Trillion-dollar economy

Opportunities and challenges for banks

June 2011

Ernst & Young
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Preface

Notwithstanding its various structural issues, the Indian economy is expected to witness robust growth of 8%-9% over the next decade. However, the social indicators all point toward rising inequality and a slowdown in growth if social-development efforts are not initiated and ramped up. According to the UNDP Human Development Report 2010, India ranks 119 in terms of human development, with a Gini Coefficient of 36.8. As much as 41.6% of the population subsists on less than US$1.25 a day in PPP terms, and 28.6% of the population lives below the national poverty line. In comparison, China ranks 89, with a Gini coefficient of 41.5. However, China's population living on less than US$ 1.25 a day totals only 15.9% and those living below the poverty line amounts to 2.8%. Education, health and gender inequality, among many other indices, paint the same picture.

Economic growth needs to be more participative and equitable. Increased efforts, requiring sustained reforms, have to be made toward social-development goals to sustain economic growth and make it more equitable.

Strong economic growth presents many opportunities and challenges for the banking sector. The role of the banking sector in supporting economic growth will be critical in channeling capital to industry and economic sectors and increasing the coverage of financial services. Financial inclusion has been taken up as a policy initiative, but banks are still working toward a viable business model.

ASSOCHAM and Ernst & Young India Pvt. Ltd. undertook this study to identify issues and aspects connected with economic growth and social development, the implications for the banking sector, and ways and means of furthering financial inclusion.

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