opportunity to be seized in the next decade.

Table 1: Demand for high-value commodities by 2030

| llary | Foodgrains | | | ab | High Value Con | nmodities | |
|-------|------------------|---------|----------|-----|------------------|-----------|------|
| No. | g horticulture. | 2000 | 2030 | No. | adl to imp using | 2000 | 2030 |
| v 1= | Pulses | 14 | 30 | 1 | Meat | 4.5 | 15 |
| 2 | Cereals | 33 | 102 | 2 | Fish | 6 | 16 |
| 3 | Wheat | 84 | 95 | 3 | Eggs | 17 | 57 |
| 4 | Rice | 81 | 156 | 4 | Fruits | 43 | 110 |
| 5 | Foodgrains | 192 | 345 | 5 | Vegetables | 93 | 180 |
| dture | integrated agric | goba of | zoureged | 6 | Milk | 76 | 182 |

Source: Vision 2030, ICAR, New Delhi, January 2011.

There are many other studies which have projected the demand for foodgrains under alternative assumptions of income growth, distribution of income and future dynamics of rural and urban populations accompanied by lifestyle changes. Substantial increase in the consumption of high-value food commodities like fruits, vegetables, milk, meat, fish and eggs have been projected (Table 2).

Table 2: Projected Demand for Major Food Commodities

| Commodities | Projected (million | Projected Demand (million tons) | | | |
|-------------|--------------------|---------------------------------|--|--|--|
| | 2030* | 2050** | | | |
| Cereals | 284 | 359 | | | |
| Pulses | 26.6 | 46 | | | |
| Edible Oils | 21.3 | 39 | | | |
| Vegetables | 192 | 342 | | | |
| Fruits | 103 | 305 | | | |
| Milk | 170.4 | 401 | | | |
| Sugar | 39.2 | 58 | | | |
| Meat | 9.2 | 14 | | | |
| Egg | 5.8 | 10 | | | |
| Fish | 11.1 | 22 | | | |

Source: Kumar (2016) for projected demand in 2030, NCAP Vision 2050 for projected demand in 2050

It is encouraging to note that for majority of the commodities, outputs have outpaced the projections due to technological improvements and better logistics. So it is expected that the rising food demand will be accompanied by increasing demand for its safety and quality owing to rising health consciousness and lifestyle changes among

the masses. The main challenge will be to develop technologies, practices, varieties and breeds that are high-yielding, laden with nutrients and micronutrients and safe for human health. The opportunities would be in augmenting farm incomes, generating employment and in involving a number of additional stakeholders in the food-supply chain. The key challenges would be to develop appropriate technologies and management options to raise productivity to meet growing food demand and also developing appropriate technologies, create required infrastructure and to evolve institutional arrangements for production, post-harvest, quality control technologies and marketing of high-value and perishable commodities and their value-added products.

3. Turning around Smallholders' Agriculture

The average size of the landholding declined from 2.30 ha. in 1970-71 to 1.15 ha. in 2010-11, and absolute number of operational holdings increased from about 70 million to 138 million (Table 3). If this trend continues, the average size of holding would be mere 0.68 ha. in 2020, and would be further reduced to a low of 0.32 ha. in 2030 (ICAR 2011). This is a very complex and serious problem, when share of agriculture in GDP is declining, average size of landholding is contracting, and number of operational holdings are increasing.

Table 3: Number of Holdings, Operated Area and Average Size of Holdings as perAgriculture Census, 2010-11

| No. | Size Classes of Holdings | Number of operational Holdings (in ₹000) | Operated area (in ₹000 ha.) | Average size of holdings (in ha.) |
|--------------------|-----------------------------|---|-----------------------------|-----------------------------------|
| bluow zalimahogo | Marginal | 92826 | 35908 | 0.39 |
| emicione 2 esimoso | Small | 24779 | 35244 | 1.42 |
| 3 | Semi medium | 13896 | 37705 | 2.71 |
| 4 | Medium | 5875 | 33828 | 5.76 |
| 5 | Large | 973 | 16907 | 17.38 |
| All Size Classes | ol anoitro timo | 138348 | 159592 | 1.15 |

Declining size of land holdings without any alternative income-augmenting opportunity is resulting in fall in farm income, causing agrarian distress. The collectivization initiatives taken up through constitution of FPCs and FPOs are giving significant positive outcomes. Along with constituting FPCs/FPOs in large numbers, design thinking process needs to be initiated to make this collectivization initiative sustainable. FPCs/FPOs can turn around the agricultural economy provided they promise farmers sustainable and better returns to farming and these institutions would not garner adequate returns without farmers buying to a self-sustained business model (Shah, 2016). Therefore, the future is to see how this initiative is taken forward with FPOs bringing out a well-planned vision document containing self-sustained business models.

4. Improving the Production Setting

The problem of land-and-water degradation is becoming a key constraint in augmenting agricultural production. Available estimates reveal that nearly 120.7 million ha. of land in the country is degraded due to soil erosion and about 8.4 million ha. has soil salinity and water-logging problems. Besides, huge

quantities of nutrients are lost during cropproduction cycle. Annually, India is losing nearly 0.8 million tonnes of nitrogen, 1.8 million tonnes of phosphorus and 26.3 million tonnes of potassium deteriorating quality and health of soil (ICAR, 2011).

The issue of imbalanced application of nutrients has further aggravated the problem along with excessive mining of micro-nutrients, leading to deficiency of macro- and micro-nutrients in the soils. While the overall consumption of fertilizer has increased from 70 kg. per ha. in 1991-92 to 169 kg. per ha. by 2015-16, the N, P, K balance particularly, in high fertilizer use areas (e.g. Northwest India) is seriously distorted. It is apparent that an integrated nutrient management (INM) approach is required to enable a balanced use of fertilizers for optimum results. Thrust should be on nutrients and promoting organic farming, curbing illegal use of urea and ensuring adequate supply through the ongoing Neem Coated Urea scheme. The issue of soil testing cards and setting up of adequate capacity for soil testing labs in Krishi Vikas Kendras (KVKs) need to be pushed further to encourage precise use of fertiliser and micro nutrient to enhance productivity of soil.

Quality seed is considered as a catalyst of change in agriculture. The Green Revolution in India during the late sixties and seventies witness to this truth. During the decade of 2000s, *Bt* cotton seeds and hybrid maize seeds have shown spectacular results. While increasing the level of public investment in domestic R&D is important, institutional reforms can lead to large scale private participation. Overall, the seed replacement rate (SRR) has been improving, but much more needs to be done in this regard to give a boost to productivity through seed improvement in the next decade.

Similarly, the green-revolution belt is exhibiting second-generation problems owing to over-exploitation and

mismanagement of soil-and-water resources. Only 46 per cent land is under institutional irrigation (Table 4).In rain-fed areas, on the other hand, where the majority of the rural population live, agricultural practices need adapting to reduce soil erosion and increase the absorption of rainfall. Over-exploited and degrading forest lands need mitigation measures. In order to address the issue, watershed management programs, where communities engage in land planning and adopt agricultural practices that protect soils, increase water absorption and raise productivity through higher yields and crop diversification need to be strongly advocated.

Table 4: Distribution of Net Irrigated Area and Net Area Sown by Size Groups of Holdings as per Agriculture Census 2010-11

| No. | Major size classes | Net | Net Irrigated Area | | et Sown Area | Percentage of Net Irrigated Area to Net Area | |
|-------------|--------------------|-------|--------------------|------------------------|--------------|---|--|
| of holdings | | Area | per cent to Total | Area per cent to Total | | Sown | |
| 1 | Marginal | 16835 | 26.07 | 32219 | 22.81 | 52.25 | |
| 2 | Small | 14263 | 22.09 | 31976 | 22.63 | 44.61 | |
| 3 | Semi-medium | 14995 | 23.22 | 33778 | 23.91 | 44.39 | |
| 4 | Medium | 13266 | 20.55 | 29442 | 20.84 | 45.06 | |
| 5 | Large | 5209 | 8.07 | 13864 | 9.81 | 37.57 | |
| | Total | 64567 | 100.00 | 14127 | 100.00 | 45.70 | |

Source: Agriculture Census 2010-11, Ministry of Agriculture and Cooperation, GoI

Ways to radically enhance productivity through irrigation ("per drop more crop") need to be found out. Underground piped conveyance, (as is the practice in Punjab), better on-farm management of water (Pani Panchayats in Odisha and Water Users associations in Andhra Pradesh), and use of more efficient delivery mechanisms through drip and sprinkler irrigation are among the actions that could be taken in a larger scale.

In order to achieve the 'per drop more crop' goal, the Union Budget 2017-18 has created a dedicated Micro Irrigation Fund of Rs.5,000 crore in Nabard for promoting drip and sprinkler irrigation.

5. Exploring Value Addition and Processing: Connecting the World through Agri-business Opportunities

The landscape of agriculture, including

agribusiness in the supply-chain operations and management is expanding fast and adequate opportunities need to be exploited in food processing sector. Contribution of food processing industries to GDP total and GDP agriculture, its growth is presented in Table 5.

Table 5: Contribution of Food Processing Industries to Gross Domestic Product at 2011-12 Prices (Rs. Crores)

| S. No. | Economic Activity | 2011-12 | 2012-13 | 2013-14 | 2014-15 |
|----------|---------------------------------------|----------------|-----------|-----------|-----------|
| 1 | GDP-All India | 81,95,546 | 85,99,224 | 91,69,787 | 98,27,089 |
| 2 | GDP-Manufacturing | 14,82,158 | 15,74,471 | 16,58,176 | 17,76,469 |
| 3 | GDP-Agriculture, Forestry and | 15,05,580 | 15,23,470 | 15,79,290 | 15,82,851 |
| 4 | GDP-FPI | 1,50,370 | 1,43,364 | 1,49,555 | 1,60,224* |
| gors bna | octivity through higher yields: | (%) Growth | | | |
| rongly | Economic Activity | 2012-13 | 2013-14 | 2014-15 | |
| 5 | GDP-All India | 4.93 | 6.64 | 7.17 | |
| 6 | GDP-Manufacturing | 6.23 | 5.32 | 7.13 | |
| 7 | GDP-Agriculture, Forestry and Fishing | 1.19 | 3.66 | 0.23 | |
| 8 | GDP-FPI | -4.66 | 4.32 | 7. | 13 |
| | awai | (%) Share of F | PI | | |
| | Economic Activity | 2011-12 | 2012-13 | 2013-14 | 2014-15 |
| 9 | GDP-All India | 1.83 | 1.67 | 1.63 | 1.63 |
| 10 | GDP-Manufacturing | 10.15 | 9.11 | 9.02 | 9.02 |
| 11 | GDP-Agriculture, Forestry and Fishing | 9.99 | 9.41 | 9.47 | 10.12 |

The corporate sector has been investing at different levels in the supply-chain, thus linking production eco-regions with consumers in the promising domestic and global markets. Foreign Direct Investment (FDI) Inflow in the Food Processing Sector has been gaining momentum (Table 6).

Table 6: Foreign Direct Investment (FDI) Inflow in the Food Processing Sector

| S. No. | Year (April- March) | FDI (Rs Crore) | FDI (US \$ Million) |
|-----------|------------------------|-------------------|------------------------|
| 1 | 2010-11 | 858.03 | 188.67 |
| 2 | 2011-12 | 826.16 | 170.21 |
| 3 | 2012-13 | 2193.65 | 401.46 |
| 4 | 2013-14 | 25,106.78 | 3,982.88 |
| 5 | 2014-15 | 3,159.36 | 515.86 |

Source: Department of Industrial Policy and Promotion (DIPP)

As new opportunities have emerged in agritrade throwing challenge of competing globally, issues related to sanitary and phyto-sanitary measures need to be appropriately addressed. The critical issue for the future agriculture is to evolve mechanisms for linking front-end activities of agricultural supply-chain (wholesale, processing, logistics and retailing) with its back-end activities of farm production that would lead to enhanced efficiencies, ensured remunerative prices to producers, assured markets and reduced production and market risks (Rao, 2010). The e-NAM project has been launched for an integrated, unified seamless market cutting across State boundaries. Plenty of opportunities for strong public-private partnerships as well as for efforts towards fostering relevant agroenterprises and technology incubators are coming up and need to be pushed further.

However, agricultural marketing is unorganized and inefficient; losses as high as 18 - 25 per cent occur in the entire food supply-chain. Markets for value-added and processed commodities are consistently increasing with new demands from consumers. Low-cost improved technologies to link production to processing are required to unleash potential and improve market efficiency and to remain competitive simultaneously. A three-pronged strategy is needed to reduce post-harvest losses and exploring opportunities in value addition and processing.(i) compress supply-chain by linking producers and markets; (ii) promote processing of food commodities in

production catchments to add value before being marketed; and (iii) develop small-scale processing refrigerated chambers or cold storages using conventional and nonconventional sources.

Public-private partnership (PPP) need to be pushed further. Firstly, commodity-specific agri-export zones identified earlier may be given adequate 'focus'. Secondly, all efforts need to be directed towards productivity enhancement, to 'grow' more, ensuring quantity and quality for value addition, processing and market penetration both domestic and export. Thirdly, 'partnering' with private corporate entities will lead to growth, both in volume and scale. Private sector participation need to be ensured for market tie-ups, processing and exports. A well-coordinated value chain finance need to be ensured in partner with financial institutions. Lastly, 'reforms' are necessary in marketing (APMC and e-NAM) and other private participation. Government has to play a lead role as an enabler, creating an enabling environment in terms of building incentives and adequate infrastructure.

The country had already created 31.8 million tons of cold storage space as at end 2014, almost 90 per cent of the overall capacity required with a current gap of 3.28 million tons in cold storage space (Bulk & Hub). However, there exist other critical gaps for integrating the cold-chain, as a medium that connect farms with markets. The current status and gaps in cold-chain are at Table 7.

Table 7: Gap Analysis of Cold-Chain Infrastructure in India

| Type of Infrastructure | Infrastructure Requirement | Infrastructure Created | All India Gap | Shortfall (%) |
|------------------------|-------------------------------|---------------------------|---------------|---------------|
| Integrated Pack-house | 70,080 nos. | 249 nos. | 69,831 nos. | 99.6 |
| Reefer Transport | 61,826 nos. | <10,000 nos. | 52,826 nos. | 85 |
| Cold Storage (Bulk) | 341,64,411 MT | 318,23,700 MT | 32,76,962 MT | 10 |
| Cold Storage (Hub) | 9,36,251 MT | (wholesale) | supply-chain | Isnalushas le |
| Ripening Units | 9,131 nos. | 812 nos. | 8,319 nos. | 91 |

Infrastructure in number, refers predefined unit size; in MT denotes metric tonnes **Source:** NCCD (2015)

6. Promoting Technology: Reforming Research

Technology needs to play a major role in future agriculture. Focus should be on a 'Technology-led Growth' as technology will drive a third of growth in agriculture in future (Alagh, 2016). Promoting new technologies and reforming agricultural research and extension are major factors that can raise the efficiency level of agriculture during the next decade. There is little connection between research and extension. The private sector involvement in Indian agriculture is a recent development. Successful examples like Bt cotton, hybrid maize, pusa basmati rice, etc. suggest beneficial outcomes arises from public sector partnership with the private sector farmer groups. The government has to play a more proactive role as coordinator, facilitator and also as a regulator. The investment in agricultural research continues to be as low as 0.5 per cent of the agricultural GDP as compared to 2-3 per cent in developed countries, which may constrain rapid development of technology for productivity increase.

Coming to application of information technology (IT), India is the world's largest sourcing destination for the IT industry, accounting for approximately 67 per cent of the US\$124-130 billion market. However, the emergence of farm technologies integrated with a robust information and communication technology (ICT) framework is still evolving and it holds tremendous potential to both positively impact agricultural performance and enhance farmers' income in future (Dutta S, et al. 2017).

Direct applications of digital technology include remote sensing, geographic information systems (GIS), crop and soil health monitoring, and livestock and farm management, etc. At the pre-harvest stage, digital technology can recommend crop and input selection and assist in obtaining credit and insurance. At the on-farm stage, there is need for weather advisories and diseaseand pest-related assistance and at the postharvest stage, real-time data on both domestic and export markets. The growth of competitive markets and demand for consistent food quality is making the adoption of such tech- based solutions imperative for the Indian farmer. Much of the scope for application and innovation remains to be exploited. The application of digital technology in agriculture will be instrumental in promoting data generation

as well as the advanced analytics that will allow farmers to make smart decisions about farming and to benefit it from an economical use of inputs and labour.

7. Mitigating Climate Change Impact

Climate Change is another issue that merits urgent attention. Inter-Governmental Panel on Climate Change has projected that by the end of this century, global earth temperature is likely to increase by 1.8° to 4.0°C. This would lead to more frequent hot extremes, floods, droughts, cyclones, and recession of glaciers. Dynamics of pests and diseases would be significantly altered. The projected increase in these events will result in greater instability in food production and will threaten farmers' livelihood security. Producing enough food for increased demand against the background of changing climate scenario is a challenging task. This would require increased adaptation and mitigation measures, capacity-building, changes in policies, and regional as well as global co-operation.

Sinha and Swaminathan (1991) had estimated that a 2°C increase in mean air temperature could decrease rice yield by about 0.75 ton/ha. in the high yield areas and by about 0.06 ton/ha. in the low yield coastal regions. Further, a 0.5°C increase in winter temperature would reduce wheat crop duration by seven days and reduce yield by 0.45 ton/ha. in wheat producing states. The yields of dry crops in Andhra Pradesh and sugarcane in Maharashtra may go down by 30 per cent. According to a World Bank (2008) report, the rice yield in Orissa in the floodprone coastal regions is expected to drop by 12 per cent. The IPCC estimated that for every 2°C rise in temperature, the reduction in GDP is expected to be about 5 per cent (http://www.ipcc.ch/activities/activities.

htm#1). Government has initiated several social sector/ development schemes, including constitution of 'National Action Plan on Climate Change' (NAPCC), as adaptation related activities to climatic variability. Natural resource management (NRM) strategies of Nabard need to be scaled up. Programs like Watershed development, WADI program under Tribal Development Fund (TDF), etc. emphasize on "enhancing livelihoods and quality of life of the rural community through improved resource conditions".

With sensitization on climate change impact, climate finance architecture for India and models for bank finance in tune with climate change need to be strongly taken forward. National and international climate change funds, like, Adaptation Fund (AF), Green Climate Fund (GCF) and 'National Adaptation Fund on Climate Change' (NAFCC) and projects supported under these funds, regulatory guidelines on climate finance and issue of climate bonds, adaptation and mitigation strategies needs greater deliberation for taking forward these initiatives to the next decade.

III. Sustainable Agrifinance: Generating Productive Capacity within Agriculture

The success of Green Revolution in Indian agriculture to a large extent can be attributed to institutional credit support to agricultural sector. It acted as a means to provide control over resources to enable the farmers to acquire the required capital for increasing agricultural production. It enabled the farmer to go for short-term credit for purchase of inputs and other services and the long-term credit for investment purposes. In all these, credit played an

important role by facilitating technological upgradation and commercialization of agriculture.

However, there are many issues to be addressed that have a bearing on bringing synergy to agricultural growth through credit. Issues like dwindling state of investment credit, financing small & marginal farmers with varied low cost products and models, supporting farmer producer organizations, financing agriculture value chains bear special challenges. The strategies are to be formulated in the context of various problems and associated issues.

1. Escalating Credit Flow: Ground Level Credit: Investment and Production Credit

Both crop loan and investment credit aid the production process - crop loan in sustaining it while investment credit in generating the capacity to further expand agricultural production through capital formation in agriculture. Empirical evidence indicates that credit is an important determinant of value added in agriculture-relationship between institutional credit and agriculture evidences positive and statistically significant elasticity - every 1 per cent increase in real agricultural credit results in an increase in real agricultural GDP by 0.22 per cent with a one-year lag (Subbarao, 2012). Further the causality runs from agriculture credit to agricultural GDP.

An important contribution of agriculture credit is to ensure that capital formation takes place which is essential for the future growth of agriculture. Empirical evidence shows that the major driver of capital formation is the private sector which accounts for almost 80 per cent of the total capital formation in agriculture. And within

the private sector the major component is bank credit (Badatya, 2010).

However, even though credit flow has increased over the years, the long term credit in agriculture or investment credit has showed a declining trend over the years. The share of long term credit in overall ground level credit flow reduced from 42 per cent in 2005-06 to 22 per cent in 2012-13 (Fig 1).

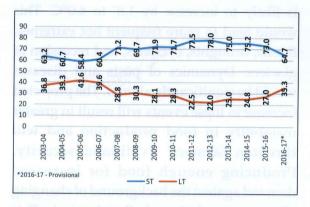


Fig 1: Share of Short-term and Long-term Credit (% to total GLC)

Banks have been able to achieve the overall agricultural credit targets, but achievements under investment credit have invariably fallen short of the target (Table 8). During 2007-08, banks could achieve around 86 per cent of the investment credit targets which reduced to 58 per cent in 2012-13. The percentage of achievement, however, increased in 2013-14 to 91 per cent and further to 98 per cent in 2015-16. It augurs well for the agriculture sector that (with concerted efforts by RBI, Nabard and Banks), for the first time the achievements under investment credit surpassed the target by a significant 32 percent in 2016-17.

Public and private investments are complementary rather than a substitute for each other and thus a fall in public investment affects private capital formation

Table 8: Target and Achievement under Investment Credit (Rs.Crore)

| Year | Target | Achievement | Achievement as % of Target |
|------------|--------|-------------|----------------------------------|
| 2007-08 | 85000 | 73264 | 86 |
| 2008-09 | 120000 | 91447 | 76 |
| 2009-10 | 125000 | 107858 | 86 |
| 2010-11 | 155000 | 132741 | 86 |
| 2011-12 | 195000 | 114871 | 59 |
| 2012-13 | 230000 | 133875 | 58 |
| 2013-14 | 200000 | 181687 | 91 |
| 2014-15 | 225000 | 209916 | 93 |
| 2015-16(P) | 255000 | 250197 | 98 |
| 2016-17(P) | 285000 | 376298 | 132 |

Source: IBA, SLBC, Nabard, P: Provisional

in agriculture. A long term perspective plan for infrastructure development in agriculture need to be given a policy thrust (Dave, 2014). Increased investment 'for' agriculture, particularly, on irrigation through RIDF, PMKSY (through long-term irrigation fund), on micro irrigation through Micro Irrigation Fund, on dairy through Dairy Infrastructure Development Fund (DIDF) will enhance investment 'in' agriculture through credit support. Growing commercialization along with importance on high value crops, value chain finance will emerge, which need to be addressed with designing standardized credit products for purveying investment credit by banks in future.

Area Development Plans (ADPs) are being prepared by Nabard. Banks need to enhance their human resource, particularly by recruiting technical manpower and training them adequately in terms of project appraisal and placing them at the branch level. Banks also need to develop "location-specific" credit portfolios (Desai, 2006).

2. Access of Small and Marginal Farmers to Institutional Credit: Developing Low Cost Models

Models like Kisan Credit Cards (KCC) and financing Joint Liability Groups (JLGs) are ways of providing low cost finance to small and marginal farmers. However, one of the major challenges of agriculture is the steadily diminishing size of land holdings and consequent dwindling net income. Thus low cost financing models with newer credit products need to be developed to purvey credit to this segment of farmers. The 12th Five Year Plan emphasizes that for achieving more inclusive growth with focus on small and marginal farmers, landless labourers, the extant policy needs to factor in the complexity of rural livelihoods and move from the "credit for agriculture" approach to a broader and more flexible, "credit for rural livelihoods" approach. Designing appropriate financial products, along with appropriate risk mitigation tools are paramount challenges for banks for the next decade.

With about 5.5 crore farmers still remaining outside the fold of institutional credit, desired outcomes can only be achieved with a thrust on credit widening. Small and marginal farmers have to effectively participate in the growth process and aggregation and collectivization approaches through FPOs/FPCs, including, cooperatives, corporate and contractual arrangements need to be adequately explored. Aggregation models on the one hand lead to benefits from the scale and on the other help in creating credit absorption capacity, accessing technology and markets. Thus, while ensuring viability of small and marginal farmers through such aggregation models, financing such farmer producers' organizations in a larger scale is no doubt a potential challenge in the years to come.

3. Financing High Tech Agriculture

There has been diversification of Indian diets away from foodgrains to high value products like milk, meat products and vegetables and fruits. The increasing middle-class due to rapid urbanization, increasing per-capita income, increased participation of women in urban jobs and impact of globalization has been largely responsible for the diet diversification in India (Badatya, 2014). The expenditure elasticity for non-cereal food items is still quite high in India. It is thrice as high when compared to cereals in the rural areas and over ten times as high in urban areas. Per capita consumption of fruits and vegetables showed the highest growth followed by edible oils.

Diversifying into high value crops and allied activities is one of the important means for raising agricultural growth and attaining the target of doubling farmers' income in next six years. Since risk is high in diversification, necessary support mechanism through development of varied financing models as also financing value chain system need to be the overriding priority.

4. Financing through Commodity-specific Supply/Value Chain framework: Exploring Institutions and policies

Agricultural value chain (AVC) that encompasses the input supply, production, post-harvest, storage, processing, marketing and distribution, food service and consumption functions all along the farm-to-plate continuum for any given product is gaining momentum and banks need to explore and venture into financing within such AVC framework. There is need for creating awareness among the bankers on value chain financing and banks would

require to reorient their policies and products and introduce new banking products for small and marginal farmers aimed at strengthening their linkages with a sustainable value chain. FPOs as collectives/ aggregators are going to be the first entry point for banks for a strong agrivalue chain finance framework (AVCF).

Modern agricultural value chains that operate through networks typically support three major flows:

- Physical product flows: physical product movements from input suppliers to producers to buyers to final customers
- Financial flows: credit terms and lending, payment schedules and repayments, savings, and insurance arrangements, and
- Information flows: which coordinate the physical product and financial flows

For the smooth functioning and successful agricultural value chain, all three flows need to be regular, uninterrupted and continuous. The government, regulators, banks and other players need to strategize a policy framework to strengthen these three network flows,

While moving towards an integrated e-NAM, support of banking sector has to be ensured at every stage of the value chain as well as for every stake holder. Along with e-NAM, there is a need to ensure better integration within the chain, better price discovery mechanism in place, co-integration with various other players in the chain, efficient storage and efficient transportation system. A well-designed PPP framework with Government playing the role as an enabler may be explored.

IV. Concluding Observation

Agricultural development continues to remain critical for economic growth, poverty alleviation and ensuring food and nutritional security of the country, besides meeting other compulsions of the agricultural sector. Green revolution brought sufficiency in food production due to a combination of technologies viz., high yielding varieties, fertilizers, improved agronomic practices, assured irrigation and price support policy. However, the interventions mainly benefited irrigated regions and resourceful farmers, bypassing the larger segment of rainfed farming and resource poor farmers. The future agricultural strategies need to stress upon agricultural development that aims at greater inclusiveness and equitable transformation, whereby all farmers are able to reap economic benefits. Along with addressing food security, nutritional security need to be addressed adequately. The Committee on DFI is guided by the fact that more than 85 per cent of the farm holdings are small and marginal, and are economically challenged. To achieve income growth, there is a need for deploying scales of operation, and therefore, the future thrust would be more on promoting new generation farmer collectives, such as Commodity Interest and Village Groups (CIGs), FPOs and Produce Organisations (VPOs).

Technology will play a major role and focus will be on a 'Technology-led Growth'. Promoting new technologies and reforming agricultural research and extension will be a priority to raise the efficiency level of agriculture during the next decade. There should be adequate thrust on investment credit flow ensuring capital formation in agriculture which is essential for the future

growth of the sector. A strong agri-value chain finance framework (AVCF) has to work seamlessly with a greater degree of coordination across producers, aggregators, traders, processors, retailers, exporters and other stakeholders.

References

- Alagh, Y. K. (1997). "Agricultural Investments & Growth", Indian Journal of Agricultural Economics, Vol. 52, No. 4.
- Alagh, Y. K. (2016). Speech delivered at Reserve Bank of India, Ahmedabad on Regional Conference on "Future of Agrifinance 2030", April, 21-22.
- Badatya, K. C. (2014), "Crop Diversification, Value of Output, Input and Crop Credit -An Exploration", Rural Pulse, Nabard, Issue-IV, July - August.
- Badatya, K C and Samantara, Samir (2010), A Perspective on Agricultural Finance 2020, Paper presented at the 12th Conference on Money and Finance, IGIDR, March, 11-12, Mumbai.
- Chand, Ramesh, Praduman Kumar, and Sant Kumar (2011). Total factor productivity and role of public sector research and education in agricultural growth during post-green revolution period. National Center for Agricultural Economics and Policy Research, New Delhi.
- Chand, Ramesh (2017), Doubling Farmers' Income: Rationale, Strategy, Prospects and Action Plan, Policy Paper No.1, National Institution for Transforming India, Government of India, New Delhi
- Dave, H. R (2014), "Capital Formation in Agriculture - A Policy Priority and Expectations from Bankers", Special Address on the Conference of In-Charges

- of Priority Sector Advances of Commercial Banks at College of Agricultural Banking (CAB), Pune, 20 November.
- Desai, B. M., (2006), "Investment Credit to Agriculture", Economic and Political Weekly, February 25,
- Dutta, Saumitra, Lanvin, Bruno & Wunsch-Vincent, Sacha (2017), "The Global Innovation Index 2017- Innovation Feeding the World, Cornell University, INSEAD, and the World Intellectual Property Organization, 2017 (Edit.)
- GoI (2017), Ministry of Agriculture, Press Information Bureau, 15-February-2017 17:23 IST
- GoI (2016), Text of PM's address at the Bloomberg India Economic Forum, Press Information Bureau, Prime Minister's Office, 28-March-2016, 19:18 IST

- ICAR (Indian Council of Agricultural Research) (2011). *Vision* 2030. New Delhi.
- Kumar, Praduman (2016): "Demand vs Supply of Food in India-Futuristic Projection." *Proceedings of the Indian* National Science Academy 82.5: 1579-1586
- Rao, N. H. (2010). Workshop on *Agribusiness Knowledge Exchange*. 14-15 April 2010, National Academy of Agricultural Research Management, Hyderabad, India.
- Sinha, S. K. and M. S. Swaminathan (1991). "Deforestation, Climate Change and Sustainable Nutrition Security: A Case Study of India". *Climate Change*, 19: 201-209.
- Subbarao, Duvvuri (2012) Agricultural Credit
 Accomplishments and Challenges,
 Speech delivered at Nabard, July 12.
- World Bank (2008). *Agricultural Development Report*. Washington, DC, USA.

HOPE Loans: Competence Based Credit Scoring for Lending at the Bottom of the Pyramid

Hrudananda Panda*

Micro enterprises typically have weak financial footprint, which is why they remain financially invisible to mainstream financial institutions. This is especially the case for 'new-to-credit' cases, where credit history is yet to be built. Digitalization of financial transactions and greater financial literacy will eventually remove financial invisibility of micro enterprises and households, and improve their financial footprint. But in the meanwhile, non-cognitive and cognitive competences like Honesty, Outlook, Personality and Economic-decision-making-behavior (HOPE) can be used as surrogates for deriving credit scores that can enable financial institutions to finance, without serious risk, those who would otherwise get no loan at all.

I. Introduction

It is well known that the size of the credit gap in the micro and small enterprises segment is enormous. But why is it difficult to lend to micro and small enterprises?

Lending to the salaried individuals is easy you just need to verify the salary. If you are lending to a large corporation, there is a lot of financial information about that company and the size of the loan is so large that you can always go up and verify the financials in detail.

But the micro enterprises sector needs large number of small loans with little information available. Given the small ticket size, lenders can bear only a small transaction cost to evaluate these proposals.

II. Need for an Alternative Credit Score

The traditional approach to small-ticket loans has been to take whatever little information is available at low cost (e.g., demographic information, NOC), relying primarily on collateral. But most micro enterprises don't have the collateral to pledge, and they don't have much of a credit history.

In the absence of collateral and credit history, a second approach is to strengthen available information by a 360-degree assessment of cash flow. By taking the family as a unit and combining the incomes and expenses of all members of the family one can derive a net cash surplus for the household. This assessment can be further corroborated through third-party discrete enquiries. This approach too is resource

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intensive. Further, it does not cover people who are just starting a new family and those who do not have adequate surrogates.

A third approach is the microfinance approach - sending loan personnel and keeping close personal contact on daily or weekly basis. The close supervision covers for the lack of financials, but also makes it expensive. In the absence of an objective score, this approach suffers further from subjective judgment.

Mainstream banks go for the first approach. Even if collateral is not available, they sanction a loan if a cash flow is readily visible, otherwise not. Such an approach is unable to serve people who are 'new to credit'. Besides, credit history is about the past, not the future. The information that is available is backward looking. When economic conditions change, credit history is not necessarily a guarantor of either success or repayment.

The new generation small finance banks, in search of a blue-ocean, go for the second approach and try to derive a cash flow by looking at surrogates. Even they insist on at least 2 years of 'vintage'. Which means, a prospective borrower must already be in that business for at least 2 years before they can be considered for a loan. So, 'new to credit' people get excluded again.

The third approach has been tried for long by microfinance institutions (MFI) and the Self-Help-Group (SHG) program. But both the MFI and SHG models have been limited by their high cost structure and inability to scale up.

The problem in funding micro enterprises essentially remains that of high transaction cost, low information and high credit risk.

A competence-cum-technology based approach can handle these problems better than the traditional approaches. It can keep transaction costs low by automating credit appraisal and delivery. It can deal with the lack of information by making use of alternative information that are inherent in people - personality traits, numeracy, self-confidence, outlook etc. It can reduce credit risk by basing decisions on objective scores (as opposed to a subjective judgment).

Well-established and reliable tools on personality traits are easily available. By adding some more layers in terms of economic decision making capability (numeracy), outlook (optimism and self-confidence) and trustworthiness (honesty), one can establish a reasonable measure of a person's Character and her likelihood of success (Capacity).

Micro enterprises usually do not have much Capital, are exempted from Collateral security and are rather agnostic to economic Conditions because of their small size and local markets.

In such cases, small loans can be given merely on the basis of an assessment of Capacity and Character, without insisting on the other Cs of credit appraisal. As and when information on the other Cs become available, and lender's confidence increases, these loans can be taken up for enhancement.

By relying on factors that are inherent to the entrepreneur, this approach overcomes the obstacles posed by the financial analysis approach. Moreover, microenterprises being largely in the nature of proprietorship or partnership firms, most of the management decisions are taken by one or two individuals. Therefore, the inherent characteristics of the individual are likely to

have strong bearing on the success or failure of the firm. Intrinsic behavioral markers of the entrepreneur can therefore be used as surrogates for predicting the probability of success and default. Instead of looking backwards at what the enterprise did yesterday, it can look forward at what they are likely to do tomorrow, thus reducing risk.

Besides, use of a technology platform makes this method highly scalable and takes out the human subjective judgment.

Further, competence-based credit scoring (CCS) solutions can be self-learning in nature and improve their logic as they process more and more applicant data and 'watch' their performance.

CCS solutions quantify attributes and give a score, making comparisons easier. One can combine it with other information/scores for a more complete picture of risk.

Where those other sources of information are not available, CCS can be used on a standalone basis.

III. How CCSs Work?

CCS solutions collect and analyze psychometric and behavioral information about borrowers to better forecast their likelihood of default. They rely on innovative technology to achieve this objective.

All humans live in a world of choices, which is constantly evolving. That means the assessment of an applicant's current business or cash flow may bear little resemblance to their situation through the term of the loan. CCS solutions therefore provide insights into future ability and

success as against projections based on static or backward-looking data.

A borrower's integrity is crucial to her willingness to repay a loan. Understanding people's intentions and identifying those with doubtful intentions is crucial to this. Using methods developed in personality testing, CCS can learn an individual's viewpoint of the world around her. This understanding influences how people act in times of crisis and during periods of stability and prosperity. It thus allows us to view individuals relative to the pool of applicants competing for the same loan. To better understand a client's true motivations, CCS solutions explore the same concept from multiple angles.

Measuring honesty and integrity has proven difficult in most environments. But, how long did it take the applicant to slide from one answer to another? Did she change her opinion in the middle, or was she fast and confident as she selected? Unlike traditional bank applications, this approach gathers data on how applicants answer in addition to what they claim about themselves.

Again, how confident is the applicant in her monthly revenues/turnover? Is her initial versus final answers consistent with her written request to the financial institution? By asking about how the applicant's working hours compare with others in similar occupations CCS can provide insights into her industriousness. Variations in these answers provide a deeper understanding of an individual.

CCS solutions can notice how the question is answered, as much as what the answer was. This competence-cum-technology approach enables deeper insights into confidence, reliability, and ultimately willingness of a

borrower to repay, which traditional methods are unable to capture.

IV. A Multivariate Competence-Based Approach

Better entrepreneurs generally make better borrowers. Entrepreneur or not, a certain mix of traits and attitudes predisposes people towards a healthy credit culture. A combination of factors – trustworthiness of the person (Honesty), self-confidence and general outlook in life (Outlook), personality orientation (Personality) and Economic decision making pattern - can predict a more reliable credit behavior than what can be surmised from analysis of financial statements alone. Loans granted on the basis of these four proxies are what we call HOPE loans.

Assessing HOPE variables necessitate use of innovative technology in order to capture also the manner in which the responses were made. This is useful in harvesting clues that may not be captured in the response itself.

Honesty

Honesty and integrity are attributes of one's character. Character refers to the mental and moral qualities distinctive to an individual. The problem with evaluating attributes of character is that these are difficult to capture and vary widely among societies and cultures. You can't just go up to someone and ask if she is honest. But, whether or not she goes back to the last screen to check on a memory question can speak volumes on her character and her likelihood of default. There are no definitive ways by which reliable responses to such questions can be elicited. However, reasonable inferences can be made by observing the involuntary behavioral footprints left by people while

dealing with mundane day-to-day things, and by making inter and intra-societal comparisons.

Even among people who are seen to be honest, the reasons for their honesty may be different. Some may be honest merely because they lack the opportunity to be otherwise. Some others may be honest because they are not smart enough to be dishonest and get away with it. Some may just be dumb enough to see the opportunity to make a quick buck, so they are honest by default. Yet some others may have the opportunity, are smart enough to handle the after-effects, but still choose to be honest because they believe that is the right thing to do. Because they believe there lies the common good.

Outlook on Life

An important part of human judgment and decision-making concerns how applicants view, and interact with the world around them. Among entrepreneurs and consumers alike, the "locus of control," or how much control someone believes they have over their future destiny is important. For example, the speed and vigor with which clients answer certain questions can shed light on their level of confidence. CCS models therefore look at how an applicant interacts with the application in addition to the answers themselves.

Similarly, all of us know of the half-full-halfempty anecdote, but we tend to remain in our own equilibrium outlooks of optimism or pessimism. Outlooks vary greatly depending upon culture, age, and even occupation. Models to measure outlook therefore needs to accommodate such variations. CCS models make it possible to look into character and outlook of respondents by use of innovative technology, working with varied client groups, following a multivariable approach and factoring behavioral events based variables.

Personality

Despite the famous saying - "Genius is 1% inspiration and 99% perspiration" - one of the most common myths about successful individuals is that they are reckless risk-takers. However, data shows that characteristics like conscientiousness, self-control, and the ability to accurately identify risk are more relevant predictors of success and default among borrowers.

The ability to act dutifully and strive for achievement against measures or outside expectations is related to the way in which people control, regulate, and direct their impulses.

Similarly, the importance of likeability as a factor for success is widely underrated. Likeability relates to individual behavior that is perceived as kind, sympathetic, cooperative, warm and considerate. People can go to any extent to help someone, if they like her. That means, likeable people are likely to be more successful in their endeavors and therefore they will make better clients.

Personality factors like people's ability to handle stress also play a significant role in these times of volatility, uncertainty, complexity and ambiguity. An understanding of the vulnerability of an applicant to succumb to stress is therefore a useful indicator for borrower selection.

Economic Decision Making Behavior

Economic decisions involve trade-offs between competing choices. Observing how an individual makes economic decisions, analyzes opportunity, and values the future versus the present can afford us an understanding of how her decisions may impact her financials in future.

Traditional economic theory assumed that people always try to maximize their benefits, and make decisions in an environment where all the constraints and preferences are known and weighed appropriately. However, behavioral sciences have, of late, shown that people make decisions in the face of incomplete information, limited cognitive resources and cognitive biases.

Empirical findings in the areas of behavioral economics and decision making have shown that human beings are not only economically not rational, but often act in ways that are economically suboptimal. For example, people may actually be seeking risk while believing that they are minimizing risk. They may show financial impatience involving huge financial costs, or they may engage in altruism, regret and revenge, which may not make apparent economic sense.

V. Can CCS solutions be Gamed?

Usually, psychometric instruments are carefully designed to seek out respondents' natural preferences. It is hard for people to respond against their natural instincts. However, respondents can try to game the test, where they are aware of the objective and design of an instrument.

With the help of technology and other techniques we can reduce gaming and

improve reliability. Technology can captures valuable clues that cannot be captured in a pen-and-paper format. Therefore, psychometric instruments like CCS are deployed only on a technology platform. Some of the techniques deployed to counter gaming are:

Repeated questions: Questions are repeated multiple times in order to look for consistency in responses. Where responses are not borne out of natural preferences, answers to repeat questions will show variations.

Variations in questions: Questions are varied slightly in order to reduce their recall factor, thereby improving fresh application of mind.

Flipped questions: Flipping is a standard technique, where a question is presented in reversed manner. This requires respondents to also reverse their response before recording their answer.

Speed of response: Interpreting the speed at which a respondent is dealing with questions, can throw several clues. Someone answering a question in less than 10 seconds has scarcely applied her mind. Similarly, someone who takes long time to respond to an apparently simple question may have attention deficit issues.

Random Order: Questions are presented in a random order, to minimize repeating of responses.

Question Bank: Alternative questions are drawn from a question bank to prevent respondents to memorize questions for future use.

Scoring Algorithm: Scoring algorithms are kept secret so that respondents cannot easily

figure out the 'desirable' way to answer a question.

VI. Further Validation

No matter how robust a questionnaire is, experts can always game it. The questionnaire method collects voluntary inputs. So, an aware respondent can provide 'desirable' answers in order to obtain a better score.

In contrast, involuntary responses cannot be easily faked. Inferences that can be drawn from big-data sources (records of behavior obtained from data aggregators like mobile phone operators, credit/debit card issuers, e-commerce platforms, internet search engines and similar other sources) are more reliable as the behavior so recorded has already happened and cannot be faked. While indulging in the behavior in question, the respondent was unaware of how her behavior was going to be used.

For example, a person who checks her email every few minutes may be vulnerable to stress. However, if asked to answer whether she is vulnerable to stress, she may answer in the negative. Chances of gaming are less where inferences can be drawn from behavioral events that have already happened. Similarly, involuntary data collected through functional MRI method cannot be faked.

Therefore, behavioral scores obtained through the questionnaire method may be re-validated with involuntary data sources, wherever feasible.

VII. How to use CCS Scores

A higher score generally indicates better suitability of the applicant to meet the demands of the role of a retail borrower, which revolves around the discipline and temperament required for productively managing retail loans, running a stable business and repaying loans.

CCS can be administered online or offline, on PC or tablet and in assisted mode or on self-identification mode through OTP, e-KYC or pre-accepted email-links. These can be made available in any requested language or even in purely pictorial form for people who cannot read at all.

The score gets delivered to the financier preferred by the applicant. A financier who makes use of the score pays a small fee to cover for costs.

VIII. Concluding Observations

By reducing banks' dependence on financial indicators for credit appraisal, competence-based credit scoring can make it possible for banks to lend to people who are financially 'invisible'. As micro enterprises typically have weak financial footprint, CCS can provide an alternative credit score and thus boost lending at the bottom of the pyramid. This is especially the case for new proposals where financial history is yet to be built.

Digitalization of financial transactions and greater financial literacy will eventually remove financial invisibility of micro enterprises and households, and improve their financial footprint.

But in the meanwhile, competence-based alternative credit scores can complement available indicators to enable banks and financial institutions to finance, without serious risk, those who would otherwise get no loan at all. Thus, competence-based credit scoring can bring HOPE to households where there is none.

References

- Spreng, R. N., McKinnon, M. C., Mar, R. A., & Levine, B. (2009). "The Toronto Empathy Questionnaire." Journal of Personality Assessment, 91(1), 62-71.
- Rammstedt, B., Danner, D. & Lechner, C. Large-scale Assess Educ (2017) 5: 2. https://doi.org/10.1186/s40536-017-0035-9
- Rotter Julian B., Generalized expectancies for internal versus external control of reinforcement, "Psychological Monographs: General & Applied", 80, 1966, pp. 1-28.
- Olderbak, S., Sassenrath, C., Keller, J., & Wilhelm, O. (2014). "An emotion-differentiated perspective on empathy with the emotion specific empathy questionnaire." Frontiers in Psychology, 5,1-14.
- Lovibond, P. F, and Lovibond, S. H. (1995). "The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories." Behaviour Research and Therapy, 33, 335-342.
- Kahneman, Daniel, 2013, Thinking Fast and Slow, Publisher: Farrar, Straus and Giroux; Reprint edition (April 2013).
- Kahneman D, Tversky A. 1979. Prospect theory: an analysis of decision under risk. Econometrica 47:263–92.
- John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative Big Five trait taxonomy: History, measurement, and conceptual issues. In O. P. John, R. W. Robins, & L. A. Pervin

(Eds.), Handbook of personality: Theory and research (pp. 114-158). New York, NY: Guilford Press.

John, O. P., Donahue, E. M., and Kentle, R. L. (1991). The Big Five Inventory - Versions 4a and 54. Berkeley, CA: University of California, Berkeley, Institute of Personality and Social Research. Gabriella Di Francesco, Fabio Roma, Orazio Giancola, Si- mona Mineo, Michela Bastianelli, Franco Fraccaroli, The relationship between competences and non-cognitive dimensions. The experience of the "PIAAC Italia" survey, "Osservatorio Isfol", V (2015), n. 3, pp. 123-144.

Entrepreneurial Finance Lab, website https://www.eflglobal.com/

CAB Calling January-June 2017, Issue 1/2017

Inter-State Regional Disparities in Indian Economy:An analysis of Major States

Ramesh Golait*, N. C. Pradhan**

The persistence of regional disparities in Indian economy is a major concern for policy makers in both advanced and emerging market economies. Clarity on the causal factors of weak regional performance and careful consideration of potential trade-offs are needed, which would guide policy choices over region-specific interventions. No doubt that the Government has a crucial role to play in reducing regional disparities and promoting balanced development in which all regions will be able to develop equally. This role calls for initiatives to identify and remove gaps in human development and basic services and infrastructure with a view to ensure that all regions/subregions and groups have equitable access to the benefits of development. Such an equity-promoting role assumes even greater criticality in the changing environment in which, with the opening of the economy and removal of controls, the interplay of market forces usually exacerbates disparities.

I. Introduction

Regional disparity is the most complex development problem faced by many states in India since their formation. Many regional conflicts are an outcome of disparities in the development of a particular region compared to the remaining parts of the country. No State can afford to ignore its region specific conflicts whether they arise on account of disparities or for other reasons. In this context, strong, sustainable and balanced regional development has been one of the objectives of economic reforms in India. Since state level performance shows considerable variation across states, with many states recording strong growth in the post-reforms

period, it is imperative to identify the reasons for their success in order to replicate it in other states lagging behind. Ultimately, the performance of the Indian economy depends on what and how much of its states/regions are doing. Understanding the drivers of growth at a regional level is therefore, crucial for effective policy formulation. Differences in the income level across regions, if sustained over time, eventually, may have significant implications for the economy.

With the above issues in the background, this paper analyses variations in state domestic product in Section I. Section II highlights Agricultural Disparities in Indian states. Disparities in regional performance are a

Earlier version of the article was presented in Symbiosis International University, Pune. The comments received from Prof. Rajas Parchure, Director, Gokhale Institute of Politics and Economics, Pune is incorporated with thanks. Views are personal. The usual disclaimer applies.

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matter of concern not just in terms of income indicators, but also human development indicators that is highlighted in Section III. The importance of Foreign Direct Investment (FDI) in the development process of an economy is well recognized. The regional dimension of FDI is set out in Section IV. Section V discusses State-wise ranking in the Ease of Doing Business Report. Section VI. highlights variations in the Fourteenth Finance Commission, which has recommended for devolution of taxes and other transfers from the center to the state. Finally, Section VII contains conclusion and policy suggestions to remove inter-state economic disparity.

II: Variations in State Domestic Product (SDP)

States in the developing countries play an important role in promoting economic growth and in reducing inequalities and poverty (Kohli, 2007). The Indian states are no exception. Performance of agriculture at state level was examined by looking at growth rate in Net State Domestic Product (NSDP). According to the Five year plan period data, the Eleventh Plan period witnessed states with the lowest PCI register relatively higher rates of growth, particularly, Bihar, Odisha, Uttar Pradesh, Punjab, Andhra Pradesh and Karnataka which had the lowest per capita income (PCI) in the Eighth Plan. Due to consistent conducive policy initiatives, all of these have progressively improved their growth rates,

particularly in the Eleventh Plan. However, it is noticeable that during the eleventh plan period, the bottom six special category state have recorded lower growth rate as compared to the tenth plan period. The average gross domestic product (GDP) growth rate of these states increased from 4.3 per cent in the Eighth Plan to 6.1 per cent in the Ninth plan and subsequently declined to

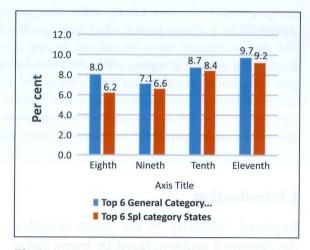


Fig 1: Average Growth rate of Top Six States

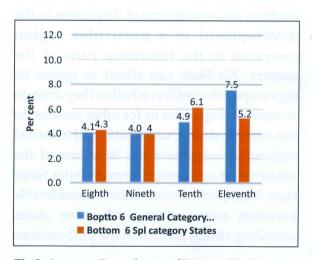


Fig 2: Average Growth rate of Bottom Six States

¹Based on their growth rate in Net State Domestic Product.

²The special category status is accorded to states based on criteria that include hilly and difficult terrain; low population density and or sizeable share of tribal population; strategic location along borders with neighboring countries; economic and infrastructure backwardness, and non-viable nature of state finances. At present, 11 states have special category status.

5.2 per cent. The Chart 1 and 2 below indicates that the top six special category states at the eight plan period having less growth rate as compared to other subsequent plan period (Annex 1).

Variations were found in the SDP growth rates during 2005-06 to 2013-14. On an average, nine States and UTs have registered the growth rate in the range of 9.0 per cent to 16.5 per cent. Twelve States including Odisha, Punjab, UP and West Bengal have registered growth rate in the range of 7-8 per cent and only eight states have their growth rate below All India level at 7.6 per cent during 2005-06 to 2013-14 (Table 1 and Annex 2).

III: Agricultural Disparities

In India, with the beginning of era of planned development in 1950-51 it was recognized that agricultural development is the key for rural economic development and eradication of widespread poverty and malnutrition. Performance of agriculture sector was also considered crucial for overall development of vast majority of people of India and for attaining several economy wide goals. It was thus imperative to follow the policy and development strategy which favoured quick and high growth rate of agriculture. Another notable feature of India's agricultural economy is its diversity.

Table 1: Range: Growth of SDP (2005-06 to 2013-14) At Factor Cost (Constant Prices)

Per cent

| >9 | 8 - 8.9 | < 8 |
|---|---|---|
| Andaman and Nicobar (9.9 per cent), Bihar (9.5 per cent), Delhi (10.0 per cent), Goa (10.3 per cent), Gujrat (9.3 per cent), Maharashtra (9.0 per cent), Puducherry (10.6 per cent), Tamil Nadu (9.2 per cent), Telangana (9.8 per cent), Sikkim (16.5 per cent), Uttarakhand (12.5 per cent) | Chhattisgarh (8 per cent), Haryana (8.5 per cent), MP (8.3 per cent), Rajasthan (8.1), Meghalaya (8.3 per cent), Mizoram (8.7 per cent), Tripura (8.6 per cent) | AP (7per cent), Chandigarh (7.1 per cent), Jharkhand (7.2 per cent), Karnataka (7.4 per cent), Kerala (7.4 per cent), Odisha (6.6 per cent), Punjab (6.7 per cent), UP (6.6 per cent), West Bengal (6.6 per cent), Arunachal Pradesh (6.1 per cent), Assam (5.6 per cent), Himachal Pradesh (7.8 per cent), J&K (5.8 per cent), Manipur (5.6 per cent), Nagaland (7.7 per cent) |

Source: Respective State Websites.

Interestingly, barring Assam, J&K and Manipur, all special category sates have recorded above all-India growth rate (7.6 per cent) during the considered period. Surprisingly, Andhra Pradesh and Punjab have grown slower than the all-India average. These states have comparatively better infrastructure and known to have promarket attitude. Punjab's slow growth could be attributed to stagnation in agriculture and fiscal mismanagement.

Both, agriculture growth and productivity have shown tremendous variation across regions and states of the country. In the recent period, though the production of foodgrains (in volume terms) has exhibited an increasing trend, on the decadal phase it has shown declining trend (Table 2).

Regional disparities and instability in agriculture in India have remained the subject of deep concern in the area of agricultural economics in India. Instability in agricultural

Table 2. Performance of Agriculture and Allied Sector

| | red and the Pr | Production | | | |
|------------------------|----------------|---------------------------|---------------------|--|--|
| Decade | Foodgrains | Foodgrains Non-Foodgrains | | | |
| on the same of manager | 2 | 3 | 2004-05 prices 4 | | |
| 1950s | 4.25 | 3.66 | 2.71 | | |
| 1960s | 1.85 | 1.49 | 1.51 | | |
| 1970s | 2.07 | 2.17 | 1.74 | | |
| 1980s | 2.73 | 3.77 | 2.97 | | |
| 1990s | 2.09 | 2.67 | 3.34 | | |
| 2000-01 to 2012-14 | 2.52 | 1.18 | 3.41 | | |
| Phase | genne amaquie | ave registered | and West Bengal I | | |
| 1950-51 to 1965-66 | 2.96 | 3.6 | 2.27 | | |
| 1966-67 to 1990-91 | 2.84 | 2.96 | 2.62 | | |
| 1991-92 to 2013-14 | 1.7 | 0.55 | 3.02 | | |

Source: Ministry of Agriculture and National Account Statistics, Government of India

production raises the risk involved in farm production and affects farmers' income and decisions to adopt high paying technologies and make investments in farming. It also affects price stability and the consumers, and increases vulnerability of low - income households. Instability in agricultural and food production is also important for food management and macroeconomic stability. Besides instability, Indian agriculture is also known for sharp variations in agricultural productivity across space which results in various types of disparities. Such regional variations are partly due to disparities in resource endowments, climate and topography and also due to historical, institutional and socio-economic factors (Chand et.al. 2011).

Due to availability of irrigation, fertilizer and other favorable facilities, few states namely Uttar Pradesh, Punjab and Madhya Pradesh accounts around 39 per cent of India's total foodgrain production (Table 3). Another important indicator of regional disparity is the differences observed in the levels of

agricultural and industrial development among states of the country. In India, states like Punjab, Haryana and part of Uttar Pradesh have recorded a higher rate of agricultural productivity due to their high proportion of irrigated areas and higher level of fertilizer use.

According to the recently released World Health Organization (WHO) Report³, each year over 800,000 people die due to suicide across the world. In India, agriculture has remained traditionally the most important economic activity. In view of the importance of the agriculture sector in the national economy, the Reserve Bank of India, the Government of India have taken several policy initiatives to facilitate hassle-free flow of credit from the institutional financial sector to the agricultural/rural sector. These measures have played a significant role in enhancing credit flow to this sector. Notwithstanding these measures, Indian agriculture has been facing difficult times and the Indian farmers have been experiencing distress.

³Preventing Suicide: A Global Imperative, 2015 by WHO.

Table 3: Three Largest Producing States of Important Crops during 2015-16*

(Million Tonnes)

| Group of Crops | States | Production |
|-----------------------|-------------------------------------|------------|
| I. Foodgrains | Uttar Pradesh | 44.01 |
| | an development Daman and Di | (18.9) |
| | Madhya Pradesh | 30.21 |
| | play considerable respectively. A | (10.9) |
| | Punjab | 28.41 |
| | Kerata was the performande el | (9.2) |
| | All India | 252.22 |
| I. Oilseeds | Madhya Pradesh | 6.24 |
| | (63.82 per cent), categories states | (20.8) |
| | Rajsthan | 5.71 |
| | n density in the Arunachal Pra | (20.3) |
| | Gujrat | 4.10 |
| | | (18.5) |
| census | All India | 25.30 |
| III: Other Cash Crops | Population Density of | |
| Sugarcane | Uttar Pradesh | 145.39 |
| TS AR BYR | 46 88.8 46 | (38.6) |
| | Maharashtra | 72.26 |
| | 2000 mag | (21.9) |
| | Karnataka | 38.48 |
| | 9258 | (10.3) |
| 991 71.04 | All India | 352.16 |
| Cotton# | Gujarat | 9.7 |
| 618 87.07 | 53.54 2191 | (29.9) |
| 15 AS 50 B | Maharashtra | 6.5 |
| 91.00 | 205 | (23.3) |
| 0478 676 | Telangana | 3.86 |
| 18.62 026 | N. REI | (19.5) |
| 877 76.64 | All India | 30.15 |
| Jute & Mesta\$ | West Bengal | 7.78 |
| MAXA 879 | 15.67 | (74.4) |
| 10.84 16.00 | Bihar | 1.58 |
| | | (16.7) |
| 946 92.28 | Assam | 0.89 |
| 100 | 20.30 | (6.4) |
| 929 82.91 | All India | 10.46 |

^{*}Fourth Advanced Estimates. #: Production in Million Bales of $170\,\mathrm{kg}$ each

^{\$:} Production in Million Bales of 180 kg each

Figures in brackets are share in per cent.

 $[\]textbf{Source:} A \textit{gricultural Statistics at a Glance 20156, Ministry of Agriculture, Government of Indiance 2015, Ministry of Agriculture, Government of Indi$

IV. Human Development Indicators

Disparities in regional performance are a matter of concern not just in terms of income indicators, but also human development indicators. State-wise data on human development indicators display considerable variation in performance across States. According to 2011 Census, Kerala was the best performer, witnessing a literacy rate of 93.91 per cent and sex ratio of 1,084. At the same time, the worst performance in literacy rate was recorded by Bihar (63.82 per cent), Rajasthan (67.01 per cent) and Jharkhand (67.63 per cent). Population density in the National Capital region of Delhi is as high as

11320 persons per square km as compared to only 17 persons per sq. km. in the north eastern hill state of Arunachal Pradesh. In terms of sex ratio, among the states and UTs Daman and Diu and Dadra & Nagar Haveli had the lowest ratio at 618 and 774, respectively. Among the advanced states sex ratio in Haryana is the lowest (877). The performance of Haryana and Punjab, two of India's richest States, on indicators such as sex ratio and female literacy rates is a matter of serious concern. Among the special category states, barring J&K (lower literacy rate at 68.47 per cent and sex ratio 883) and Arunachal Pradesh (lower literacy rate at 66.95), have comparably improved (Table 4).

Table 4: Human Development Decadal Indicators, as per 2011 census

| 145.39 | Population growth rate (%) | Density of Population | Sex Ratio | Literacy rate (%) |
|-----------------------------|----------------------------|-----------------------|-----------|-------------------|
| Andaman and Nicobar Islands | 6.68 | 46 | 878 | 86.27 |
| Andhra Pradesh | 11.10 | 308 | 993 | 75.6 |
| Bihar | 25.07 | 1106 | 918 | 63.82 |
| Chandigarh | 17.10 | 9258 | 818 | 86.43 |
| Chhattisgarh | 22.59 | 189 | 991 | 71.04 |
| Dadra and Nagar Haveli | 55.50 | 700 | 774 | 77.65 |
| Daman and Diu | 53.54 | 2191 | 618 | 87.07 |
| NCT of Delhi | 20.96 | 11320 | 868 | 86.34 |
| Goa | 8.17 | 394 | 973 | 87.40 |
| Gujarat | 19.17 | 308 | 920 | 79.31 |
| Haryana | 19.90 | 573 | 877 | 76.64 |
| Jharkhand | 22.34 | 414 | 948 | 67.63 |
| Karnataka | 15.67 | 319 | 973 | 67.66 |
| Kerala | 4.86 | 860 | 1084 | 93.91 |
| Lakshadweep | 6.23 | 2149 | 946 | 92.28 |
| Madhya Pradesh | 20.30 | 236 | 931 | 70.63 |
| Maharashtra | 15.99 | 365 | 929 | 82.91 |
| Odisha | 13.97 | 270 | 979 | 73.45 |
| Puducherry | 27.72 | 2547 | 1037 | 86.55 |
| Punjab | 13.73 | 551 | 895 | 76.68 |

| 2009-10 2011-12 % chings | Population growth rate (%) | Density of Population | Sex Ratio | Literacy rate (%) |
|--------------------------|----------------------------|--------------------------|-----------|-------------------|
| Rajasthan | 21.44 | 200 | 928 | 67.06 |
| Tamil Nadu | 15.60 | 555 | 996 | 80.33 |
| Uttar Pradesh | 20.09 | 829 | 912 | 69.72 |
| West Bengal | 13.93 | 1028 | 950 | 77.08 |
| Special Category States | Pradesh | 7.1 -40.8 | 128 | olayd |
| Arunachal Pradesh | 25.92 | 17 | 938 | 66.95 |
| Assam | 16.93 | 398 | 958 | 73.18 |
| Himachal Pradesh | 12.81 | 123 | 972 | 83.78 |
| Jammu and Kashmir | 23.71 | 56 | 883 | 68.74 |
| Manipur | 18.65 | 122 | 985 | 79.85 |
| Meghalaya | 27.82 | 128 | 989 | 75.48 |
| Mizoram | 22.78 | 52 | 976 | 91.58 |
| Nagaland | -0.47 | 119 | 931 | 80.11 |
| Sikkim | 12.36 | 86 | 889 | 82.20 |
| Tripura | 14.75 | 350 | 960 | 87.75 |
| Uttarakhand | 19.17 | 189 | 963 | 79.63 |
| ALL-INDIA | 17.64 | 382 | 943 | 74.04 |

Source: The Office of the Registrar General & Census Commissioner, Govt. of India

It has been notice that there is significant improvement in economic growth and per capita income, which translated in reducing in the level of poverty in the country. Though there are differences in the estimates of the percentage of the poor by different

sources, there has been a spectacular decline in the share of poor in the population, except few states like Arunachal Pradesh, J&K, Andaman and Nicobar Island during 2009-10 and 2011-12 (Table 5).

Table 5: Population Below poverty Line by States 2009-10 and 2011-12

(Tendulkar Methodology)⁶

(Per cent)

| General Category States | 2009-10 | 2011-12 | % change |
|----------------------------|---------|---------|----------|
| Andhra Pradesh | 21.1 | 9.2 | -56.4 |
| Bihar | 53.5 | 33.7 | -37.0 |
| Chhatisgarh | 48.7 | 39.9 | -18.1 |
| Delhi | 14.2 | 9.9 | -30.3 |

| General Category States | 2009-10 | 2011-12 | % change |
|----------------------------|---------|---------|----------|
| A & N Island | 0.4 | 1 | 150.0 |
| Chandigarh | 9.2 | 28.8 | 213.0 |
| D & N Haveli | 39.1 | 39.3 | 0.5 |
| Daman and Diu | 33.3 | 9.9 | -70.3 |

⁶The Expert Group (Tendulkar) had used the all-India urban poverty line basket as the reference to derive state-level rural and urban poverty. This was a departure from the earlier practice of using two separate poverty line baskets for rural and urban areas.

| General Category States | 2009-10 | 2011-12 | % change |
|----------------------------|---------|---------|----------|
| | | - 1 | diffondi |
| Goa | 8.7 | 5.1 | -41.4 |
| Gujarat | 23 | 16.6 | -27.8 |
| Haryana | 20.1 | 11.2 | -44.3 |
| Jharakhand | 39.1 | 37 | -5.4 |
| Karnataka | 23.6 | 20.9 | -11.4 |
| Kerala | 12 | 7.1 | -40.8 |
| Madhya Pradesh | 36.7 | 31.6 | -13.9 |
| Maharashtra | 24.5 | 17.4 | -29.0 |
| Orissa | 37 | 32.6 | -11.9 |
| Puducherry | 1.2 | 9.7 | 708.3 |
| Punjab | 15.9 | 8.3 | -47.8 |
| Rajasthan | 24.8 | 14.7 | -40.7 |
| Tamil Nadu | 17.1 | 11.3 | -33.9 |
| Uttar Pradesh | . 37.7 | 29.4 | -22.0 |
| West Bengal | 26.7 | 20 | -25.1 |

Source: Planning Commission, Government of India

V: Regional Dimension: Foreign Direct Investment

The importance of FDI in the development process of an economy is well recognized. Inflows of FDI bridges the gap between the desired and the actual level of capital stock, especially when domestic investment is not sufficient to push the actual capital stock up to the desired level. The FDI flows to India have picked up significantly in the recent years. The rise in FDI flows to India has been accompanied by strong regional concentration. The top six States includes NCT of New Delhi, viz., Maharashtra,

| General Category States | 2009-10 | 2011-12 | % change |
|----------------------------|---------|---------|----------|
| Lakshadweep | 6.8 | 2.8 | -58.8 |
| Special Category S | tates | | |
| Arunachal Pr. | 25.9 | 34.7 | 34.0 |
| Assam | 37.9 | 32 | -15.6 |
| Himachal Pradesh | 9.5 | 8.1 | -14.7 |
| Jammu & Kashmir | 9.4 | 10.3 | 9.6 |
| Manipur | 47.1 | 36.9 | -21.7 |
| Meghalaya | 17.1 | 11.9 | -30.4 |
| Mizoram | 21.1 | 20.4 | -3.3 |
| Sikkim | 13.1 | 8.2 | -37.4 |
| Uttaranchal | 18 | 11.3 | -37.2 |
| Nagaland | 20.9 | 18.9 | -9.6 |
| Tripura | 17.4 | 14 | -19.5 |
| All India | 29.8 | 21.9 | -26.5 |

Karnataka, Gujarat, Tamil Nadu and Andhra Pradesh accounted for over 71 per cent of the FDI equity flows to India during 2012-2015 (Table 6). The top two states, i.e., Maharashtra and N. Delhi accounted for 49 per cent of FDI flows during this period. Maharashtra alone accounted for 29 per cent of FDI flows to India during the same period. Despite impressive growth rates achieved by most of the Indian states as well as aggressive investment promotion policies pursued by various state governments, the concentration of FDI flows across Indian states remained skewed.

Table 6: Region-wise Received FDI Equity Inflows

(Amt. in Rs. Crores)

| Region | 2012-13 (April - March) | 2013-14 (April - March) | 2014-15 (April- March) | Cumulative Inflows (April, 00- March, 15) | % age to total Inflows (in terms of US\$) |
|-----------|-------------------------------|-------------------------------|------------------------------|---|---|
| Mumbai | 47,359 | 20,595 | 38,933 | 3,53,022 | 29 |
| New Delhi | 17,490 | 38,190 | 42,252 | 2,49,023 | 20 |

⁷Determinants of Inter-State Variations in FDI Inflows in India.

| Region | 2012-13 (April - March) | 2013-14 (April - March) | 2014-15 (April- March) | Cumulative Inflows (April, 00- March, 15) | % age to total Inflows (in terms of US\$) |
|----------------------|-------------------------------|-------------------------------|------------------------------|---|---|
| Chennai | 15,252 | 12,595 | 23,361 | 88,766 | 7 r states (Table |
| Bangalore | 5,553 | 11,422 | 21,255 | 82,121 | 7 |
| Hyderabad | 6,290 | 4,024 | 8,326 | 49,240 | 4 |
| Ahmedabad | 2,676 | 5,282 | 9,416 | 53,797 | 9/4 |
| Top Six States | 94,620 | 92,108 | 1,43,543 | 8,75,969 | 71 |
| Kolkata | 2,319 | 2,659 | 1,464 | 14,627 | 1 Andina Prade |
| Chandigarh` | 255 | 562 | 234 | 6,360 | 0.5 |
| Jaipur | 714 | 233 | 3,237 | 6,795 | 0.5 |
| Bhopal | 1,208 | 708 | 601 | 6,096 | 0.5 |
| Kochi | 390 | 411 | 1,418 | 6,150 | 0.5 |
| Panaji | 47 | 103 | 211 | 3,867 | 0.3 |
| Kanpur | 167 | 150 | 679 | 2,444 | 0.2 |
| Bhubaneshwar | 285 | 288 | 56 | 1,961 | 0.2 |
| Guwahati | 27 | 4 | 29 | 381 | 0 |
| Patna | 41 | 9 | 68 | 267 | 0 |
| Jammu | 0 | mission 1 | 25 | 26 | 0 |
| Region Not Indicated | 21,833 | 50,283 | 37,544 | 3,08,060 | 24.9 |
| Total | 1,21,907 | 1,47,518 | 1,89,107 | 12,33,005 | 100.00 |

Note:

- 1. FDI equity inflows include 'equity capital component' only.
- 2. Mumbai includes Maharashtra, Dadra & Nagar Haveli and Daman & Diu.
- 3. N. Delhi includes New Delhi and part of UP and Haryana.
- 4. Chennai includes Tamil Nadu and Pondicherry.
- 5. West Bengal includes West Bengal, Sikkim, and Andaman & Nicobar Islands.
- 6. Chandigarh includes Chandigarh, Punjab, Haryana and Himachal Pradesh.
- 7. Madhya Pradesh includes Madhya Pradesh and Chhattisgarh.
- 8. Uttar Pradesh includes Uttar Pradesh and Uttaranchal.

Source: Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry, Government of India.

State-wise distribution of FDI have undergone substantial changes over the years. It appears that FDI each progressively getting concentrated in the western and southern states. Some of the backward states might be losing their initial appeal.

VI. Business Environment

According to the World Bank's latest Report on ease of doing business, Gujarat has topped with a score of 71.14 per cent followed by Andhra Pradesh. The western Indian state, occupied the top five places on the list, which also highlights the poor state of business environment in a large number of states (Table 7). Governments' level in order to achieve the Governments vision of making India a successful destination for business progression.

Table 7: State Ranking in Doing Business

| State | Rank | Score (per cent) | State | Rank | Score(per cent) |
|----------------|------|------------------|-------------------|------|-----------------|
| Gujarat | 1 | 71.14 | Himachal Pradesh | 17 | 23.95 |
| Andhra Pradesh | 2 | 70.12 | Kerala | 18 | 22.87 |
| Jharkhand | 3 | 63.09 | Goa | 19 | 21.74 |
| Chhattisgarh | 4 | 62.45 | Puducherry | 20 | 17.72 |
| Madhya Pradesh | 5 | 62.00 | Bihar | 21 | 16.41 |
| Rajasthan | 6 | 61.04 | Assam | 22 | 14.84 |
| Odisha | 7 | 52.12 | Uttarakhand | 23 | 13.36 |
| Maharashtra | 8 | 49.43 | Chandigarh | 24 | 10.04 |
| Karnataka | 9 | 48.50 | A and Nicobar | 25 | 9.73 |
| UP | 10 | 47.37 | Tripura | 26 | 9.29 |
| West Bengal | 11 | 46.90 | Sikkim | 27 | 7.23 |
| Tamil Nadu | 12 | 44.58 | Mizoram | 28 | 6.37 |
| Telangana | 13 | 42.45 | J&K | 29 | 5.93 |
| Haryana | 14 | 40.66 | Meghalaya | 30 | 4.38 |
| Delhi | 15 | 37.35 | Nagaland | 31 | 3.41 |
| Punjab | 16 | 36.73 | Arunachal Pradesh | 32 | 1.23 |

Source: Assessment of State Implementation of Business Reforms, Department of Industrial Policy & Promotion, Government of India and World Bank September 2015

The effort is part of the government's initiatives to improve India's ranking on the World Bank's `Ease of Doing Business'. India stands at 142nd on the list, among 189 countries. The Government wants India be among the top 50 countries of Ease Doing Business at the earliest. While efforts at improving India's ranking in the Doing Business Report do cover some of the regulatory issues pertaining to state governments, much needs to be done at State

VII. Fiscal Situation

In its recent report, the Fourteenth Finance Commission (FFC) has recommended for devolution of taxes and other transfers from the center to the states, and between the states, for the period 2015-16 to 2020-21. These are likely to have major implications for Center-State relations. The FFC has enhanced the share of the states in the central divisible pool of taxes from the current 32 per cent to 42 per cent which is the biggest

ever increase in vertical tax devolution. (The last two Finance Commissions viz. Twelfth (2005-10) and Thirteenth (2010-15) had recommended a state share of 30.5 per cent (increase of 1 percent) and 32 per cent (increase of 1.5 percent), respectively in the central divisible pool). Implementing such recommendations will be a new initiative for moving the country towards achieving greater fiscal federalism, conferring more fiscal autonomy on the States. For example, based on assumptions about nominal GDP growth and tax buoyancy and the policy measures that are contemplated for 2015-16, it is estimated that the additional revenue for

the states could be as much as Rs.2 lakh crores relative to 2014-15. Of this, a substantial portion represents the difference that is purely due to the change in the States' share in the divisible pool. According to Economic Survey 2015, preliminary estimates suggest that all States stand to gain from FFC transfers in absolute terms. The biggest gainers tend to be the Special Category States (SCS) (Table 8). The major gainers in per capita terms turn out to be Arunachal Pradesh, Mizoram and Sikkim for the SCS states and Kerala, Chhattisgarh and Madhya Pradesh for General Category States.

Table 8: Additional FFC Transfers (in 2015-16 over 2014-15)

| States | Benefits from FFC (Rs. Crore) | Benefits Per capita (Rs.) | Benefits as percent of NSDP |
|-----------------------|----------------------------------|------------------------------|--------------------------------|
| General Category Stat | tes | nd special category | sates. It has accorded a |
| A. Pradesh | 14620 | 1728 | 2.2 |
| Bihar (9old) | 13279 | 1276 | 4.9 |
| Chhattisgarh | 7227 | 2829 | 5.2 |
| Goa | 1107 | 7591 | 3.0 |
| Gujarat | 4551 | 753 | 0.8 |
| Haryana | 1592 | 628 | 0.5 |
| Jharkhand | 6196 | 1878 | 4.8 |
| Karnataka | 8401 | 1375 | 1.8 |
| Kerala | 9508 | 2846 | 3.1 |
| M. Pradesh | 15072 | 2075 | 4.5 |
| Maharashtra | 10682 | 951 | 0.9 |
| Odisha | 6752 | 1609 | 3.2 |
| Punjab | 3457 | 1246 | 1.4 |
| Rajasthan | 6479 | 945 | 1.6 |
| Tamil Nadu | 5973 | 828 | 0.9 |
| Uttar Pradesh | 24608 | 1232 | 3.5 |

| States | Benefits from FFC (Rs. Crore) | Benefits Per capita (Rs.) | Benefits as percent of NSDP |
|------------------------|----------------------------------|---------------------------|-----------------------------|
| West Bengal | 16714 | 1831 | 3.0 |
| Special Category State | es | hare of 30.5 per cent | ecommended a siale s |
| Aru. Pradesh | 5585 | 40359 | 51.0 |
| Assam | 7295 | 2338 | 5.8 |
| H. Pradesh | 8533 | 12430 | 14.6 |
| J&K | 13970 | 11140 | 22.4 |
| Manipur | 2130 | 8286 | 19.5 |
| Meghalaya | 1381 | 4655 | 8.6 |
| Mizoram | 2519 | 22962 | 33.3 |
| Nagaland | 2694 | 13616 | 18.7 |
| Sikkim | 1010 | 16543 | 10.7 |
| Tripura | 1560 | 4247 | 6.9 |
| Uttarakhand | 1303 | 1292 | 1.4 |

Source: Economic Survey, 2014-15

The 14th FC has removed the distinction between non-special and special category states. It has accorded greater importance to fiscal capacity, with indicators of cost and revenue disabilities being assigned a combined weight of 72.5 per cent as against

57.5 per cent assigned by the 13th FC. Under the new tax devolution formula, the share of 19 states in taxes would be higher than those under the Thirteenth Finance Commission recommendations (Table 9).

Table 9: Inter-se Share of States in Tax Devolution

(Per cent)

| States | 13 th FC | 14 th FC | State | 13 th FC | 14 th FC |
|-------------------|---------------------|---------------------|------------|---------------------|---------------------|
| Andhra Pradesh | 6.937 | 4.305 | Manipur | 0.451 | 0.617 |
| Arunachal Pradesh | 0.328 | 1.37 | Meghalaya | 0.408 | 0.642 |
| Assam | 3.628 | 3.311 | Mizoram | 0.269 | 0.460 |
| Bihar | 10.917 | 9.665 | Nagaland | 0.314 | 0.498 |
| Chhattisgarh | 2.47 | 3.08 | Odisha | 4.779 | 4.642 |
| Goa | 0.266 | 0.378 | Punjab | 1.389 | 1.577 |
| Gujarat | 3.041 | 3.084 | Rajasthan | 5.853 | 5.495 |
| Haryana | 1.048 | 1.084 | Sikkim | 0.239 | 0.367 |
| Himachal Pradesh | 0.781 | 0.713 | Tamil Nadu | 4.969 | 4.023 |
| Jammu & Kashmir | 1.551 | 1.854 | Telangana | - | 2.437 |
| Jharkhand | 2.802 | 3.139 | Tripura | 0.511 | 0.642 |

| States | 13 th FC | 14th FC | State | 13 th FC | 14 th FC | | |
|----------------|---------------------|---------|---------------|---------------------|---------------------------|--|--|
| Karnataka | 4.328 | 4.713 | Uttar Pradesh | 19.677 | 17.959 | | |
| Kerala | 2.341 | 2.500 | Uttarakhand | 1.120 | 1.052 | | |
| Madhya Pradesh | 7.12 | 7.548 | West Bengal | 7.264 | 7.324 | | |
| Maharashtra | 5.199 | 5.521 | gn the pro- | be to desi | chieve this objective may | | |

Source: State Finances: A study of Budgets, 2015, RBI

VIII: Concluding Observations and Policy Implications

In India, several commissions/committees/ working groups to suggest policy measures to feed 1.252 billion population and provide employment opportunities for its growing population. The persistence of regional disparities within countries is a major policy concern, which is being confronted by many Governments in rich and poor countries. Clarity on the causal factors of weak regional performance and careful consideration of potential trade-offs are needed, which would guide policy choice over region specific interventions. No doubt that the Government has a crucial role to play in reducing regional disparities and promoting balanced development in which all regions will be able to develop equally. This role calls for initiatives to identify and remove gaps in human development and basic services and infrastructure with a view to ensure that all regions or sub-regions and groups have equitable access to the benefits of development. Such an equity-promoting role assumes even greater criticality in the changed environment in which, with the opening of the economy and removal of controls, the play of market forces usually exacerbates disparities.

With about 69 per cent of the population in rural areas, and most of them dependent on agriculture, it follows that the strategy for economic reforms must address the constraints on efficiency and production in the agricultural sector. Much of what needs to be done in this area consists of effective implementation of the basic strategy for agricultural development that has worked well in many parts of the country and needs to be extended to other parts. This calls for substantial investments in land and water management, supply of improved seeds, biodiversity, an effective institutional system for delivery of rural credit. Many of these elements fall within the area of responsibility of State Governments.

A disturbing feature of recent trends in the agricultural sector is that real investment in agriculture, both public and private, has been stagnant for quite some time. Therefore, there is need for substantial increase in public investment in agriculture and irrigation but this can only happen if resources available for investment with the State Governments can be increased. Top priority must be given to reducing these implicit subsidies through rational pricing of both water and electricity and also better management. The resources thus saved should be devoted to increased investment in agriculture and related rural infrastructure.

The presence of strong agglomeration effect indicates that the states already rich in FDI flows tend to receive more of them which make it more difficult for the other states to attract fresh investments. In view of this difficulty, a conscious and coordinated effort at the national as well as State levels would be essential to make the laggard states more attractive for FDI flows. The direct method to achieve this objective may be to design the national FDI policy in such a way that a sizable portion of FDI flows to India move into the laggard states. The indirect way is to provide a boost to the overall economy of the less advanced states, with special thrust on the manufacturing, services and the infrastructure sectors so that they themselves become attractive to foreign investors.

Balanced regional development is an important criteria in the country's planning and various measures including fiscal incentives, industrial policies and directly targeted measures have been used in the past to achieve this objective. In fact, adoption of planning as a strategy of State-led industrialization with plans and policies designed to facilitate more investments in relatively backward areas, were intended to lead to a more balanced growth. It was expected that over time, with such measures in place, regional disparities would gradually disappear. Even though there is no historical consensus on the best mechanism for reducing regional disparities. However, there is a need to

fortify the backward areas adequately and target them with additional resources and investments to help them overcome structural bottlenecks that contribute to their backwardness, which hinders the process of growth.

Further, there is a need to improve the overall environment for economic and social growth of less developed States and areas through a judicious combination of major infrastructure interventions, institutional reforms and appropriate incentives structures. It would, however, bear repetition that not all imbalances are amenable to positive solutions and that under certain circumstances palliative measures in the form of safety nets may also be necessary for quite some time. Admittedly, the need for investment in social services and infrastructure in the relatively backward States is far greater than in the more developed States. Governance in the poor performance states are, fiscally weak and, as a result, not in a position to muster adequate resources to fund the huge investments, which are required to catch up with the developed States. Backward States are usually unable to attract sizable private investment due to poor infrastructure which cannot be upgraded due to lack of resources. The challenge, in essence, is to break this vicious cycle.

Annex I: Growth Rates in SDP Across Plan Periods

(Per cent)

| States/Union Territories | Eighth Plan | Ninth Plan | Tenth Plan | Eleventh Plan |
|--------------------------|-------------|------------|------------|---------------|
| Andhra Pradesh | 5.4 | 4.6 | 6.7 | 8.33 |
| Bihar | 2.2 | 4.0 | 4.7 | 12.11 |
| Chhattisgarh | n.a. | n.a. | 9.2 | 8.44 |
| Goa mark to suom svisoss | 8.9 | 5.5 | 7.8 | 9.02 |
| Gujarat | 12.4 | 4.0 | 10.6 | 9.59 |

| States/Union Territories | Eighth Plan | Ninth Plan | Tenth Plan | Eleventh Plan |
|--------------------------|-------------|------------|------------|----------------------|
| Haryana | 5.2 | 4.1 | 7.6 | 9.1 |
| harkhand | na | na | 11.1 | 7.27 |
| Karnataka | 6.2 | 7.2 | 7.0 | 8.04 |
| Kerla | 6.5 | 5.7 | 7.2 | 8.04 |
| MP | 6.3 | 4.0 | 4.3 | 8.93 |
| Maharashtra | 8.9 | 4.7 | 7.9 | 9.48 |
| Odisha | 2.1 | 5.1 | 9.1 | 8.23 |
| Punjab | 4.7 | 4.4 | 4.5 | 6.87 |
| Rajasthan | 7.5 | 3.5 | 5.0 | 7.68 |
| ΓN | 7 | 6.3 | 6.6 | 8.32 |
| UP | 4.9 | 4.0 | 4.6 | 6.9 |
| West Bengal | 6.3 | 6.9 | 6.1 | 7.32 |
| Special Category States | | 1.0 0.0 | 1.5 | - Comment |
| Arunachal Pradesh | 5.1 | 4.4 | 5.8 | 9.42 |
| Assam | 2.8 | 2.1 | 6.1 | 5.5 |
| Himachal Pradesh | 6.5 | 5.9 | 7.3 | 5.5 |
| J&K | 5 | 5.2 | 5.2 | 4.4 |
| Manipur | 4.6 | 6.4 | 11.6 | 4.6 |
| Meghalaya | 3.8 | 6.2 | 5.6 | 7.5 |
| Mizoram | na | na | 5.9 | 8.7 |
| Nagaland | 8.9 | 2.6 | 8.3 | 3.5 |
| Sikkim | 5.3 | 8.3 | 7.7 | 12.2 |
| Tripura | 6.6 | 7.4 | 8.7 | 8.0 |
| Uttarakhand | n.a. | n.a. | 8.8 | 9.3 |

Source: Twelfth Five year Plan (2012-17).

Annex II. Gross State Domestic Product At Factor Cost (Constant Prices)

(Per cent)

| States | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2005-06 to 2013-14 |
|----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------------------|
| A & N Islands | 5.2 | 18.0 | 10.1 | 14.3 | 13.2 | 7.8 | 7.9 | 7.5 | 5.1 | 9.9 |
| Andhra Pradesh | 5.3 | 10.9 | 13.1 | 2.1 | 7.2 | 6.8 | 6.2 | 4.0 | 7.2 | 7.0 |
| Bihar | -1.7 | 16.2 | 5.6 | 14.5 | 5.3 | 15.0 | 10.3 | 10.7 | 9.1 | 9.5 |
| Chandigarh | 10.7 | 14.7 | 7.3 | 8.1 | 5.5 | 1.0 | 3.4 | 3.8 | 9.6 | 7.1 |
| Chhattisgarh | 3.2 | 18.6 | 8.6 | 8.4 | 3.4 | 10.6 | 5.7 | 8.8 | 5.0 | 8.0 |

| States | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2005-06 |
|----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------------|
| 1.6 | | A.T. | | | | | | | | to 2013-14 |
| Delhi | 10.0 | 12.4 | 11.2 | 12.9 | 8.2 | 7.2 | 9.3 | 9.3 | 9.3 | 10.0 |
| Goa | 7.5 | 10.0 | 5.5 | 10.0 | 10.2 | 16.9 | 20.2 | 4.2 | 7.7 | 10.3 |
| Gujarat | 14.9 | 8.4 | 11.0 | 6.8 | 11.2 | 10.0 | 6.7 | 6.1 | 8.8 | 9.3 |
| Haryana | 9.2 | 11.2 | 8.4 | 8.2 | 11.7 | 7.4 | 8.0 | 5.5 | 7.0 | 8.5 |
| Jharkhand | -3.2 | 2.4 | 20.5 | -1.7 | 10.1 | 15.9 | 4.5 | 7.4 | 8.9 | 7.2 |
| Karnataka | 10.5 | 10.0 | 12.6 | 7.1 | 1.3 | 10.2 | 3.7 | 5.5 | 5.4 | 7.4 |
| Kerala | 10.1 | 7.9 | 8.8 | 5.6 | 9.2 | 6.9 | 5.9 | 5.9 | 6.3 | 7.4 |
| MP | 5.3 | 9.2 | 4.7 | 12.5 | 9.6 | 6.3 | 8.5 | 8.7 | 9.5 | 8.3 |
| Maharashtra | 13.3 | 13.5 | 11.3 | 2.6 | 9.3 | 11.3 | 4.8 | 6.2 | 8.7 | 9.0 |
| Odisha | 5.7 | 12.9 | 10.9 | 7.7 | 4.5 | 8.0 | 4.0 | 3.8 | 1.8 | 6.6 |
| Puducherry | 24.9 | 3.7 | 8.6 | 8.1 | 16.3 | 6.2 | 5.1 | 12.0 | 10.7 | 10.6 |
| Punjab | 5.9 | 10.2 | 9.0 | 5.8 | 6.3 | 6.5 | 6.5 | 4.6 | 5.2 | 6.7 |
| Rajasthan | 6.7 | 11.7 | 5.1 | 9.1 | 6.7 | 14.4 | 8.3 | 6.4 | 4.8 | 8.1 |
| Tamil Nadu | 14.0 | 15.2 | 6.1 | 5.5 | 10.8 | 13.1 | 7.4 | 3.4 | 7.3 | 9.2 |
| Telangana | 15.9 | 11.6 | 10.5 | 13.4 | 1.1 | 18.0 | 8.7 | 4.1 | 4.8 | 9.8 |
| Uttar Pradesh | 6.5 | 8.1 | 7.3 | 7.0 | 6.6 | 7.9 | 5.6 | 5.8 | 5.0 | 6.6 |
| West Bengal | 6.3 | 7.8 | 7.8 | 4.9 | 8.0 | 5.8 | 4.7 | 7.5 | 6.9 | 6.6 |
| Special Category | State | e.ä | 60 | | - 6 | 0 | | | | isadsil/ |
| Aru. Pradesh | 2.8 | 5.2 | 12.1 | 8.7 | 9.4 | 3.8 | 5.6 | -1.6 | 8.9 | 6.1 |
| Assam | 3.4 | 4.7 | 4.8 | 5.7 | 9.0 | 5.2 | 4.6 | 5.1 | 7.5 | 5.6 |
| Himachal Pradesh | 8.4 | 9.1 | 8.6 | 7.4 | 8.1 | 8.8 | 7.3 | 6.1 | 6.2 | 7.8 |
| Jammu and Kashmir | 5.8 | 6.0 | 6.4 | 6.5 | 4.5 | 5.6 | 7.9 | 4.5 | 5.2 | 5.8 |
| Manipur | 6.3 | 2.0 | 6.0 | 6.6 | 6.9 | -0.6 | 9.7 | 7.0 | 6.2 | 5.6 |
| Meghalaya | 7.9 | 7.7 | 4.5 | 12.9 | 6.6 | 8.6 | 12.5 | 3.8 | 9.8 | 8.3 |
| Mizoram | 7.0 | 4.8 | 11.0 | 13.3 | 12.4 | 17.2 | -2.6 | 7.2 | 7.8 | 8.7 |
| Nagaland | 10.2 | 7.8 | 7.3 | 6.3 | 6.9 | 9.4 | 8.3 | 6.5 | 6.5 | 7.7 |
| Sikkim | 9.8 | 6.0 | 7.6 | 16.4 | 73.6 | 8.7 | 10.8 | 7.6 | 7.9 | 16.5 |
| Ггірига | 5.8 | 8.3 | 7.7 | 9.4 | 10.7 | 8.1 | 7.2 | 11.2 | 9.2 | 8.6 |
| Uttarakhand | 14.3 | 13.6 | 18.1 | 12.7 | 18.1 | 10.0 | 9.4 | 7.4 | 8.4 | 12.5 |
| ALL-INDIA | 9.5 | 9.6 | 9.3 | 6.7 | 8.6 | 8.9 | 6.7 | 4.5 | 4.7 | 7.6 |

Source: CSO.

References

- Chand R., Garg, Raju, Pandey (2011), 'Instability and Regional Variation in Indian Agriculture', Policy Paper 26, National Centre for Agricultural Economics and Policy Research.
- Das, M, S. Kapoor and D. Nikitin (2010), 'A Closer Look at Child Mortality among Adivasis in India', World Bank Policy Research Working Paper.
- Debroy, B. and L Bhandari (2003), "District Level Deprivation in the New Millennium", RGICS and Indicus Analytics.
- Government of India (2014), 'Fourteenth Finance Commission'.
- (2015) Economic Survey, 44-50.
- Kohli, Atul (2007). 'State and Redistributive Development in India'. Princeton University Press: Priceton.
- Reserve Bank of India (2007). 'Report of the Working Group to Suggest Measures to Assist Distressed Farmers', July.

ad commercial bank type working

- (2015) 'State Finances: A Study of Budgets of 2014-15, RBI, pp. 27-39.
- R, Martin and M. Lokshin (2006), "Testing Poverty Lines", *Review of Income and Wealth*, 52(3): 399-421.
- Subramanian, S (2011): 'The Poverty Line: Getting It Wrong Again", Economic & Political Weekly, 37-42.
- Swaminathan, M. (2010), 'The New Poverty Line: A Methodology Deeply Flawed, *Indian Journal of Human Development*, Vol. 4, No. 1, 2010.
- S. Bakshi, A. Chawla, M. Shah (2015), Regional Disparities in India, *Economic & Political Weekly*, 44-52.
- U Kumar, A Subramanian (2014). Growth in India's States in the First Decade of the 21st Century: Four Facts, *Economic & Political Weekly*.
- World Health Organisation, 2015 'Report on 'Preventing Suicide: A Global Imperative, 2015.

Cooperative and Social Innovation in Finance: A Case Study of Mann Deshi Mahila Sahkari Bank

Ajit Kumar*

The preference by the financially excluded women for the costly Mann Deshi Mahila Sahkari Bank over others is a case of successful outreach efforts made by the bank. The financially excluded segment of the society probably need social inclusion to precede financial inclusion. They need respect, recognition, timeliness and doorstep service more than interest rate benefits. Mann Deshi Bank succeeded in capturing the sense of these excluded population with customized products and delivery model. Banking penetration in India being still low, the banks still have enough scope to challenge market competition provided access to products is made easier and hassle free to its clients. A suitable design and delivery model will continue to give enough head room to bankers on product pricing.

I. Introduction

The cooperative movement in India started in response to the emergence of capitalism resulting in greater economic inequality in the society. It encouraged people to own property through the power of association. The origin of the credit cooperative movement in India traced back to the close of nineteenth century inspired by the success of the same in Britain and Germany. The first Cooperative Bank in India was Anyonya Cooperative Bank Limited (ACBL) at Baroda established in 1889 with the primary objective of providing an alternative to moneylenders. It was started with a Capital of Rs.76 and having 23 members.

People having wealth and property usually get favourable treatment from the banking system because of the collateral asset they own. As opposed to this, cooperative credit institutions (both bank and non-banks) have usually been successful in catering to the needs of the poor. They are not averse to small ticket uncollateralized lending to their members. Further, they are better suited to customize credit products and innovate delivery mechanism as per the needs of their members.

As at the end of September 30, 2017, there are 1554 urban cooperative banks in India. The sector is highly heterogeneous in size and geographical presence. While most of the banks are located in the western part of the country, its size varies from a business mix of roughly Rs.100 million to Rs.500 billion. While the bigger entities have generally adopted commercial bank type working model, small banks like *Mann Deshi Mahila*

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Sahkari Bank finds its niche market among the poor women headquartered at Mhaswad in Satara district in Maharashtra. The Bank is one of the small but iconic urban cooperative banks in India for women which has done exemplary social innovation in the field of banking to reach out to financially excluded population in its area of operation.

With the above background, the objectives of this paper is to study the product designing, delivery model in general and product cost structure in particular to ascertain and understand how it succeeded in making significant changes in the lives of women beneficiaries of the bank. The case study is based on both primary and secondary sources of information. We have visited the head office of the bank and its Pune branch to gather detailed information about selection of niche market for the bank, loan products, pricing of loan products, loan sanctioning process, delivery mechanism and loan recovery process etc. There was also a random survey of bank's clients to understand their approach towards bank's product and cost structure and its acceptance by the customers. We have also made some socio-economic impact analysis of innovative schemes through random interviews of beneficiaries of the bank.

II. Survey of Literature

Social innovation was discussed in the writings of experts such as Peter Drucker and Michael Young in the 1960s². There are numerous definitions of social innovation found in literature. Murray *et al.* (2010) defined social innovation as "...new ideas

(products, services and models) that simultaneously meets social needs (more effectively than alternatives) and create new social relationships or collaborations...". Phills et al. (2008) defines social innovation as "a novel solution to a social problem that is more effective, efficient, sustainable than existing solutions and for which the value created accrues primarily to society as a whole rather than private individuals." The Young Foundation, in order to distinguish between social and business innovation, stressed that social innovation is developed and diffused via organisations, whose primary purpose are not centered on mere profit maximization (Mulgan et al. 2007). Pol and Ville (2009) suggest the following definition of social innovation: "an innovation is termed a social innovation if the implied new idea has the potential to improve either the quality or quantity of life."

Here, it may be mentioned that the study of cost structure of the bank's products in general and of the weekly market cash credit product, in particular, was carried out only for Mann Deshi Mahila Sahakari Bank. It is understood that there are a few banks both in cooperative and commercial banking segment who have similar client profile and similar delivery model and are extending credit facility at more competitive interest rates. No comparative analysis of the product design and product cost of these banks has been done. Such comparative analysis would provide better insight into the reasons why other banks with similar client profile have different cost structures.

²For example Gavron, Dench (eds.) Young at 80, Carcanet Press, London, 1995 for a comprehensive overview of one of the world's most successful social innovators.

III. Profile of Mann Deshi Mahila Sahkari Bank and Product Innovation

Mann Deshi Mahila Sahkari Bank (The Bank, hence forward) originally started as a credit union/credit society in 1993 and received banking license in 1997. The bank began with 550 members, initial capital of Rs.0.6 million with staff strength of seven members. At present, the bank has seven branches (with 24,978 members) and 68 staff members with a capital of Rs.54.37 million.

The bank started with the motto of serving the poor, downtrodden and financially excluded women. After twenty years of its existence, the bank continues to serve the same set of people with average loan ticket size of Rs.41,800. However, excluding 10% of banks high value loan, the average loan ticket size is still lower at Rs.18,500 only. About half of the loans sanctioned by the bank is of less than Rs.0.5 million in value. Furthermore, most of the small ticket loans of the bank are unsecured debt. In value terms, total uncollateralized loans of the bank is 28.2% of the total loans as on March 31, 2017. However, borrower-wise the unsecured loan of the bank is significantly higher at 81.25% of the total loans. Till recently the bank was not paying any dividend to its shareholders. Of late, it has started paying dividend at a meagre rate of 5%. The bank clearly remained focused on horizontal growth rather than vertical growth.

The Bank has designed weekly market cash credit product for the poor women in collaboration with *Deutsche Gesellschaft fur Internationale Zusammenarbeit* (GIZ) by studying daily cash flow of poor households along with financial diary of households. Interestingly, the bank also studied the

working of some of the moneylenders to get an insight into their lending and recovery processes. It is assessed that cash credit product for micro-entrepreneurs in general and vegetable vendors in particular, is one of the high impact product innovations by the bank. Mann Deshi Bank observed that the weekly markets in most part of Satara district were common phenomenon but the vendors in these markets, like their counterparts in other parts of the country had invariably no linkage with formal financial system. The vendors operating in these markets frequently purchased goods on credit from wholesalers.

Interview of 134 randomly selected vendors at the weekly market by GIZ team (July 2014) revealed that the average worth of stock bought per day was Rs.5,050. Purchasing on credit was a common phenomenon. As per the Report, 91% of all respondents had bought on credit at least once from the wholesaler. Close to half of the sellers in these markets borrowers bought their entire day's goods on credit while the other half bought a small fraction on credit. The wholesalers charged daily interest up to 1.4%. Moreover, it was observed that credit buyers had less bargaining power than cash buyers and they would often be given poor quality goods by the wholesaler. product specification is provided in the Annex.

Analysis of Product Cost

The cost of loan products offered by the Bank is higher than that of commercial banks as well as urban cooperative banks. The interest on cash credit product charged by most of the commercial banks during September 2017 generally ranged from 9% to 13% depending on the borrower. In

commercial banks, pricing is usually linked to credit rating of the borrower. However the normal cash credit product of Mann Deshi Bank attracts a flat interest rate of 15% which is 2% higher than the commercial bank. As per the regulatory prescription* for Non-Banking Finance Company-Micro Finance Institution (NBFC-MFI), the interest charged by an NBFC-MFI would be lower of the following: (a) The cost of funds plus a maximum margin of 10% for large MFIs and 12% for the others (b) The average base rate of five largest commercial banks multiplied by 2.75. Given this backdrop, the interest rate on weekly market product of Mann Deshi Bank is high at 26%. The justification given by the bank is that servicing cost of this type of doorstep credit product is very high and therefore the higher interest rate.

IV. Survey Results

Although Mann Deshi Bank type of clientele is not the niche market for commercial banks, many of them, through their Business Correspondents (BC), do provide doorstep banking service to their clients in rural areas at cheaper rates. The moot point, therefore, is that despite Mann Deshi Bank being very costly in terms of interest rate why this bank was preferred over other cheaper sources of formal credit channels. As part of the present study a random survey was conducted through a questionnaire to ascertain the reasons. The respondents were asked very direct questions viz., (i) Whether they were aware that the interest rate charged by the Mann Deshi was exorbitant? (ii) Whether they approached any other bank before choosing Mann Deshi? (iii) On being informed that other banks are providing cash credit at much cheaper rates whether they would now shift to other banks? The

survey revealed that (i) 70% of the clients surveyed had never approached commercial banks for loans as they perceived commercial banks non-accessible for them. (ii) 30% of the clients had visited commercial banks but they had poor experience with them. Most of these 30% clients had deposit accounts with commercial bank but no loan account with them (iii) 45% of the clients were unaware that interest rate charged by Mann Deshi was higher. In fact, out of these interest rate ignorant group, 9% clients had a sense that interest rate charged by Mann Deshi was rather cheaper than other institutions. (iv) 55% of the clients were aware about the high interest rate charged by Mann Deshi. But these respondents were completely dismissive of any suggestion of availing credit from commercial banks at cheaper rates of interest. Even after being educated that commercial banks are providing cheaper loans, they had no second thoughts on banking with Mann Deshi. Clearly, for these poor clients of Mann Deshi Bank, commercial banks carried a negative image. 15% of the respondents attributed it to bad staff behavior and 12% to delay in processing of loans. 8% of the clients opined that they did not believe commercial banks give this type of loan. Others did not attribute any reason but they said that nobody from commercial bank ever approached them.

This brought to the fore the issue of availability vs accessibility. In urban areas credit channels are available but probably not accessible. The survey reveals that what matters for poor is not only good and customized product but also efficient delivery channel. The preference for Mann Deshi over others is a case of successful

outreach efforts made by this bank which their counterparts lacked. The excluded population probably need social inclusion to precede financial inclusion. They need respect, recognition, timeliness and doorstep service more than interest rate benefits. Mann Deshi Bank probably succeeded in capturing the sense of these excluded segments of society with customized products and delivery mechanism.

Goat Rearing and Artificial Insemination of Goats

The bank, in association with Mann Deshi Foundation³ is helping women of the area breaking all social barriers to adopt unconventional vocations. One such vocation is artificial insemination of goat project in Satara district. The district, particularly Mann taluka, is a drought-prone area and has faced successive droughts in recent times. Farming is very difficult in this monsoon dependent area. Goat rearing was considered a viable income generating occupation. Mann Deshi Bank decided to provide loans for purchase of goat in a big way which usually cost Rs.5000 to Rs.6000 each. However, the area had dearth of qualified veterinary doctors. There was usually only one doctor for four to five villages. Further, in the absence of higher breed insemination facility, goat rearing was not really remunerative. The Mann Deshi Foundation decided to support women willing to take up the work of artificial insemination of goat. The Foundation financed training of these women with the

help of Nimbkar Seeds Pvt. Ltd. which imported Boer Goat embryos from Australia in order to make Boer Goat stock widely available throughout India. It also imported semen of Damascus Goats from other parts of the world and started breeding them with locals. Post training of these women, the Foundation financed insemination kit and container while the bank financed two wheeler to these "goat doctors".

Socio-economic Impacts

Out of the total loan portfolio of the bank, as on March 31, 2017, housing loan constituted16.47% while consumption loan was an insignificant 0.48%. The major chunk of bank's loan (54.5%) was for business and other productive purposes. 72% of the borrowers of business/ productive purpose loan could significantly improve their economic status. There were a few failures also but such cases were low at 10% only. The condition of 18% of the borrowers neither improved nor worsened. The most popular businesses, women chose to set up or expand, were dairy farming, goat farming, catering, poultry farming, ladies shops, grocery shops and street stalls. During the course of study visits were made to certain successful entrepreneurs of the bank and a phenomenal change in the life of these ladies were observed.

V. Concluding Observations

The preference by the financially excluded women for the costly Mann Deshi Bank over others is a case of successful outreach efforts

Mann Deshi Foundation: Mann Deshi Foundation was founded in 1996 by Chetna Gala Sinha in Mhaswad, Maharashtra to empower women to make their own choices by equipping women with the knowledge, skills, courage, access, and capital to become successful entrepreneurs with more control over their lives.

made by the bank. The financially excluded segment of the society probably need social inclusion to precede financial inclusion. They need respect, recognition, timeliness and doorstep service more than interest rate benefits. Mann Deshi Bank succeeded in capturing the sense of these excluded population with customized products and delivery model. Banking penetration in India being still low, the banks still have enough scope to challenge market competition provided access to products is made easier and hassle free to its clients. A suitable design and delivery model will continue to give enough head room to bankers on product pricing.

References

Deutsche Gesellschaft fur Internationale Zusammenarbeit (GIZ) GmbH (2014): Mann Deshi Bank's Cash Credit Product for Micro-Entrepreneurs – A Case Study. Gavron, Dench (eds.) 1995. Young at 80, London: Carcanet Press.

Maclagan Committee Report (1915). Cooperation in India (Maclagan) Committee 1914-15. Shimla: India.

Mulgan G. (2007). Social innovation: what it is, why it matters and how it can be accelerated? *Working Paper*, Skoll Centre for Social Entrepreneurship.

Mumford, M. D. (2002). Social Innovation: Ten Cases from Benjamin Franklin, *Creativity Research Journal*, 14(2), 253-266.

Murray, Robin, Julie Caulier-Grice, and Geoff Mulgan (2010). The Open Book of Social Innovation. The Young Foundation. Available at: https://youngfoundation.org/wp-content/uploads/2012/10/The-Open-Book-of-Social-Innovationg.pdf

Pol E, Ville S (2009). Social innovation: buzz word or enduring term? *Journal of Socio-Economic Change*, 38(6):878-885.

Annex: Product Specification

| 1. | Eligibility Criteria | Age between 21 and 59 years Females only Has business in the weekly market where the loans is to be given. Has been coming to the market regularly for the past three months. Business is not seasonal but conducted throughout the year. |
|----|----------------------|---|
| 2 | Guarantor/JLG | Two guarantors with a business in the same market as the client are required. Each borrowing member guarantees at least the interest component of the loan of the other two members. |
| 3 | Required Documents | Photo ID (Voter ID, Aadhar card, PAN card, Bank Pass Book) Address Proof (Voter ID, Aadhar card*, Bank Pass Book, Electricity Bill, House Tax Receipt) |
| 4 | Credit Limit | Rs.10,000/-initially, increased to Rs 20,000/-upon regular payment |
| 5 | Loan Tenor | Three years Three years |
| 6 | Interest Rate | 26% per annum on reducing balance computed every week |
| 7 | Repayment terms | Required payment: Accrued interest every week Recommended repayment: At least 10% of loan amount |
| 8 | Location | Collection of documents, disbursements, repayments and withdrawals take place largely in the weekly market that has been pre-decided. Client has also the option to withdraw or deposit at the bank during working hours. |

भारतीय बैंकों का विलयन: फायदे एंव चुनौतिया

गौतम कुमार*

I. प्रस्तावना

आजकल शहरों में निम्न दृश्य दिखाई देते है। शहर की एक बहुमंज़िला व्यावसायिक इमारत में तीन बैंकों की शाखाएँ है। तीनों शाखा में दिनभर में कुल 300–350 ग्राहकों का फुटफॉल यानि आवाजाही रहती है। शाखा 'क' एक हज़ार रुपये से सामान्य बचत ख़ाता खोलती है। शाखा 'ख' भी करीब – करीब वैसा ही बचत ख़ाता पाँच सौ रुपये से खोलती है। शाखा 'ग' भी ग्राहकों को बचत खाते की सुविधा देती है, कमोबेश उतने ही न्यूनतम खाते शेष पर। शाखा 'क', शाखा 'ख' और शाखा 'ग' ग्राहकों के 'जमा', 'ऋण', एंव डिजिटल उत्पाद लगभग एक जैसे ही हैं। महानगर के एक पाँश व्यावसायिक इलाक़े में जहाँ ऑफिस का रियल इस्टेट रेट 20,000/ – रुपये प्रति वर्ग फुट है। उस इलाक़े में विभिन्न बैंकों के करीब सात सर्कल/अंचल/क्षेत्रीय कार्यालय हैं। हर प्रशासनिक कार्यालय में 125–150 तक का स्टाफ है।

विभिन्न शहरों में विज्ञापन के बड़े –बड़े होर्डिंग लगे हुए हैं। एक बैंक अपने विज्ञापन में गृह ऋण में ब्याज दरों की कमी को रेखांकित कर ग्राहकों को लुभाने की कोशिश कर रहा है तो एक दूसरी बैंक के विज्ञापन में प्रोसेसिंग फी की छूट की बात कही गई है।

निर्माणाधीन टाउनशिप के डेवलपर और बिल्डर के दफ़्तर में ग्यारह से ज़्यादा बैंकों के प्रॉजेक्ट अप्रूवल का बोर्ड लगा हुआ है।

उपरोक्त दृश्यों से निम्न मुख्य बातें निकल कर आती हैं।

अनावश्यक रूप से एक ही शहर में या एक ही निश्चित इलाक़े में बैंकों की संख्या का अधिक होना देश के मूल्यवान संसाधनों का अपव्यय है।

सभी बैंको की शाखाओं में कमोबेश एक जैसी सेवाएँ या बैंकिंग उत्पाद हैं जैसे कि बचत ख़ाता, चालू ख़ाता, आवधिक जमा, ख़ुदरा ऋण, कृषि ऋण, डिजिटल उत्पाद (आर टी जी एस, एन ई एफ टी, मोबाइल बैंकिंग, इंटरनेट बैंकिंग) इत्यादि। जब उत्पादों में इतनी समानता है तो ग्राहकों को क्या फ़र्क पड़ता है कि बचत ख़ाता नीले रंग के सिंबल वाले बैंक में रखे या हरे या नारंगी रंग के सिंबल वाले बैंक में रखे।

बैंक शाखाओं की अधिक संख्या (ख़ासकर मेट्रो और टीयर 2 शहरों में) होने के कारण वहाँ का बैंकिंग मार्केट एक तरह से संतृप्त हो चुका है और बड़ी-बड़ी शाखाएँ महज सफेद हाथी (वाइट एलिफेंट) बनकर रह गई हैं।

बैंकों का मूल उद्देश्य देश की अर्थव्यवस्था में सार्थक योगदान करना, नागरिकों तक सुविधाजनक रूप से वित्तीय एवम् बैंकिंग उत्पाद पहुँचाना है। इसके साथ वंचितो का वित्तीय समावेशन कराना है। किंतु पिछले दो दशक से यह देखा जा रहा है कि दो दर्जन से अधिक की संख्या में उपस्थित सरकारी बैंक आपस में ही गलाकाट प्रतिस्पर्धा में लगे हुए हैं।एक दूसरे के आँकड़ों से आगे निकलने की यह चूहा–दौड़ (रॅट रेस) विस्तृत सामाजिक बैंकिंग की अवधारणा को भूल संकीर्ण कॉरपोरेट कल्चर में तब्दील हो चुकी है।

* गौतम कुमार, वरिष्ठ प्रबंधक एवं संकाय सदस्य, बड़ौदा अकादमी, बड़ौदा। यह दिये गये विचार व्यक्तिगत हैं।

बैंक शाखाओं की अधिक संख्या होने के कारण उनके प्रशासनिक या नियंत्रक कार्यालयों (एडिमिनिस्ट्रेटिव एंड कंट्रोलिंग ऑफिस) की संख्या भी अधिक होगी । वहाँ सैकड़ों की संख्या में स्टाफ अनुत्पादक कार्यों में लगे दिखते हैं। यह सीधा –सीधा धन, श्रम और समय का अपव्यय है।

बड़े बिल्डर, बड़े कॉरपोरेट बैंकों की आपसी प्रतिस्पर्धा का खूब फ़ायदा उठाते हैं। वे तरह-तरह के गैर वाजिब कन्शेशन (छूट) या ब्याज दर में कमी, कम मार्जिन आदि के लिये बैंकों पर दबाव बनाते हैं।

उपरोक्त बातों को ध्यान में रखा जाए तो संपूर्ण आर्थिक विकास के लिए वर्तमान बैंकिंग व्यवस्था में भी कई बदलाव की ज़रूरत है। इसी परिवर्तन को साधने हेतु बैंकिंग बोर्ड ब्यूरो ने गवर्नन्स, रिवॉर्ड, अकाउंटबिलिटी, फ्रेम वर्क (GR-F) के तहत भी बड़े बैंक बनाने की अनुशंसा की है।

II. भारतीय बैंकों के विलयन की आवश्कता

हम विश्व में छठी सबसे बड़ी अर्थ व्यवस्था होते हुए भी हमारे यहाँ का कोई भी बैंक विश्व के चोटी के 40 में शामिल नहीं है (स्टेट बैंक और उसके सहयोगी बैंकों के विलयन के पश्चात स्टेट बैंक 45 वें स्थान पर पहुँचा है)।

रेटिंग एजेन्सी मूडीज ने भारतीय सार्वजनिक क्षेत्र के बैंकों के बेसल – तृतीय के तहत इक्विटी की बढ़ती आवश्यकताओं के संदर्भ में कहा है कि मार्च 2019 तक 70,000 करोड़ से 90,000 करोड़ तक बैंकिंग सेक्टर में पूंजी की आवश्यकता है। लेकिन सरकार ने अपने बजट में केवल 20,000 करोड़ ही इस के लिए आवंटित किये है। दो दर्जन से अधिक बैंको में से कई अपने अपने अस्तित्व बचाने की जद्दोजहद में लगे हैं।

हाल में ही रिज़र्व बैंक ने पी सी ए (प्रॉम्प्ट कोरेक्टिव एक्शन) के तहत आईडीबीआई बैंक, इंडियन ओवरसीज बैंक, यूको बैंक, देना बैंक और सेंट्रल बैंक ऑफ इंडिया एवं बैंक ऑफ महाराष्ट्र के तहत करवाई की है। इस कदम के पीछे कारण यह था कि लगातार उनके परिसम्पति (असेट) की गुणवत्ता में गिरावट आ रही थी और बैंको की अनर्जक आस्ति (एन पी ए) में निरंतर वृद्धि हो रही थी। अगर जमाकर्ताओं के प्रति दायित्व को पूरा करने के लिए किसी बैंक के हिस्से पर कोई चूक होती है, तो पीसीए मॉड्यूल के किसी भी संदर्भ के बिना एक संभावित रिज़ॉल्यूशन प्रक्रिया का सहारा लिया जा सकता है। इससे पहले अप्रैल में आरबीआई ने पीसीए फ्रेमवर्क को एक खंड के साथ संशोधित किया था कि अगर बैंक में सुधार नहीं दिखाया जाता है, तो इसे अन्य बैंक द्वारा विलय या अधिग्रहण किया जा सकता है।

आने वाले समय में इंड एएस (IND AS) या परिवर्धित लेखा पद्धित में अधिक कौशल के साथ बैंकों को और अधिक प्रावधान (प्रोविजन) की ज़रूरत पड़ेगी। पिछले साल गुड़गाँव में हुए बैंकर्स काँक्लेव ज्ञान संगम में भी बैंकों के कन्सॉलिडेशन पर गहन चर्चा हुई।

वित्तीय एवं बैंकिंग के एक्सपर्ट के अनुसार मर्जर भी कई तरह के हो सकते है। जैसे कि हॉरिज़ॉटल या क्षैतिज (इस तरह के मर्जर में दो कंपनी जो आपस में प्रतिद्वंदी हैं और एक तरह के उत्पाद या सेवाएँ प्रदान करती है और करीब करीब एक जैसे मार्केट या बाज़ार में होती हैं) वर्टिकल या उर्ध्व मर्जर में एक बी टू बी कंपनी के बीच हो सकता है, जैसे सप्लाइयर और उसकी कंपनी के बीच।

इसी प्रकार कॉन्जेनेरिक मर्जर, जिसमें दो भिन्न भिन्न कंपनी अपने भिन्न भिन्न उत्पाद से एक ही ग्राहक को अपने उत्पाद बेच रहा हो जैसे एक कोई पर्सनल कंप्यूटर कंपनी और सॉफ़्टवेयर कंपनी का आपस में विलय।

बैंकिंग में मर्जर होरिजोंटल मर्जर के अंतर्गत आते हैं। यह अन्य विलयन के प्रकार की तुलना में कम जटिल है।

हालिया हुए स्टेट बँक ऑफ इंडिया में उसके अन्य सहयोगी बैंकों के विलय में जितनी जटिलताओं के कयास लगाए जा रहे थे वह अनुमान ग़लत साबित हुआ और बड़ी ही सरलता से यह विलयीकरण संपन्न हुआ। दिसंबर 1997 में बैंकिंग सुधार के लिए गठित नरसिम्हन कमिटी ने अप्रैल 1998 में अपनी रिपोर्ट दी इसमें कुछ विलयीकरण के सम्बन्ध में निम्न सुझाव दिए गये।

• बैंकों के विलय पर बल दिया गया था ताकि प्रत्येक बैंक

के लिए आकार और परिचालन क्षमता में वृद्धि हो सके।भारत में 2 से 3 बैंक अंतरराष्ट्रीय स्तर पर, 8– 10 राष्ट्रीय बैंक होने चाहिए।

 बैंक विलय समान आकार की संस्थाओं के बीच होना चाहिए।

आर बी आई के पूर्व गवर्नर श्री रघुराम राजन ने भी "द एकॉनमिस्ट" के अपने एक लेख में लिखा था कि भारत जैसे विशाल देश में यहाँ की मौजूद जटिलताओं, यहाँ का जननांकीय वर्णन (डेमोग्रॅफिक प्रोफाइल) और नगदी का आकस्मिक प्रवाह को देखते हुए विशाल बैंकों की आवश्यकता समय की माँग है।

III. बैंकों का विलयन - एक वरदान

बड़े बैंकों की वजह से कार्यप्रणाली में ज्यादा सुसूत्रता आयेगी। साथ ही, बड़े बैंकों में छोटे बैंकों का विलीनिकरण होने के कारण, बड़े बैंकों के पास के तकनीक और नेटवर्क का लाभ अन्य छोटे बैंकों के ग्राहकों तक पहुँचेगा। इस वजह से खर्च भी कम होगा, बैंक की कार्यक्षमता बढ़ेगी और मुनाफ़ में वृद्धि होगी, ऐसा कहा जाता है। विलयन के बाद पहले साल में खर्चा कम होने से हजार करोड़ रुपये की बचत होगी, ऐसा दावा किया जाता है। इसके अलावा बैंकों में कर्जा देने के लिये और जमा निधि इकट्ठा करने के लिए जिस प्रकार की प्रतिस्पर्धा चलती थी, वह भी कम होगी ऐसा कहा जाता है।

बैंकिंग एक ग्राहकोन्मुखी सेवा क्षेत्र है अत: इसमें प्रोफेशनल स्किल या व्यावसायिक दक्षता की आवश्यकता पड़ती है। बड़े बैंक के प्रशिक्षण प्रणाली (ट्रेनिंग सिस्टम) के ज़रिए कर्मचारियों में ज़रूरी दक्षता की ट्रैनिंग दी जा सकती है।

छोटे छोटे बैंकों के बड़े बैंकों में मर्जर से अनावश्यक आपसी प्रतिस्पर्धा में आशातीत कमी आएगी। इससे बैंकिंग व्यवसाय करने में होने वाले खर्चों में कमी आएगी साथ ही ग्राहकों को भी कई तरह के क्रॉस बैंकिंग शुल्क जैसे की ए टी एम सम्व्यहार शुल्क, चेक वसूली शुल्क आदि में कमी आएगी।

बैंकों का आकार जब बृहद होगा तो उसे अपने लघु अविध एवं दीर्घ अविध की तरलता (शॉर्ट टर्म एंड लॉंग टर्म लिक्विडिटी) को बेहतर ढंग से प्रबंधन करने मे सरलता होगी। इस तरह रिज़र्व बैंक ऑफ इंडिया के सांविधिक दिशानिर्देशों के तहत लिक्विडिटी अङ्जस्टमेंट फेसिलिटी (एल.ए.एफ.) एवं मार्जिनल स्टाँडिंग फेसिलिटी (एम एस एफ) के लिए बार बार कॉल मार्केट से ओवरटाइम बोरोविंग की ज़रूरत नहीं पड़ेगी।

बैंकों के बीच आपसी प्रतिस्पर्धा में कमी :-

आजकल लाभप्रद केंद्रों ख़ासकर मेट्रो, शहरी क्षेत्रों में बाजार की प्रतिस्पर्धा के कारण विभिन्न बैंक शाखाओं की संख्या काफ़ी है जबिक ग्रामीण और अर्धशहरी एवं दूर दराज क्षेत्रों में शाखाओं की कमी है। मर्जर से बैंकों की इस असमानता को दूर किया जा सकता है। बैंकों के बीच अनावश्यक रूप से ब्याज दर आदि को लेकर आपस में प्रतिस्पर्धा देखने को मिलती है। इस अस्वस्थ प्रतिद्वन्दिता में कई बार कुछ बैंक ग्राहक को लुभाने के लिए जमा राशि पर अधिक ब्याज दर या ऋण पर न्यूनतम ब्याज दर देने का वादा करते हैं मगर बाद में कई हिडेन चार्जस या छुपे हुए शुल्क लगाए जाते हैं जिससे ग्राहक भी स्वयं को ठगा हुआ महसूस करता है।

बैंकों के भिन्न भिन्न कार्यप्रणाली (वर्क प्रोसेस), अलग अलग बैंकिंग सॉफ़्टवेयर एवं दिशानिर्देशों में एक रूपता का अभाव ग्राहक के साथ साथ बैंको के लिए भी अस्पष्ट स्थिति उत्पन्न करता है।

प्रतिस्पर्धा के कारण कई बैंक केवल व्यवसाय की खींच तान के लिए कई तरह के रेग्युलेटरी दिशानिर्देशों को भी दरिकनार कर देते हैं। हाल के वर्षों में बैंकिंग में घटित विभिन्न धोखाधड़ी के मूल में भी अल्प कालीन लाभ वाला नज़रिया रहा।

परिचालन व्यय में कमी एवं लाभप्रदता में वृद्धि:-

यह इसलिए होता है कि दो या अधिक का सिमश्रण के परिणाम स्वरूप लागत में कटौती होती हैं। दूसरे शब्दों में सिमश्रित फर्म एक दूसरे के ऊपर कार्य से बचता या उसे कम करता है जैसाकि विनिर्माण, विपणन, अनुसंधान और विकास और इस प्रकार से परिचालन लागतें कम करता है। उदाहरण के लिए एक मिश्रित फर्म वितरण का दोहरा चैनल समाप्त कर सकता है या केन्द्रीयकृत प्रशिक्षण केन्द्र का सृजन करता है या एकीकृत योजना और नियंत्रण प्रणाली पुर:स्थापित कर सकता है।

बैंकों की संख्या कम होने से उच्च प्रबंधन (एम डी, ई डी, सी जी एम, जी एम, आर एम आदि) पदों की संख्या में कमी आएगी जिससे की प्रशासनिक खर्चों में काफ़ी कमी आएगी इस तरह बैंक की लाभप्रदता में भी वृद्धि होगी।

बड़ी बैंक विदेशी विनिमय व्यापार (फॉरेक्स बिजनेस) पर ज़्यादा फोकस करके अपनी लाभप्रदता और मार्केट रीच में वृद्धि कर सकेगी।

बैकों का और अधिक मूल्यवान होना:-

बैंकों के आपसी एकीकरण से निर्मित बैंक की बाजार पूंजी, मार्केट रीच, ग्राहक आधार (कस्टमर बेस), निवेशको आदि में वृद्धि होगी। एक उदाहरण ले तो कोटक महिंद्रा बैंक में आई एन जी वैश्य बैंक के विलयन से दोनों ही बैंक के इनवेस्टर्स को फायदा हुआ।

एक तरफ कोटक मिहंद्रा बैंक वैश्य की कामकाजी क्षमता बेहतर बनाने में मददगार साबित हुआ। साथ में बेहतर कैपिटल बेस की वजह से कोटक बैंक आई एन जी वैश्य के मौजूदा ब्रांच से ज्यादा बिजनस ग्रोथ हासिल भी कर सका।

शेयरों की कीमत पर डील होने पर आई एन जी वैश्य का वैल्यूएशन इसके बुक वैल्यू का 2 गुना हुआ जो कोटक के इनवेस्टर्स के लिए अट्रैक्टिव साबित हुआ।

2010 में आई सी आई सी आई बैंक में मर्ज किए जाने के वक्त बैंक ऑफ राजस्थान का वैल्यूएशन उसके बुक वैल्यू का 3 गुना से ज्यादा लगाया गया था।

ग्राहक सेवा में गुणात्मक सुधार:-

कई बैंक एक सीमित भौगोलिक क्षेत्रो तक सीमित है, जैसे पंजाब और सिंध बैंक की शाखाएँ केवल उत्तर भारत के कुछ राज्यों तक ही सीमित है इसी तरह विजया बैंक, आंध्रा बैंक की शाखाएँ बहुतायत दक्षिण भारत में केंद्रित है। मर्जर या विलयी करण के पश्चात भौगोलिक सीमाएँ टूटेगी और विलय के बाद निर्मित वृहद बैंक का सर्वोत्तम (बेस्ट) सभी ग्राहकों तक पहुँचेगा।

बैंकों की संख्या कम होने से ग्राहकों को अन्य निम्न लाभ मिल सकते है।

- चेकों के समाशोधन (क्लियरिंग) में होने वाले विलंब में कमी आएगी
- अंतर बैंक लेन देन में लगने वाला शुल्क ख़त्म हो जाएगा।
- बड़े बैंक होने से प्रक्रिया में एकरूपता रहेगी जिससे ग्राहकों में भ्रम या किसी तरह की अनिश्चितता नहीं रहेगी।
- सरकारी वित्तीय सहायता लोगों तक तीव्र और आसानी से पहुचेंगी
- रियल टाइम बेसिस पर ग्राहकों को सेवाएँ मिलेंगी सरकारी योजनाओं एवं कार्यक्रमों को लागू करने में आसानी:-

2014 में मौजूदा सरकार की प्रधान मंत्री जन धन योजना के तहत महज डेढ़ साल के अंदर करीब 22 करोड़ बैंक खाते खुल गये थे। लेकिन उसमें करीब 30 प्रतिशत खाते ऐसे थे जो बाद में निष्क्रिय (डॉरमेंट)हो गये। एक अध्ययन में यह भी पाया गया कि एक ही व्यक्ति के खाते जन धन योजना के तहत तीन से चार बैंकों में खुले।

इसी तरह बैंकों के बीच आपस में सूचना आदान प्रदान के अभाव में सरकारी योजना का लाभ किसी को बिल्कुल नहीं मिल पा रहा था तो कोई दो बार उठा रहा था जैसे विभिन्न सरकारी योजना के तहत क्रेडिट लिंकेज, मुद्रा लोन, पी एम ई जी पी लोन,प्रधान मंत्री आवास योजना, किसान क्रेडिट कार्ड इत्यादि।

बैंकों के विलयन से बड़े बैंकों के पास खुद का बड़ा डेटाबेस होगा जिससे वह सही लाभार्थी तक सरकारी योजना का लाभ पहुँचा सकता है।

सरकार को अभी अपने ट्रेजरी संबंधित कार्य के लिए केवल स्टेट बैंक पर निर्भर रहना पड़ता है। भारतीय स्टेट बैंक के तर्ज पर चार पाँच और वृहदकर बैंक होने से सरकार को अपने वित्त एवं बैंकिंग संबंधी कार्यों हेतु अन्य विकल्प भी मिल जाएँगे और जिला एवं राज्य स्तर पर होने वाली डी एल सी सी, एस एल बी सी में बड़े बैंक अधिक होंगे तो स्वयं सहायता समूह, कृषि में संलग्न लोगों; सूक्ष्म, लघु एवं मध्यम उद्योग को ऋण से जोड़ने एवं उनकी निगरानी, वसूली में सरलता होगी।

गैर निष्पादित आस्तियों का बेहतर प्रबंधन (बेटर एन पी ए मैनेजमेंट):-

वर्तमान बैंकिंग परिदृश्य में अनर्जक आस्तियाँ अर्थात एन पी ए एक विकराल चुनौती के रूप में खड़ी है। वित्त मंत्रालय के जारी आधिकारिक आँकड़ों के अनुसार जून 2016 तक भारत में स्थित सभी 49 सरकारी एवं निजी बैंकों के एन पी ए का कुल योग करीब 6 लाख करोड़ था। समाप्त हुए वित्तीय वर्ष 2016–2017 में बैंकों का कुल एन पी ए 7.65 लाख करोड़ था, जो कि अब दस लाख करोड़ से भी अधिक हो गया है। संक्रमण के ऐसे दौर में नए जोखिम मानकों के मुताबिक, सार्वजनिक क्षेत्र के बैंकों को दस साल में सात लाख करोड़ रुपए से अधिक राशि जुटानी होगी। रिजर्व बैंक के पूर्व गवर्नर सुब्बाराव के मुताबिक सरकारी बैंकों को आने वाले सालों में तकरीबन पांच खरब रुपए की जरूरत होगी।

अधिकतर बड़े कॉर्पोरेट ऋण एक बैंक अकेला नहीं देता बल्कि कन्सॉर्टियम के तहत कई बैंक मिलकर देते हैं। उस ऋण के एन पी ए होने की स्थिति या उससे पहले जब ऋण में दवाब दिख रहा हो, तो कोई भी सुधार या ऋण को संभावित एन पी ए से बचाने के लिए तुरंत ठोस निर्णय लेने की आवश्यकता होती है। बैंकों की अधिक संख्या होने के कारण कोई भी त्वरित निर्णय लेने में कठिनाई होती है साथ ही बैंकों के बीच एक सहमति बनाना भी बड़ी रुकावट बनकर सामने आती है।

मर्जर के पश्चात बड़े बैंक होने पर किसी भी तरह के त्वरित निर्णय में आसानी होगी। साथ ही डिफॉल्टर कर्ज़दारों के विरुद्ध क़ानूनी कारवाई एवं अन्य वसूली के माध्यमों के इस्तेमाल करने में कोई अड़चन नहीं आएगी। साथ ही रिपोर्टिंग, रिकवरी फॉलो अप आदि से अनर्जक आस्तियों के प्रबंधन की गुणवत्ता में सुधार आएगा।

उत्तम बैंकिंग प्रौद्योगिकी और विस्तृत डेलिवरी चैनेल:

बैंकों के मर्जर से बैंकिंग सॉफ़्टवेयर में एकरूपता (यूनिफॉर्मिटी) एवं एकीकृत परिचालन (इंटेग्रेटेड ऑपरेशन्स) से बैंकिंग प्रौद्योगिकी और अधिक मजबूत (रोबस्ट) सुरक्षित (सेक्यूर) और यूजर फ्रेंडली होगा।

अभी विभिन्न बैंक अलग अलग सॉफ़्टवेयर पर कार्य करते है। कुछ बैंको जैसे बैंक ऑफ बड़ौदा, पी एन बी, आई सी आई सी आई आदि में फिनेकल (इन्फ़ोसिस द्वारा निर्मित) है तो कुछ बैंकों जैसे भारतीय स्टेट बैंक, सेंट्रल बैंक इत्यादि में बी एन सी एस (BaNCS, टी सी एस द्वारा निर्मित) है, कुछ अन्य बैंकों जैसे केनेरा बैंक, येस बैंक आदि में फ्लेक्स क्यूब (ऑरेकल द्वारा निर्मित) प्रयुक्त होता है।

उपरोक्त कोर बैंकिंग सोल्यूशन के अलावा विभिन्न अन्य सॉफ़्टवेयर भी प्रयोग में लाए जाते हैं जैसे, एल एम एस, अस्क्रोम, ओलटास इत्यादि।

बैंकों के मर्जर से अलग अलग प्रौद्योगिकी पर किया जाने वाला व्यय भी रुकेगा और साथ ही एक ही प्लॅटफॉर्म पर सारे डेलीवेरी चैनेल ग्राहकों को मिल सकेंगे।

प्रभावी मानव संसाधन प्रबंधन, प्रभावी धोखा धड़ी निवारक तंत्र:-

बैंकों के विलयस्वरूप वृहद बैंक के निर्मित होने से उच्च, मध्यम और निन्म प्रबंधन में बेस्ट मैनेजमेंट प्रक्टिसेस को बढ़ावा मिलेगा। मानव संसाधन स्तर पर भी प्रतिभा को रोकने (टैलेंट रीटेंशन), कर्मचारियों को सर्वोत्तम वेतन एवं भुगतान (बेस्ट कॉम्पेन्सेशन), प्रभावी प्रशिक्षण आदि से फ्यूचर लीडर्स बनाए जा सकते हैं।

हाल के वर्षों में कई तरह के परिचालन एवम् ऋण संबंधी धोखाधड़ी की घटनाएँ देखी गयी है। आँकड़ों के मुताबिक छोटे छोटे बैंक इसका शिकार अधिक हुए हैं। बैंकों के विलयन से परिचालन एकरूपता, विशाल डेटाबेस, अर्ली अलर्ट, रोबस्ट फ्रॉड मैनेजमेंट सिस्टम होने से सतर्कता और सुरक्षा मानदंडों का स्तर और सुधरेगा एवं फर्जी के वाय सी, नकली चेकों आदि पर लगाम लगेगा।

IV. चुनौतियाँ:-

जिस तरह हर घटना या हर परिवर्तन में केवल सब चीज़े सकारात्मक ही नहीं होती, उसके साथ कुछ चुनौतियाँ, कुछ कठिनाइयाँ भी सिन्निहित होती है। हर बड़े वरदान के साथ एक छुपा हुआ अभिशाप भी रहता है उसी तरह हर बड़े अभिशाप के साथ कुछ अच्छी बात भी ज़रूर छिपी रहती है।

मानव संसाधन, सूचना व प्रौद्योगिकी, वेतन व भत्ते, प्रणाली आदि का एकीकरण भी आसान नहीं है। इसके अलावा यूनियन को विलय के लिए राजी करना, मानव संसाधन का फिटमेंट, विसंगति की स्थिति में क्षतिपूर्ति की व्यवस्था आदि ऐसे मुद्दे हैं जिनका समाधान ढूंढ़ना सार्वजनिक क्षेत्र के बैंकों के लिए चुनौतीपूर्ण होगा। पूर्व में दो सरकारी उपक्रमों एअर इंडिया और इंडियन एअरलाइंस के विलय में सबसे बड़ा रोड़ा मानव संसाधन का एकीकरण ही रहा था। वर्तमान एअर इंडिया की बदहाली का कारण एकीकरण को ही बताया जा रहा है।

कई विद्वान मर्जर को भारतीय बैंकिंग के सन्दर्भ में उचित कदम नहीं मानते। वे इसे एक गंभीर परिणामों का पुलिंदा बताते है। अपनी अलग राय के पक्ष में (अर्थात मर्जर के विरोध में) वे निन्म तर्क देते हैं।

भारतीय बैंकिंग व्यवस्था कोई एक दिन या कुछ दशक में निर्मित नहीं हुई है। यह एक तरह से ज़मीनी रूप से, या नैसर्गिक रूप से विकसित अर्थात इवॉल्व हुई है। आने वाले कुछ दशकों में बड़ी बैंक और मजबूत बनकर खुद ही ग्लोबल बैंक के रूप में स्वयं को स्थापित कर लेगी। इस बात की कोई गारंटी और निश्चित नहीं कि बैंकों के मर्जर से रातों रात या यूँ कहें चन्द वर्षों में बैंक विश्व स्तर के मानक को हासिल कर ले। विश्व स्तर पर ऐसा कोई उदाहरण नहीं है की संकट से उबरने के लिए कंपनी के विलयी करण कोई फूल प्रूफ समाधान है।

कहा जाता है कि "Parts are the greater than the sum of whole" अतीत के आईने में देखे तो महान वित्तीय संकट (Great Financial Crisis) के समय जैसे कि 1920-1921 की अमेरिका की महा मंदी, 1939 - 1945 के द्वितीय विश्वयुद्ध का विश्वस्तरीय प्रभाव, 1991 का भारतीय वित्तीय संकट, सन् 2000 का डॉट कॉम बबल या 2001 का 9/11 हमले के बाद की स्थिति या 2008 का सब प्राइम संकट; कई बड़े बड़े बैंक (जो कभी जाइयंट कहे जाते थे) डूब गये। मगर छोटे छोटे बैंक और वित्तीय संस्थान अपने अस्तित्व को बचाए रखने में कामयाब हुए।

हर छोटा या मध्यम आकार का बैंक अपने एक खास भौगोलिक या सांस्कृतिक क्षेत्र में कार्यरत रहता है। उसे उस खास क्षेत्र के जन जीवन की वित्तीय ज़रूरतों का पता रहता है और वे उस तरह के "Customized Product" को लोगों तक पहुँचाते हैं। हर बैंकिंग या वित्तीय उत्पाद हर क्षेत्र में समान रूप से उपयोगी नहीं होता। जैसे की गोल्ड लोन का प्रचलन उत्तर भारत की अपेक्षा दक्षिण भारत में अधिक है। वैसे ही कुछ क्षेत्रों में इस्लामिक बैंकिंग की माँग होती रही है। बड़े बैंक छोटे—छोटे क्षेत्रों की बैंकिंग ज़रूरतों को वहाँ के सामाजिक—आर्थिक संरचना (Social-Economic structure) या प्रचलित प्रथा को ज़्यादा तवज्रो नहीं देते। इस कारण छोटे बैंको की उपयोगिता को बिल्कुल नहीं नकार सकते।

बैंकों के मर्जर से मानव संसाधन पर काफ़ी उथल पुथल की स्थिति देखी जाती रही है। हर बैंक का एक अलग ही मानव संसाधन संस्कृति या कहे प्रचलित मान्यताएँ होती हैं। बैंकों के आपस में विलय से कर्मचारी वर्ग, अधिकारी वर्ग, कार्यपालक वर्ग के हितों पर भी प्रभाव पड़ता है। वे दूसरे की कार्य संस्कृति में खुद को ढालने में असहज महसूस करते है। यहाँ बड़े बैंक का कार्य बल (वर्क फोर्स) एवं विलयित छोटे बैंकों के कर्मचारीओं के बीच आपसी अहम या ईगो की समस्या को भी देखा गया इससे कर्मचारीओं के बीच असुरक्षा का वातावरण निर्मित होता है और कर्मचारी संगठन भी अपने अस्तित्व के लिए संघर्ष में लगे रहते हैं और बैंक विलय की अपेक्षित लाभकारिता के उद्देश्य से भटक जाते हैं।

उपसंहार:-

बैंकों के मर्जर या एकीकरण या विलयी करण निष्कर्तः अधिकतर अर्थशास्त्रियों, बाजार विश्लेषकों, नीति निर्माताओं की दृष्टि में एक स्वागतयोग्य कदम है, हमारी अर्थव्यवस्था के लिए वरदान के समान है क्योंकि इससे हमारी बैंकिंग को अंतरराष्ट्रीय स्तर पर पहचान मिलेगी, हम विश्वस्तरीय मानकों को अपनाएँगे और बैंकिंग जाएंट (Banking Giant) में भारत के भी कुछ बैंकों के नाम विश्व क्षितिज पर उभर कर आएँगे। मर्जर हमारे यहा कोई नयी चीज़ भी नहीं है। अतीत में भी कई बैंकों के आपस में मर्जर हुए हैं जैसे कि 1993 में न्यू इंडिया बैंक का पंजाब

नेशनल बैंक में, 1999 में बरेली को-ऑप लिमिटेड का बैंक ऑफ बड़ौदा में, सन् 2000 में टाइम्स बैंक का एच डी एफ सी बैंक लिमिटेड में, सन् 2004 में ग्लोबल ट्रस्ट बैंक का ओरिएंटल बैंक ऑफ कॉमर्स में, सन् 2006 में सांगली बैंक का आईसीआईसीआई बैंक में। हाल के वर्षों में भी 2014 में आईएनजी व्यास बैंक का कोटक मिहंद्रा बैंक में विलय हुआ।

किंतु बैंकों के मर्जर में यह ज़रूर ध्यान रखना होगा कि इसे पूरी रणनीति बनाकर, निश्चित रोड मैप के साथ, एक दीर्घकालीन विजन, और बिना किसी राजनैतिक लाभ हानि को ध्यान में रखकर किया जाना चाहिए।



Customer Analytics in Banking and Finance

Mohan Venkateswaran K.*

I. Introduction

The latin term "Caveat Emptor" i.e. let the buyer beware, was the concept which was predominant in trade and commerce. This concept meant that it is the responsibility of the customer to ensure that the right product is purchased. Later, that concept was replaced by another latin term "Caveat Venditor" i.e. seller beware. Under that concept the responsibility was on the seller to keep the buyer completely informed of the goods or services he is selling or providing. In the modern trade and commerce, the sellers have evolved to be more competitive and are now collecting information about the customers and are designing products especially for those customers. This new age method is called Customer Analytics.

II. Customer analytics

Customer Analytics is the method of identifying customer's behavior and requirements through various means and offer customized products that enhance customer satisfaction. A satisfied customer means better sales. The first question is how customer analytics is being done. The answer is big data analytics. It is the process of examining large and varied sets of data to

uncover hidden patterns, unrelated correlations, market/shopping trends and other insights, which enable businesses to make more informed business decisions. The technology firms identify the customers' behaviours and requirements to enable the vendors to offer customised products that increase customer satisfaction and improve the sales.

The second question is how much time it takes to examine the large and varied data. The answer is that it is being done in no time. The technology available today enables analysis of massive data and provides a solution almost immediately. The third question is from where the data is being collected. The data is collected from every possible digital footprint of customers.

III. Improving banking experience

The past few years have seen additions to the already fiercely competitive banking sector. With the competition to attract the customers ever growing, the unique selling proposition is which bank knows the customer better. Banking is no longer standing in a queue with token at a bank counter. It is about building relationship with the customer taking the service to the doorstep and providing the

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right banking product to the customer at the right time without making the customer waste her time. The banking product could be deposit or investment or loan product as per the requirement of the customer. On one hand it is very important to offer the right product but on the other hand it is very important as to who approaches the customer first at the right time with the right product. Therefore, knowing the requirements of customers is going to be key for competitive advantage in banking. Further, it is necessary for the banks to evolve to adapt to the changing needs of their customers, which will improve crossselling and up-selling of products. Customer analytics will enable banks to know the customers better and this is an opportunity, which the banks can use to differentiate themselves in the competitive market. Predictive analytics enables targeting the right customers by studying their behavioural patterns. It is possible to know about which customer will stay longer with them and what actions of the service providers will earn the loyalty of the customers.

There is lot of digital data available about everybody and much of it is relevant. These data can be used for business decisions. Using web browsing history, it is possible to know whether a customer is looking for a loan, and with the keywords used for search, it is also possible to understand the priorities of the customer while seeking to avail a loan. With this knowledge, credit institutions may be in a better position to approach the customer with the right product at the right time.

IV. Customer experience in payments and remittances

With the advent of e-commerce platforms, there has been lot of focus on the buying experience by designing the website and providing better functionalities. However, the convenience in making payments is also equally important. Payments banks and wallets are significantly contributing towards enhancing the customer experience in online payments and remittances. These newbies are giving the incumbent banks a run for their money in this niche sector. The customer's behavior is being analysed while designing products and the products are accompanied with rewards and incentives in the form of cashbacks to motivate customers to use their services. Once the customers are acquired, the convenience and service quality is being used as a major tool to retain them.

Today, one need not wait in a long queue to recharge her Mumbai and Delhi Metro Train smart cards. On a real time basis, a customer can now log into a payment wallet app and key in the Metro Train card details to check the card balance and instantly recharge the same. This facility is applicable for electricity, gas and telecom services. In today's scenario customers can log into one payment wallet and make payment for all their utility services. This shows that there is integration of databases of financial service provider and other utility service providers. This integration is assisted by application programming interface (API), which enables the stakeholders to deal with the complex software systems and disjointed

¹http://www.mas.gov.sg/Singapore-Financial-Centre/Smart-Financial-Centre/Application-Programming-Interfaces.aspx

technologies. ¹API is a set of formalised commands that allow software applications to talk with each other in a seamless manner. APIs make it possible for innovative applications to leverage on foundation services to create better customer-centric services. APIs are a crucial enabler for financial institutions to harness the benefits of Fintech. They facilitate financial institutions' push towards customer-focused initiatives by enabling applications to be developed quickly and responsively. APIs also allow financial institutions to leverage on external talent and tap on emerging and innovative Fintech.

V. Customer experience in borrowing/ lending

The customer's needs for finance may vary depending upon the stage of their life cycle. It could be for personal purposes or business purposes. Though borrowing from banks are still a popular option, customers may or may not satisfy the specifications of the banks and they may also need the finance urgently which may or may not fit into the application process of the banks. Therefore, banks are stated to have2 partnered with fintechs to adopt innovative technology based solutions for sourcing of customers, anti-fraud detection and easier customer onboarding processes. Banks have also realized that collaboration with fintechs is the best way to go forward. Some of the Non banking financial companies (NBFCs) have changed the face of lending by digital means. In respect of these companies, the customers are required to apply online with minimum details such as mobile number and aadhaar

number. Most of these NBFCs do unsecured lending. In October, 2017, the Reserve Bank of India (RBI) has issued directions for NBFCs that operate peer-to-peer (P2P) lending platforms. P2Ps provide a technology platform through an online market place, which enables the borrowers and lenders to connect. The question which arises at this juncture is how these institutions underwrite these loans.

In cases where the loan applicants are seeking to access credit for the first time, they may not have a CIBIL score. Further, they may not have any security to offer for the loans. As per the Fourth Census of MSME, 92.77% of the MSMEs had no access to external finance. The limited credit history and non-availability of security have generally been quoted as a reason for not financing.

The fintech companies have created ways and means to underwrite the loans without relying on a credit score by CIBIL or security. These companies have developed a black box algorithm to assess the borrowers and process the loan application in minimum time and with no paper work. The factors which matter for under writing could be the identity of the applicant, the intention of the applicant, the fraud risk and the credit worthiness. To assess these factors, the fintech companies rely upon a large amount of data which is left behind by the applicant as her digital footprint. These data could be available in the form of:

 web browsing history and social media to understand the nature, reputation, connections and character of a person,

²https://economictimes.indiatimes.com/markets/stocks/news/yes-bank-taps-ai-to-directly-offer-small-loans-to-students/articleshow/59483294.cms

- b. online bill payment records to show regularity in paying bills; and
- c. shopping trends and fitness information through trackers to understand the food habits and lifestyle of a person.

The analytics of the above digital data which provide a 360 degree view about the customer to enable the credit institutions to decide whether to lend or not. Apart from assessing the capacity of a person to repay, the data analysis enable the credit institution to have a better idea about the intention and willingness of a person to repay. The interesting part of this process is that it happens in no time since it is machine driven. With the advent of Aadhaar, the KYC is being done through electronic means. The credit decision is being taken in minutes and the money is transferred immediately using the UPI infrastructure. This seems to have enhanced customer experience with such credit institutions.

A tech company called "Redcarpetup"³ claims to have access to a lot of data, including data on the mobile phones and they use this data to service customers who never had any access to credit before. Redcarpet offers loans to students who may not have a credit score and these kinds of tech companies have also collaborated with

banks⁴ to lend to students. The loan is repayable in flexible installments.

Lenddo is another tech company, which assesses the borrowers based on digital foot prints. Lenddo's patented score⁵ is stated to be a powerful predictor of an individual's character or 'willingness to pay'. The LenddoScore ranges from 1 to 1000, with higher scores representing a lower propensity to default. Lenddo states that LenddoScore complements traditional underwriting tools, like credit scores, because it relies exclusively on nontraditional data derived from a customer's social data and online behavior. It is also stated that when the LenddoScore is added to a traditional underwriting scorecard, it helps to discriminate between good and bad borrowers.

Another tech company called "Affirm" is stated to have introduced smarter underwriting and anti-fraud technology to improve on the traditional systems, and therefore create financial products that are simple, transparent and fairly-priced. Proper capitalization in the sentences while filling up online applications and time spent in reading the terms and conditions makes a customer more credit worthy for these new age fin techs.

³https://www.redcarpetup.com/credit/loan/

⁴https://economictimes.indiatimes.com/markets/stocks/news/yes-bank-taps-ai-to-directly-offer-small-loans-to-students/articleshow/59483294.cms

⁵https://www.lenddo.com/products.html#creditscore

https://www.forbes.com/sites/zackfriedman/2017/05/05/max-levchin-paypal-affirm/#6b3b06a360d3 Affirm founded by Max Levchin, a co-founder of Paypal.

⁷https://www.nytimes.com/2015/01/19/technology/banking-start-ups-adopt-new-tools-for-lending.html

⁸http://www.ey.com/Publication/vwLUAssets/EY_

_Big_data:_changing_the_way_businesses_operate/%24FILE/EY-Insights-on-GRC-Big-data.pdf

VI. Data Protection

Data is becoming an integral part of the banking and financial landscape. The increased use of big data challenges the traditional frameworks for protecting the privacy of personal information, forcing companies to audit the implementation of their privacy policies to ensure that privacy is being properly maintained8. Though, it is necessary to foster innovation and entrepreneurship, it is also pertinent to protect the personal data of the customers. The Supreme Court of India in the Puttaswamy case observed that the dangers to privacy in an age of information can originate not only from the state but from non-state actors as well. The Court recommended the Union Government to examine and put in place a robust regime for data protection. The Government of India has set up a Committee of Experts9 to study various issues relating to data protection in India, make specific suggestions on principles underlying a data protection bill and draft such a bill. The objective of any data protection framework must be to ensure growth of the digital economy while keeping personal data of citizens secure and protected.

VII. Conclusions

The steps to be taken by banks and financial institutions to know their customers is no longer only a matter of compliance. It is the mantra of doing business and the new normal. The digital revolution in financial services now places the customer and the data about the customer at the forefront of the banking and financial sector. If the traditional financial institutions do not embrace this new reality and adapt to the evolving needs of customers, then those who do so, may replace them.

http://meity.gov.in/writereaddata/files/meity_om_constitution_of_expert_committee_31072017.pdf

Cooperative Banks in India – A SWOT Analysis

Mauli Bodiwala*

Cooperative banks in India have played pivotal role in shaping banking sector in tandem with public sector, private sector and foreign banks. Their existence and sustenance are of prime importance given the mandate of financial inclusion incurred by the Government of India at macro level. Within this background, this article describes growth of cooperative banks, special characteristics of cooperative banks, and their strength, weaknesses, opportunities and threats in the emerging banking policy landscape.

I. Introduction

India is perennially a capital starved economy. Her small entrepreneurs, agriculturists, small traders, women and rural folks and people with less or no collateral are always in need of capital. Originally, Cooperative banks were conceptualized to cater the needs of these segments. Cooperative banks are supposed to serve the largest section of people who are untouched by commercial banks as these banks can't venture to the remote corner of the Country and remain viable. Cooperative banks are envisioned as the original vehicle for financial inclusion. They are expected to encourage saving at the grass root level and make credit available to those unserved by mainstream banking channel.

The Report of the High Powered Committee on Urban Cooperative Banks (UCBs) headed by Shri R. Gandhi, Deputy Governor, Reserve Bank, categorized the evolution of post 1966 cooperative banking segment in three phases. The first one, the growth phase that lasted till 2003 which was marked by tremendous growth in the number of cooperative banks, number of branches, deposits and advances. From 1100 UCBs with deposits and advances of ₹1.67 billion and ₹1.53 billion respectively, in the year 1966, the segment has grown to over 1579 UCBs and 9722 branches with deposits of ₹3.55 trillion and advances of ₹2.24 trillion.

Second phase of the co-operative banks lasted till 2008 and the same was marked with collapse of Madhavpura Mercantile Co-operative Bank, Gujarat. Between April 2004 and March 2008, the number of UCBs declined from 1926 to 1770. In the face of such failure, the Reserve Bank stopped issuing licenses to new banks. It also signed memorandum of understandings (MOUs) with State Governments as well as the Central Government to achieve better coordination of regulatory policies and actions, initiating capacity building

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initiatives and putting in place measures to bring in efficiency through adoption of technology. It introduced the Graded Supervisory Action (GSA) framework in 2003 and classified UCBs into four grades – Grade I, II, III and IV, depending on their financial conditions. This was replaced by Supervisory Action Framework (SAF) in 2012, wherein supervisory action was initiated based on various trigger points such as CRAR, gross NPAs, CD ratio, profitability and concentration of deposits. SAF was reviewed and modified in 2014 by advancing the trigger points for imposing directions and cancellation of license.

In the post-2008 period, the co-operative banks segment has been in consolidation mode. As a result of the new initiatives and sustained efforts by the Reserve Bank, number of financially weak banks in the UCB sector declined. Further, due to consolidation in the sector on account of closure and merger, the number of UCBs came down from 1770 as at end-March 2008 to 1589 as on March 31, 2014 and further to 1579 by end-March 2015. However, the impact of consolidation was a substantial increase in deposits and advances of UCBs which increased from ₹1,398.71 billion and ₹904.44 billion as of end-March 2008 to ₹3,551.34 billion and ₹2,243.08 billion, respectively, as on end-March 2015.

As per the available literature, Ramu (2004) and Selvam (2008) have done their SWOT analysis of cooperative banks. The first study finds that the Government, policy makers, cooperators and supervisory authorities have undertake collective action for review and recognize activities of century old movement and make up strategies to cope up with socio-economic, political and

business environment. Instead of bowing to challenges, UCBs must bounce back and take up challenges and utilize opportunities. The second study has done SWOT analysis of cooperative banks from historical standpoint. As per the finding, commercial banks, during the period of depression following the two World Wars, had suffered considerable loss of public confidence and cooperative banks were considered to be safer institutions.

With the above facts in the background, the present study delves into latest developments in cooperative banking industry in tandem with entry of small finance banks and payment banks, etc.

II. Strengths of Cooperative Banks

Most of the employees of cooperative banks are rooted in ground realities and they are better aware of the business opportunities that are unique to the area, as well as borrowers' credentials. Because of being local and having knowledge of local language, cooperative banks are more trusted by small time depositors. This helps banks to mobilize resources from lower and middle-income groups. Bigger commercial banks struggle to reach these sections of population who are unable to create that environment of trust and support.

Cooperative banks most often have strong connections with specific communities and often draw employees from those communities, which increases the trust of small savers as well as borrowers. This trust is the most important ingredient in financial inclusion. Cooperative banks' cost structure is generally lower than that of commercial banks. Co-operative banks charges/penalties are comparatively low as well as

many times they pass part of benefit to customers.

III. Weaknesses of Cooperative Banks

Despite various advantages and positive developments, cooperative banks continue to face a number of structural problems/ weaknesses. Most important is the size of the cooperative bank. Most of these banks are still single-branch banks, which make them extremely vulnerable to the localized problems and business risks. Such banks, when they have exposure to other equally vulnerable banks, and which is a common phenomenon, the systemic risk rises significantly. The failure of the Madhavpura Mercantile Co-operative Bank (MMCB) in Ahmedabad in 2001 is an example which led to widespread interbank contagion among cooperative banks in Gujarat.

Lack of professionalism is another major weakness. The localized profile of these banks, which keeps cost down, often becomes a drag on professional work ethic. The problem is not restricted to lower levels, the quality of people and processes at the top is also a cause of worry for a sizable number of cooperative banks. Talent acquisition and retention at all levels has been a tough task for cooperative banks as they cannot compete with larger commercial banks as far as salaries are concerned. Because of this, in order to improve the human resources of cooperative banks, free of cost training courses for Directors, Chief Executive Officers (CEOs) and other officials of UCBs is being conducted by the Reserve Bank at regional locations and in local languages for the convenience of banks.

Cooperative banks are very slow in adoptions of latest technologies due to resource constraints *i.e.*, lack of skilled IT

personnel as well as insufficient funds to adopt new technology. In most of the cooperative banks, quality of audit is very poor and many times there is absence of concurrent audit system. This results in weaker internal control system and increase in risk.

Many cooperative banks are closely connected with local politicians and due to the said reason, in many cooperatives banks, majority of loans are becoming NPAs. In majority of cooperative banks, there is low attendance in Annual General Meeting and there is lack of meaningful discussion. Most of the time, re-election is of the same management or their family members. Corporate governance in majority of cooperative banks is weak.

IV. Opportunities for cooperative banks

RBI has taken several policy initiatives for cooperative banks that has enhanced opportunities. Among them are: (i) Introduction of LAF for scheduled UCBs; (ii) Quantum of gold loan under Bullet Repayment Scheme increased from ₹1 lakh to ₹2 lakh for all cooperative banks; (iii) UCBs can act as PAN Service Agent (PSA) in tie-up with authorised agencies; (iv) Permission to invest in shares of Market Infrastructure Companies (MICs) - CCIL, NPCI & SWIFT; (v) CBS enabled UCBs not having own ATMs can issue ATM-cum-Debit Card in tie up with a Sponsor Bank; (vi) Eligible banks can offer all their products and value-added services through ATMs subject to availability of supporting technology; (vii) Banks having CBS and IPV6 can provide Internet Banking with "view only" facility without prior approval from RBI and Transaction Facility with RBI

approval; (viii) CBS enabled banks can participate in Govt. schemes like PMJJBY, PMSBY & APY; (ix) Installation of Off-Site/Mobile ATMs without prior approval of RBI; (x) Authorisation to open one Controlling Office for a cluster of 40 branches without prior approval of RBI; (xi) Banks can grant unsecured loans up to 35% of Total Assets under priority sector subject to certain conditions; (xii) Acceptance of deposits by Scheduled UCBs from other Scheduled / non-Scheduled UCBs; (xiii) Relaxation in raising and repayment of long-term disability and introduction of mandatory disclosure requirements; (xiv) Permission to Salary Earners' Banks for grant of loans against fixed/term deposits for nonmembers; (xv) scheduled UCBs have been permitted to undertake various activities such as opening specialized branches, undertaking intra-day short selling in secondary market transactions in government securities, undertaking ready forward contracts in corporate debt securities, opening currency chests etc.

Cooperative banks that have single-branch and face localized problems, business risks, are unable to cope with technological advancement, should get merged with Urban cooperative bank. UCBs can explore possibilities to consolidate such small banks and can increase their branch network and business mix.

V. Threats/Challenges for Cooperative banks

Co-operative banks will perhaps be the most impacted segment because of churning and evolution of the financial sector. Looking at operating environment, a few strands emerge that can significantly impact the cooperative banking system.

First, banking industry in general is becoming more technology driven. Emergence of banking through hand held devices such as smart phones is an example. Any financial intermediary ill-equipped to leverage technology faces extinction in this scenario.

Second, moving forward, rural banking will be increasingly done by individual representatives of banks with enough backend support from banks. Nationalized banks will increase usage of banking correspondents once their financial viability is ensured. This will enhance competition for cooperative banks.

Third, Cooperative banks will have to face tough competition from Small finance banks and Payment banks. Payment banks sponsored by telecom companies can easily capture remittance business of cooperative banks.

VI. Concluding Observations

Co Operative banks are required to change their working style, become more efficient and transparent in their operations, stay clear of regional and local politics and be prudent in credit management. It is not easy and would require extreme discipline, something that has not been the forte of banking industry in general and cooperative banks in particular. Further, cooperative banks are required to strengthen capital base through internal accretions and reduction in operational cost. There is a need to develop good governance standards in the cooperative banks.

As suggested by Malegam committee, regulators need to tighten the leash on the management of these banks through

measures like setting up Board of Management (BoM) in addition to Board of Directors; election of Board of Directors in accordance with the provisions of the respective Co-operative Societies Acts; putting Board of Management and CEO in complete control of RBI etc. This will help cooperative banks to retain public trust. Cooperative banks have to leverage technology to improve efficiency and bring down cost. Through partnerships and acquisitions, cooperative banks will have to integrate financial services, wallets, payments, shopping services etc. to deliver an enhanced customer experience. Cooperative banks have to implement grievance redressal/complaint handling system.

Cooperative banks have to improve MIS and regulatory reporting system through CBS. These banks should strengthen audit and inspection machinery and improve compliance function. Cooperative banks have to diversify in new territories as well as

into new activities mainly fee based services and for that, they need to concentrate on good quality of human capital, talent acquisition, retention of employees at all levels and should increase pay scale also. There is a need to provide training to staff for capacity building. Cooperative banks should increase use of Banking Correspondents (BC) and focus on financial inclusion. They must try to achieve targets of priority sector lending and weaker section and can take benefit of participating lending certificate by selling the same to private banks who do not have much presence in rural and semi urban areas.

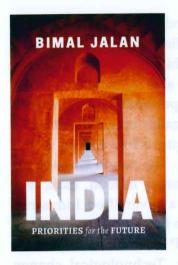
References

Ramu N. (2006). "SWOT Analysis of Urban Cooperative Banking Sector in India, Cooperative Perspective", Vol. 40, No. 4, pp. 28-35, January-March.

Bhasin Hitesh (2017). "SWOT analysis of Banking industry".

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India: Priorities for the Future

By Bimal Jalan, 2017; New Delhi: Penguin Random House, pp. 184, ₹499.

Narayan Chandra Pradhan*

In 2017, India is celebrating her $70^{ ext{th}}$ independence day. Looking back at the year 1947 and while reflecting on the happenings, we can very well visualize the diversity and poverty that India inherited from British Raj. Over time, however, India's democratic system has not only survived but is universally regarded as a role model for other democracies. The Indian economy, which for quite some time - in the 1960s and the 1970s - was in the doldrums also recovered and has shown steady growth since the beginning of the 1980s. The economy's potential for even faster growth is now gaining strength. The view that India will become one of the dominant economies of the world by the middle of the 21st century is gaining traction very first. These are the views provided by Dr. Bimal Jalan, the former Reserve Bank of India Governor (from 1997 to 2003) in this latest book. His formidable analysis of the last thirty-five years (1980-2015) of India's economic journey illuminates the nation's transition from a strictly regulated, slow-growth state

enterprise to one of the fastest-growing economies in the world. In these years, Dr. Jalan was at the helm of affairs in managing the Indian economy in various capacities.

The book by Dr. Jalan is divided into two sections: (i) 'India Then' (1980-2000), and (ii) 'India Now' (2000-2015). The very first chapter of the book is an edited version of the author's 1991 book India's Economic Crisis: The Way Ahead. This chapter is a prologue to the crisis period and unfolds the scenario for discussion on crisis and thereafter. India's Plans failed to develop a viable strategy for the management of balance of payments. The last chapter of the book in second section highlights some important priorities for the future in the areas of politics and governance in the light of recent developments in the economy. The objective of the whole book is to put the priorities together in a form that makes it feasible to implement them within a relatively short period of time - hopefully, before the next General Election in 2019.

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The Punch line

Dr. Jalan posits quite early in the book that India has an over-abundance of plans and schemes. But what keeps the nation from attaining its goal? High potential is that all of them remain on paper. Nothing about its governance framework - the electoral system, the working of Parliament, Centre-State relations, the 'steel frame' of civil services, the public delivery system — works as it should. The growing divide between politics and economics, where a government's performance on growth or poverty alleviation matters little to its winning elections, is another big problem. He argues for deep-rooted reforms to fix the broken workings of these institutions.

India's history since independence, as indeed that of other developing countries across the world, highlights the importance of politics to outcomes. In this context, an additional factor that needs to be kept in view is that the overall political situation changes from time to time, for better or worse, which in turn, affects the economy. Interestingly, Dr. Jalan also has a political advice to push forward India's growth story. "We need a stable government to achieve the desired economic results. And what comes in between, in a big way, is the current antidefection laws, which provide incentives for the fragmentation of political parties." His suggestion: Amend the anti-defection law to ensure that elected representatives aren't able to switch sides without seeking reelection! Dr. Jalan, just as his book's name suggests, truly and clearly sets the priorities for India's future.

The post-Independence period in India was characterized by several external and domestic shocks, such as war, drought, oil price increases and political upheaval. In defence of the earlier Indian strategy, it can be argued that while the growth rate was slower, India was able to maintain a stable and democratic political system with a mixed economy against very difficult odds. This was a unique achievement in the developing world. The nation was able to achieve self-sufficiency in food. India was able to develop a diversified industrial structure and raise its savings rate, from 10 per cent of the GDP in 1950-51 to 21 per cent in the mid-1980s. Technological change made the accumulation of skills a more important factor in determining comparative advantage than capital endowments. The sharp decline in costs of communication and transport made geography and proximity to markets less relevant in influencing the choice of location for manufacturing.

The author points out that the most remarkable feature of the so-called 'new economy' in the twenty-first century is the role of the services sector in generating growth in income and employment. Services were believed to be mainly non-tradable activities with slow productivity growth and low employment potential. In developing countries, the conventional view of the growth of the services sector was even worse. It was seen to divert scarce resources away from the production of goods and contribute to the accentuation of income inequalities.

India's Tryst with Destiny

There has been a fair amount of debate in the country on the implications of the new directions in India's economic policy. There is also broad agreement that the

government's fiscal deficits should be reduced, exports should be increased, and that more should be done for improving the health and education of the poor. Concern has also been expressed on certain political and social implications of the new policies, particularly about whether they will make the country more amenable to external pressure and hurt the development of the country's domestic resources. These issues are important, and deserve to be fully considered in the evolution of India's economic policy in the twenty first century. Most of India's public resources are currently dissipated in the payment of salaries or for interest on past debt, with little or no resources available for the expansion of public or publicly supported services in vital sectors.

The process and procedures for conducting business in government and public service organizations, over time, have become nonfunctional. There are multiplicity of departments involved in the simplest of decisions, and administrative rules generally concentrate on the process rather than the results. There is very little decentralization of decision making powers, particularly financial powers. Thus, while, local authorities have been given significant authority in some states for implementing national programs, their financial authority is limited.

Any Solutions?

The author has critical about the tendency of recent governments to pass new laws without bothering about the niceties of a full parliamentary debate and the unruly behavior which disrupts the House. He suggests a legislative cap on the number of adjournments permitted during a session.

The book is critical of the declining administrative capacity of the bureaucracy to implement the grand plans of the Government. It thus prescribes greater autonomy for the civil services from ministerial whims. But it also suggests doing away with the special legal protection to civil servants under Article 311 of the Constitution and the Official Secrets Act.

The delivery of public services could be made vastly more efficient if the Government delegated the job to private agencies. Overall, the book cuts a wide range of issues across economics, politics and public administration. But then, Dr. Jalan has been in a unique position to observe the workings of multiple institutions by virtue of his varied stints in policymaking roles within the Government and outside of it. His prescriptions are quite specific, as a result. On the criminalisation of politics, the author has mentioned: "An urgent political reform is to reduce the attractiveness of politics as a career of choice for persons with criminal records. There is a natural reluctance on the part of investigative agencies and ministries to speed up investigations and prosecute persons who are leaders of political parties and/or members of the Cabinet"!

Dr. Jalan is at pains to lean towards neither the so-called Leftist nor Right-wing ideologies in his search for solutions to reform India's political and governance structure. He takes a similar middle road in eschewing any political affiliations while diagnosing problems. Both the NPA and UPA led regimes attract equally trenchant criticism from him for systematically undermining the working of Parliament and the lawmaking process. The NDA, however, manages to win oblique praise in the latter

chapters for its success with rooting out corruption in the upper echelons of government.

The Lacuna

One of the uncomfortable reading of this book is its tendency to swap back and forth in time, making it a disorienting read at times. Some of the sections could also have overlaps with the author's five other books on the economy and governance. That some of the content for this book is drawn from the author's edited speeches at various global forums, delivered over an extended period from 1991 to 2007, also detracts from its flow. In reading the first few chapters, for instance,

the reader has to bear in mind that some of the data points cited as well as the assertions made relate to the nineties, which is why they seem at odds with the present economic context.

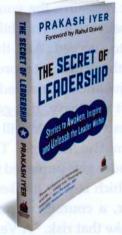
Dr. Jalan resolves this problem towards the end, extracting prescriptions from and across the book into a final chapter. For those impatient folk who believe they are well-acquainted with the myriad problems plaguing India, and are keen to get to the solutions part, starting with the last chapter of this book may be a good idea. For others, this short read offers a good lesson on India's political economy over the last 35 years from 1980 to 2015.

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The Secret of Leadership

By Prakash Iyer, 2011; New Delhi: Penguin Books, pp. 249, ₹172.

Mukesh Kumar*

The Secret of Leadership: Stories to Awaken, Inspire and Unleash the Leader Within is a simple and easy to understand book on leadership. The book is divided into four sections, viz., (i) the Leader Within, (ii) the Leader's Mindset, (iii) the Leader's Way, and (iv) Leading Teams. The author believes that every single person is the leader and through this book, he gives simple and powerful examples from lessons on leadership. The book is filled with stories that illustrate important leadership lessons. The author feels that people can learn something valuable from something as simple as a tea bag. Just like any tea bag, a leader's true value and strength is understood only when he or she is dipped in hot water. The book has interesting examples such as the comparison between footballers and people working in the corporate world. It has been proven on the football field that players who use both their feet achieve much more than those who use only one. Similarly, in the corporate environment, a person is more likely to succeed if he has two skill sets instead of one.

Lessons from Animal World

The author gives lessons from the animal world and tells the tale of a bunch of frogs who decide to climb up a television tower. This example is used to emphasize on the importance of self-belief and learning how not to let cynics affect your confidence. Another learning story is that of a mother giraffe who kicks her newborn baby. Though it may sound shocking, this technique helps the young animal learn how to stand quickly, and understand that the world is a tough place. The story of how an elephant that is chained and held captive on a wooden peg from its infancy teaches lessons to come out of self-limiting belief. The elephant is chained by its limitations. Likewise, if we continue to be fed on 'Don't do that!' or 'You can't do it, we become slaves of our own self-limiting beliefs. We need to come out of our limitations and fears and break from our self-limiting belief.

Importance of Discipline

Discipline is key to success as can be learnt from the story of the gold medal winning

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gymnast who, when asked for the secret of her success, simply said, "I practiced when I felt like it. And when I didn't feel like it." Most of us are halfway there on the road to success. We do things when we feel like it. The challenge is to push self and stay committed, even when we don't feel like it. The story of Gillian is about the child with learning disorder. A psychologist advised her mother to observe what she liked best. Observing the little girl dangling her feet, she was trained in dancing to become the greatest dancer. The author points out that each one ought to search for special talents and achieve greatness by making disciplined efforts.

The Role of Positive Thoughts

When you are unhappy with the people and circumstances in your life, may be the problem is not with them, rather it is with you. Change your thought process and the complete outlook will change. The story of batsman Ricky Ponting is about focusing on the opportunities and ignoring the obstacles. The batsman described his secret of hitting fours and sixes that he doesn't see the fielders, he only sees the gaps. Therefore change of thoughts is shift from looking at the obstacles in life to looking for the opportunities. Never Give Up is another story of Thomas Alva Edison who never gave up to experiment to invent the filament light bulb. Failure holds valuable lessons if only we are willing to learn. Start by doing what's necessary; then do what's possible; and suddenly you will be doing the impossible.

Developing Talent Pipeline

Betting on unripe fruit is the hallmark of great leaders. It gives young talent a chance

to raise their game. It reassures the young person that someone believes in their ability and is backing them to succeed. And they then do all they can, rather a little bit more to make sure the faith is justified. For a leader, betting on unripe fruit isn't easy. If it goes wrong, as it sometimes will, people will be quick to pounce on the failure. The interesting bit is, no leader gets punished for not taking the risk. Which is why it takes a special kind of leader, a courageous one, who is motivated to take that risk. "A Very, Very Special Lesson from Laxman" speaks of how V.V.S. Laxman proved his worth as a successful captain able to bat with tailenders and delivering great results. The author points out that no leader should try to be a hero all by himself, instead trust and inspire ordinary teammates to achieve success.

The Success Mantra

The author believes that if you want to change the results in your life, and if you want to alter the outcomes, start by changing your mindset, your thoughts and your beliefs. In our heads, we all have two little voices. One that's positive, optimistic, bullish, let's call it the "I can!" voice. And the other is negative, pessimistic, bearish, the "I can't" voice. One says: "Come on, slog, and go for it." And the other says: "You unlucky sod, you won't make it, so why even bother trying?" Whether "I can" wins in your mind or "I can't" depends on which thought you are feeding. The one you feed, grows. When Nelson Mandela forgave and invited his former jailors to attend his presidential inauguration on 10 May 1984, he set an example of forgiving and moving ahead towards achieving greater goals. Carrying a grudge in life only makes you overweight

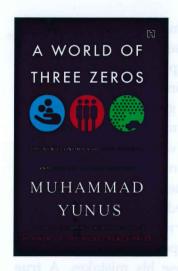
and in turn slows down your progress. the author points out the need for rules of success: i) Decide what you want, ii) Make sure your goals are SMART (Specific, Measurable, Actionable, Realistic, Timebound), iii) Write them down, iv) Commit to doing whatever it takes, and v) Take action.

Empathy

Being empathetic is key to success in. the author points out how people can be divided into the 99% of people who push the door open and move on and the 1% of people who open the door and hold it open to allow next person to walk through. Those leaders who open the door and let others in, are true leaders and go on to build their teams. Upar se Sirf Gap hi Gap Nazar Aata Hai!" is a statement made by the legendary Indian hockey player Viren Rasquinha who told his coach that he sees only gaps from the galleries upstairs. On the actual field of play the reality is very different. Like in a game of hockey, leaders ought to relate with other people, since the view from the top is often

distorted. In yet another story, the author recalls how he observed trucks driving on Mumbai-Pune Expressway, disregarding those driving behind. Good leaders know that they need good headlights and functioning tail lamps to prevent disasters. "It's a poor leader who is solely focused on his own bosses, constantly looking up, and forgetting about the people he leads. In the final story entitled "The Pencil and the Eraser," the author recalls the story in which the eraser tells the pencil to go on writing as he is there to erase his mistakes. A true leader should never be afraid to make a mistake as there would be erasers around to set things right.

Overall, the book gives lessons on resilience, discipline, passion, and commitment. The author has given interesting stories with meaningful lesson one after the other to keeps the readers engaged. The book is for the ones who like light reading and the ones looking for serious stuff, formulas and equations, may get disappointed. The book is an interesting read and is difficult to leave it before concluding.



A World of Three Zeros

By Muhammad Yunus, 2017; Hachette India, Hard Cover 352 pages, Rs.431.

Ramesh Golait*

To arrest the recent global financial crisis, the international and domestic political and economic forums have dealt with many issues, particularly, economic growth, poverty, climate changes, etc. Prof. Muhammad Yunus, a Nobel Laureate from Bangladesh, who made capital available to the poor, especially, to the women in Bangladesh (over US\$ 2.5 billion a year to 9 million) on the basis of trust, has recently authored a book titled 'A World of Three Zeros: The New Economics of Zero Poverty, Zero Unemployment, and Zero Net Carbon Emissions'. Prof. Yunus has offered his vision of an emerging economic system that can save both the mankind and the planet earth.

This book has described the theories of microcredit, and documents how these financial habits are being put into practice by entrepreneurs who run successful businesses that also alleviate poverty, clean up pollution, and improve health standards. The book is divided into four parts: (i) Challenges - highlighting the failure of

capitalism and creating a new civilization, the counter economics of social business; (ii) Three Zeros - zero poverty that brings an end to income inequality, zero unemployment, and zero carbon emission; (iii) Mega powers for transforming the world's youth, technology, good governance, and human rights; and (iv) fourth part offers stepping stone to the future.

I. Capitalism and Inequality

The author has described how capitalism breeds inequality. Of course, capitalism has stimulates innovation and economic growth. But it's time to admit that the neoclassical vision of capitalism offers no solution to the economic problems we face. It has produced amazing technological advances and huge accumulations of wealth but at the cost of creating massive inequality and the terrible human problems that inequality fosters. The rise of such inequality has led to social unrest, political polarisation and growing tensions among groups. The

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A World of Three Zeros Book Review

author feels the need to abandon our unquestioning faith in the power of personal-profit-centred markets to solve all problems and confess that the problems of inequality are not going to be solved by the natural workings of the economy as it is currently structured.

Rather these problems may become more acute and very fast. In that context, charity and welfare programs are well intentioned efforts to lessen the damage done by the capitalist system. However, a real solution requires a change in the system itself. The author advocates redesign the economic engine to bridge the gap of inequality. Prof. Yunus has engaged in redesigning the economic engine with three basic elements: (i) need to embrace the concept of social business; (ii) Need to replace the assumption that human beings are job seekers; and (iii) need to redesign the entire financial system and trying out the new model in the real world.

While explaining the new civilisation, the counter economics of social business, Prof. Yunus has cited the Paris agreement (Paris climate agreement is an agreement within the United Nations Framework Convention on Climate Change dealing with greenhouse gas emissions mitigation, adaptation and finance starting in the year 2020), as victory for the people, led by the committed activities who never gave up campaigning for common cause. The author emphasised the need to create the new economic system that will unlock their powers and allow them to relaize the potential.

II. Three Zeros

(i) Zero Poverty

According to the World Bank, there has been marked progress on reducing poverty over the past decades. The world attained the first Millennium Development Goal (MDG) target to cut the 1990 poverty rate to half by 2015, five years ahead of schedule, in 2010. Despite the progress made in reducing poverty, the number of people living in extreme poverty globally remains unacceptably high. And given global growth forecasts, poverty reduction may not be fast enough to reach the target of ending extreme poverty by 2030. According to the_most recent estimates, in 2013, 10.7 percent of the world's population lived on less than US\$1.90 a day, compared to 12.4 percent in 2012. That's down from 35 percent in 1990. For too long, we have tolerated the persistence of poverty. Author believes that this is a failure of our economic system. Since the economic system was created by human beings, better to replace that economic system with a new one that more accurately reflects human needs and desires. The central problem with capitalism is that the system recognises only one goal i.e., the selfish pursuit of individual profit. To come out with this disease, Prof. Yunus offers initiatives of social business¹.

The author is confident that the rising generation has the power to ensure the elimination of poverty from this planet. It is up to the policy makers to decide that the world we choose to live in will not contain the scourge of poverty and then to create the new economic system that will make the world we choose possible.

¹This concept has got an international attention in 2006, when the Grameen Bank launched a joint venture with Danone, the multinational food products company from France, which offers advantages that are available neither to profit maximisation companies nor to traditional charities.

ii) Zero Unemployment

The problem of unemployment is not created by the unemployed people themselves. It is created by grossly flawed conceptual framework, which has drilled in to our heads that people are born to work for a few fortunate capitalists. The author also rejects the myth that unemployment problem is the idea that some people are incapable of producing economic values and they are fit only to receive charity. He advocates to change the economic system which starts with challenging the orthodox that currently controls it.

iii) Zero Net Carbon

Research Studies highlighted that humans must reduce net greenhouse gases emissions to zero well before 2040 in order to ensure global warming does not go above 1.5 degrees Celsius by the end of the century. Under the Paris Agreement on climate change, the world committed to prevent global warming from going above 2 degree Celsius but also attempt to restrict it to as close as 1.5 Celsius as possible amid mounting evidence that dangerous effects could kick in sooner than previously thought. The Author, in this section illustrates a growing number of social businesses around the world dedicated specifically to selling goods and services that address environmental problems. Advancing towards the goal of zero net carbon is a giant task that requires contributions from all the people and all kinds of organisations. He believes that a new economic framework that makes ample room for business dedicated to social goals is an essential pre-requisite to achieve this goal.

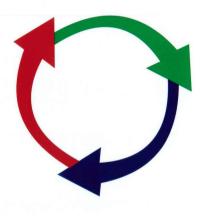
The author believes that we live with philosophical paradox. Many economic

theorists, journalists, pundits continue to proclaim that free market capitalism is a perfect mechanism to solve of humanity problems. Society tactically confesses the shortcoming of the free market and channels billions of dollars every year towards remedial efforts. Prof. Yunus disagrees with the view and claims that these efforts are largely ineffective and he calls for a new way of thinking to tackle these issues. He has pointed out that low-income people in the advanced economies have been suffering from the problems as the poor faced in poorer nations in terms of lack of institutional services, health care, inadequate education, substandard housing, and so forth.

III. Summing UP

Author contends that capitalism is not the answer to inequality, unemployment, and environmental damage that are rampant worldwide. He believes that it's time to abandon capitalism and find an alternative economic system, one grounded not in self-interest but in generosity. The author has rightly described the new civilisation emerging from the economic experiments. He explains how global companies have been involved with the new economic model through their own social action groups and pointing out legal and regulatory changes needed to jumpstart the next wave of social driven innovations.

At the end, Prof Yunus' economic reforms with humane face proposals makes the book a stimulating one for readers. He believes the solutions to many of our recent pressing problems including hunger, poverty and disease that have plagued humankind since the dawn of history are within reach. Most of the solutions could be accelerated through the creation of a new economic order that includes the powerful tool of social business.



Gist of Important Circulars



Gist of Important Circulars

Financial Literacy by FLCs (Financial Literacy Centers) and Rural Branches - Policy Review

The Reserve Bank has revised the policy on conduct of camps by Financial Literacy Centers (FLCs) and rural branches of the banks. Financial Literacy Centers (FLCs) are advised to conduct special camps for a period of one year beginning April 1, 2017 on "Going digital" through Unified Payment Interface (UPI) and *99# (USSD)". Besides the special camps on going digital, FLCs will continue to conduct the tailored camps for the different target groups. Rural branches of banks are henceforth required to conduct only one camp per month (on the Third Friday of each month after branch hours). This camp will cover all the messages that are part of the Financial Awareness Messages (FAME) booklet and the two digital platforms UPI and *99# (USSD).

FLCs and rural branches of banks are eligible for funding support for the financial literacy camps to the extent of 60 per cent of the expenditure of the camp subject to a maximum of ₹15,000/-per camp.

FIDD.FLC.BC.No.22/12.01.018/2016-17 dated March 02, 2017

Financial Literacy Week

The Reserve Bank has decided to observe the week from June 5 to June 9, 2017 as Financial Literacy Week across the country. The literacy week will focus on four broad themes, namely, KYC, Exercising Credit Discipline, Grievance Redressal and Going Digital (UPI and *99#). The five messages will be communicated to the common man based on the above broad themes.

Banks to advise their Financial Literacy Centers to conduct special camps on each of the five days in backward/unbanked areas. All bank branches in the country may display posters on the five messages in the local language inside the branch premises for at least six months in the branch premises even after the Financial Literacy week is over. Banks may display one message each day on the home page of their websites in English and Hindi and also display one message each day on the ATM screens across the country in English and the local languages. All Rural branches may conduct one camp on any of the five days of the week after branch hours.

FIDD.FLC.BC.No.27/12.01.018/2016-17 dated April 13, 2017

Guidelines on Merchant Acquisition for Card Transactions

In order to encourage digital channels for financial transactions in cooperative banks, the Reserve Bank has decided that all cooperative banks, not intending to act as Point of Sale (POS) acquiring bank are permitted to deploy third party POS terminals without prior approval of Reserve Bank subject to the bank fulfilling the prescribed criteria. The co-operative banks intending to act as POS acquiring bank are permitted to deploy their own POS terminals with prior approval of the Reserve Bank subject to the bank fulfilling the prescribed criteria.

The banks shall comply with instructions and guidelines on Merchant Acquisition for card transactions and POS issued by Department of Payment and Settlement Systems, RBI from time to time.

DCBR.RAD (PCB/RCB) Cir.No.4/7.12.001/2016-17 dated April 28, 2017

Rationalisation of Branch Authorisation Policy - Revision of Guidelines

Taking into account the suggestions/feedback received from the Government of India and other stakeholders, the Reserve Bank issued final guidelines on 'Banking Outlets'.

A 'Banking Outlet' for a domestic scheduled commercial bank (DSCB), a small finance bank (SFB) and a payment bank (PB) is a fixed point service delivery unit, manned by either bank's staff or its Business Correspondent where services of acceptance of deposits, encashment of cheques/cash withdrawal or lending of money are provided for a minimum of 4 hours per day for at least five days a week.

A banking outlet which does not provide delivery of service for a minimum of 4 hours per day and for at least 5 days a week will be considered a 'Part-time Banking Outlet'.

An 'Unbanked Rural Centre' (URC) is a rural (Tier 5 and 6) centre that does not have a CBS-enabled 'Banking Outlet' of a scheduled commercial bank, a small finance bank, a payment bank or a regional rural Bank nor a branch of local area bank or licensed co-operative bank for carrying out customer based banking transactions.

DBR.No.BAPD.BC.69/22.01.001/2016-17 dated May 18, 2017

Regulatory requirements for issue of Pre-paid Payment Instruments by Cooperative Banks

The Reserve Bank permitted all licensed co-operative banks having their own Automated Teller Machine (ATM) network to issue semi-closed Pre-Paid Payment Instruments (PPIs), provided there were no restrictions on acceptance or repayment of deposits. This was subject to the compliance with eligibility criteria and other guidelines as prescribed by the Department of Payment and Settlement Systems (DPSS) of the Reserve Bank from time to time.

Further, co-operative banks satisfying the above criteria, have also been permitted to issue Open System PPIs. The banks should comply with the additional regulatory requirements for this purpose.

DCBR.CO.LS.(PCB/RCB).Cir.No.5/07.01.000/2016-17 dated May 25, 2017

Continuation of Interest Subvention Scheme for short-term crop loans on interim basis during the year 2017-18- regarding

Refer to RBI Circular FIDD.CO.FSD.BC.No 9/05.02.001/2016-17 dated August 4, 2016 on Interest Subvention Scheme for Short-term Crop Loans 2016-17 wherein RBI had advised the continuation and implementation of the Interest Subvention Scheme for the year 2016-17. As regards the Scheme for the year 2017-18, Ministry of Agriculture & Farmers Welfare, Government of India (GoI) has informed that they have initiated the process for continuation of the Interest Subvention Scheme.

In view of the above, it has been decided by GoI, as an interim measure, to implement the Interest Subvention Scheme for the year 2017-18 till further instructions are received, on the terms and conditions approved for the Scheme for 2016-17, as contained in the above cited circular. All banks are, therefore, advised to take note and implement the Interest Subvention Scheme for 2017-18 accordingly.

FIDD.CO.FSD.BC.No.29/05.02.001/2016-17 dated May 25, 2017



Aligning roadmap for unbanked villages having population more than 5000 with revised guidelines on Branch Authorisation Policy

The Reserve Bank advised State Level Banker's Committee (SLBCs) Convenor banks to review and identify the unbanked rural centers (URCs) in villages with population above 5000, in light of the revised guidelines on rationalisation of branch authorisation policy and ensure that such unbanked rural centres in villages with population above 5000, if any, are banked forthwith by opening of Core Banking Solution(CBS) enabled banking outlet. A confirmation stating that all unbanked rural centres in villages with population above 5000 have been banked, may be furnished to the respective Regional Office of Financial Inclusion and Development Department of the Reserve Bank, latest by December 31, 2017.

FIDD.CO.LBS.BC.No 31/02.01.001/2016-17 dated June 8, 2017



Limits on balances in customer accounts with payments banks - sweep out arrangements with other banks

Based on the comments/proposals received from the Payments Banks (PBs), and keeping in view the financial inclusion objective of the Payments Bank model, the Reserve Bank advised the PBs to follow the instructions as mentioned below:

• Payments Banks are permitted to act as Business Correspondents (BCs) of other banks. Under the BC arrangement and with prior specific or general consent of the customer, PB may effect the transfer of funds deposited by a customer into own account with another eligible bank, so that the balance in the customer's account with the PB does not exceed ₹100,000 or any such lower amount as specified by the customer.

- At any time, PB shall not have rights to operate or have real-time access to the funds available in the account of the customer at any other bank, including the transferee bank. However, as a BC of a bank, PBs may facilitate withdrawals and transfers by the customer from her account with the bank of which it is the BC.
- A PB shall neither arrange nor avail of intraday funding facilities for its customers, based on the balances available in the customer's account with any other bank, or otherwise.

DBR.NBD.No.77/16.13.218/2016-17 dated June 29, 2017

Campus Capsule

Campus Capsule

During the period January-June 2017, the College has conducted the following important training programmes, conferences and seminars. The brief of the same are given below.

I. Conferences and Seminars

National Conference on Agrifinance 2030

Reviving growth in agriculture in the longer term and on a sustainable basis is a key priority for the country. In view of the changes that are taking place, viz., rise in disposable income, change in dietary pattern etc., agriculture and agribusiness will undergo a paradigm shift and so will agrifinance. To explore the space the financial institutions, would and should occupy in the changed landscape for financing agriculture and agribusiness in futuristic terms, i.e., by 2030 and given the significance of the subject as also being a leading institution in dealing with training and capacity building of banking personnel on agricultural finance, the College conducted a National Conference titled "Future of Agri-finance 2030" during April 24-25, 2017.

The Conference was inaugurated by Dr. Deepak Mohanty, Executive Director, RBI. About 74 delegates including the priority sector heads/agriculture of both public and private commercial banks, select Chairmen of Regional Rural Banks, academicians, representatives from institutions/agencies/think-tanks involved in the field of agriculture and senior officers

from RBI participated in the conference. Dr. Mohanty delivered the inaugural address and the keynote address was delivered by Prof. Vijay Paul Sharma, Chairman, Commission of Agricultural Costs and prices (CACP), Government of India.

Conference on Credit flow to Priority Sector - Policy and Implementation

The College has organized the 13th annual two-day Conference on Credit flow to Priority Sector - Policy and Implementation during June 27-28, 2017. The objective of the conference was to provide a platform for deliberating on issues related to credit flow to priority sector and coordination issues under the lead bank fora. The Conference focused on achievements of banks under revised priority sector lending targets, challenges in meeting priority sector lending targets, pricing of PSLC certificates, innovations in agri and MSME finance and coordination issues under lead bank fora. About 50 delegates, including heads of priority sector divisions of commercial banks, conveners of SLBCs, select Chairmen of RRBs and officials from RBI attended the conference. The conference was inaugurated by Shri S. S. Mundra, Deputy Governor, RBI. In his speech, Shri Mundra emphasized upon the need for banks to look at priority sector lending as a business opportunity and not as a compliance issue and the need for coordination amongst relevant verticals dealing with priority sector segments, integrated approach and proper strategy for lending to priority sector.

Seminar on Agri Export-Import Financing

The College conducted a seminar on Agri Export-Import Financing during March 6-7, 2017. The seminar was inaugurated by Shri H. N. Panda, General Manager, CAB and keynote address was delivered by Dr. Sudhir Kumar Goel, IAS and former Additional Chief Secretary to the Government of Maharashtra. The seminar had three modules viz., (i) Export Finance Module with 5 sessions on various export financial products and schemes, (ii) Export Promotion module -with 6 sessions on promotional efforts of various agencies to boost exports, and (iii) Export Logistics Module with 2 sessions on new dimensions of agricultural marketing in India, quality control, food safety standards, Global GAP, HACCP certification, etc.

II. Training Programmes

Foundation Course on Agricultural Banking (FCAB)

The College introduced its new flagship programme, the Foundation Course on Agricultural Banking (FCAB) during January 9-28, 2017, as a comprehensive, thoughtfully designed, long duration programme in tune with the current and emerging trends in agriculture, agribusiness and agrifinance. The basic objective of the program is to look at agriculture as an enterprise and looking at agriculture, agribusiness and agrifinance not in silos but in sync as a continuum.

The FCAB was inaugurated by Smt. Surekha Marandi, Executive Director, RBI on January 9, 2017. Shri Umesh Chandra Sarangi, retired IAS officer delivered delivered keynote address. A total of 42 bank officers including Reserve Bank participated in the training programme. Leading speakers during the programme were Shri Deepak Mohanty, Executive Director, RBI; Prof. Vijay Paul Sharma, Professor, IIM Ahmedabad and Chairman, Commission for Agricultural Costs and Prices (CACP), Govt. of India; Shri Sivakumar, Head, Agribusiness, ITC Limited.

Exposure programme in SHG, JLG and Farmers Club for Centre for International Cooperation and Training in Agricultural Banking (CICTAB)

The exposure programme was conducted by CAB in collaboration with CICTAB from January 30 to February 3, 2017. There were 14 participants from Nepal, Bangladesh and India. The program started with the introduction of basic models and bank linkage programme of SHG, JLG and Farmers Clubs in India, and also gave adequate exposure to the participants on SHGs through field visits and face-to-face interaction with SHG groups and members of Farmers Producer Companies. The programme concluded with a visit to Krishi Vigyan Kendra (KVK), Baramati.

Programme on Innovative Agriculture and Bank Financing

The College conducted two programmes on innovative agriculture and bank financing during February 6-8, 2017 and May 2-4, 2017. The basic objective of the programme was to enable bankers to understand the innovations in agriculture. A few such sessions include precision farming, agriexports and export finance, urban and periurban agriculture, hydroponics, aquaponics, horticulture and floriculture.

Advanced Course on Agricultural Banking (ACAB)

A six-day comprehensive training programme 'Advanced Course on Agricultural Banking' (ACAB) was held in the College during February 13-18, 2017. The programme was designed with the objective of re-orienting the mind-set of bank officials dealing with agri-credit, to view agriculture as a hi-tech, high value business proposition having huge hidden potential for financing. Sixteen officers dealing with agri-finance from commercial banks including Regional Rural Banks participated in the programme. The participants were provided inputs on the latest developments in agriculture, techniques for appraisal of hi-tech projects in emerging supply and value chains under farm and allied sectors, post-harvest management, agri-marketing and ecommerce, contract farming, agri-export and documentation, supervision, recovery aspects and NPA management.

State Focused Programme on Financing Agriculture in Bihar (In collaboration with ROs of RBI & NABARD)

The College has organized a State Focused Programme on Financing Agriculture in Bihar from February 15-17, 2017, at Reserve Bank of India, Patna. The programme was organized to cater to the capacity building of banking personnel in Bihar keeping in view the specific needs of the state for enhancing the credit flow to agriculture and allied sectors and to generate new investment and job opportunities for stimulating the rural economy.

Programme on Agri-financing for Rural Branch Managers

A one week programme on Agri-financing for Rural Branch Managers was conducted at

the College during March 14-18, 2017. The programme was aimed at addressing the emerging challenges in making the rural branches profit centers and reorient their business strategies to meet the challenges of inclusive growth and ensure profitability. Besides the regular sessions on project financing to agriculture and allied sector like sustainable dairy farming, poultry, greenhouse cultivation etc., the participants benefitted from the special sessions organized to develop appreciation of HR issues in rural branches, including understanding the unique needs of a rural customer and expectations from rural branch managers.

Customized Programme for Different Banks

A customized programme on Agri financing and Business Development for the officers of Saurashtra Gramin Bank, Rajkot, Gujarat was conducted from May 15-19, 2017 at Junagadh, Gujarat. There were 32 officers attended the programme. A customized programme on Agri Financing was conducted for 30 officers of Bank of Maharashtra during June 12-16, 2017. The College also conducted a customized programme in Bhubaneswar for 31 officers of Odisha State Cooperative Bank (OSCB) and District Central Co-operative Banks (DCCB) in Odisha.

Programme on Governance and Management for Directors of UCBs

The primary objective of the programme was to create awareness about RBI Policy initiatives and sensitize the directors about corporate governance issues. A total of 33 directors from 14 different UCBs with different professional background attended the programme.

III. Other Events

International Archives Day

The Reserve Bank of India Archives celebrated International Archives Day on June 9, 2017. On this occasion a one day workshop on Archival and Records Management Policy (ARMP) for head of HR/Administration Division of Central Office Departments and Regional Offices of RBI was held. The programme was attended by 31 participants. The Inaugural address was given by Shri A. K. Sarangi, CGM-in-Charge, HRMD, CO, Mumbai. Shri V. Srinivas, IAS, Joint Secretary to the Government of India gave the keynote address on the topic 'Archiving the History of RBI'. Some extracts from the speech is reproduced below.

The speech identified 15 landmark events in RBI's 75 years of history: (1) RBI – Shaping of History, (2) Resignation of Sir Osborne Smith, RBI's first Governor, (3) Sir C. D. Deshmukh – RBI's young Governor, (4) India at the Bretton Woods, (5) Nationalisation of RBI, (6) First Rupee Devaluation, (7) India's First Bank Run – The Palai Central Bank, (8) Second Rupee Devaluation in 1966, (9) Bank Nationalisation in 1969, (10) Setting of

Regional Rural banks in 1975, (11) IMF Program during 1981-83, (12) IMF Program in 1991, (13) Asian Currency Crisis in 1997, (14) RBI during 2000-2007, and (15) Financial Crisis during 2008 onwards.

Coordination Committee on Training in Hindi (CCTH)

The Coordination Committee on Training in Hindi of which CAB Principal, is the exofficio Chairman, has been set up by RBI on the suggestion of Parliamentary Committee on Official Language with a view to ensuring greater use of Hindi by banks in their training activities. During the period January-June 2017, two meetings of the CCTH were held.

CAB has brought out a publication on CCTH named as 'History of CCTH', which includes the origin, evolution and activities of CCTH, covering the journey from first to 100^{th} meeting. Initially it has been released in soft copy in 103^{rd} CCTH meeting. It will also be printed in hard copy and circulated among all member banks in due course.

All India Rajbhasha Conference

CAB hosted the All India Rajbhasha Conference during April 7-8, 2017. About 110 Rajbhasha Officers attended the conference.



वित्तीय क्षेत्र में क्षमता निर्माण एवं विकास

कृषि बैंकिंग महाविद्यालय (सीएबी) की स्थापना भारतीय रिज़र्व बैंक द्वारा 1969 में ग्रामीण एवं सहकारिता बैंकिंग में प्रशिक्षण प्रदान करने के लिए की गयी थी । तत्पश्चात, भारतीय वित्तीय क्षेत्र की बदलती आवश्यकताओं को पहचानकर, महाविद्यालय ने सूचना प्रौद्योगिकी, मानव संसाधन प्रबंधन, साधारण बैंकिंग और गैर-बैंकिंग वित्तीय सेवाओं जैसे क्षेत्रों में प्रशिक्षण प्रदान करने के लिए अपना दायरा बढ़ाया । महाविद्यालय कई अंतर्राष्ट्रीय संस्थाओं जैसे एफएओ, अपराका, सिकटैब, यूएनडीपी एवं कॉमनवेल्थ सेक्रेटेरिएट के सहयोग से भी प्रशिक्षण कार्यक्रम आयोजित करता आ रहा है । महाविद्यालय ने विकास बैंकिंग में उत्कृष्टता के अंतर्राष्ट्रीय केंद्र के रूप में ख्याति प्राप्त की है । भारतीय वित्तीय क्षेत्र की वर्तमान चुनौतियों के मद्देनज़र महाविद्यालय ने ग्रामीण विकास एवं सहकारी बैंकिंग के अलावा महाविद्यालय, विभिन्न संस्थोओं (राष्ट्रीय व अंतर्राष्ट्रीय) के लिए उनकी विशिष्ट आवश्यकता के अनुसार भी प्रशिक्षण कार्यक्रम आयोजित करता है । महाविद्यालय, समय की मांग के अनुसार वित्तीय क्षेत्र में क्षमता निर्माण एवं विकास के लिए प्रतिबद्ध है ।

Building & Enhancing Capabilities in the Financial Sector

College of Agricultural Banking (CAB) was established by the Reserve Bank of India in 1969 to provide training inputs in Rural and Cooperative Banking. Subsequently, recognising the changing needs of the Indian financial sector, the College has expanded its scope to provide training in other areas like Information Technology, Human Resource Management, General Banking and Non-Banking Financial Services. The College also conducts programmes in collaboration with international agencies like FAO, APRACA, CICTAB, UNDP and the Commonwealth Secretariat. It has earned acknowledgement as an international centre of excellence for development banking. The College also conducts customized taining programmes for institutions, both national and international, as per their specific requirements.

The College is committed to enhancing and building capabilities in the financial sector in tune with the changing times.



College of Agricultural Banking www.cab.org.in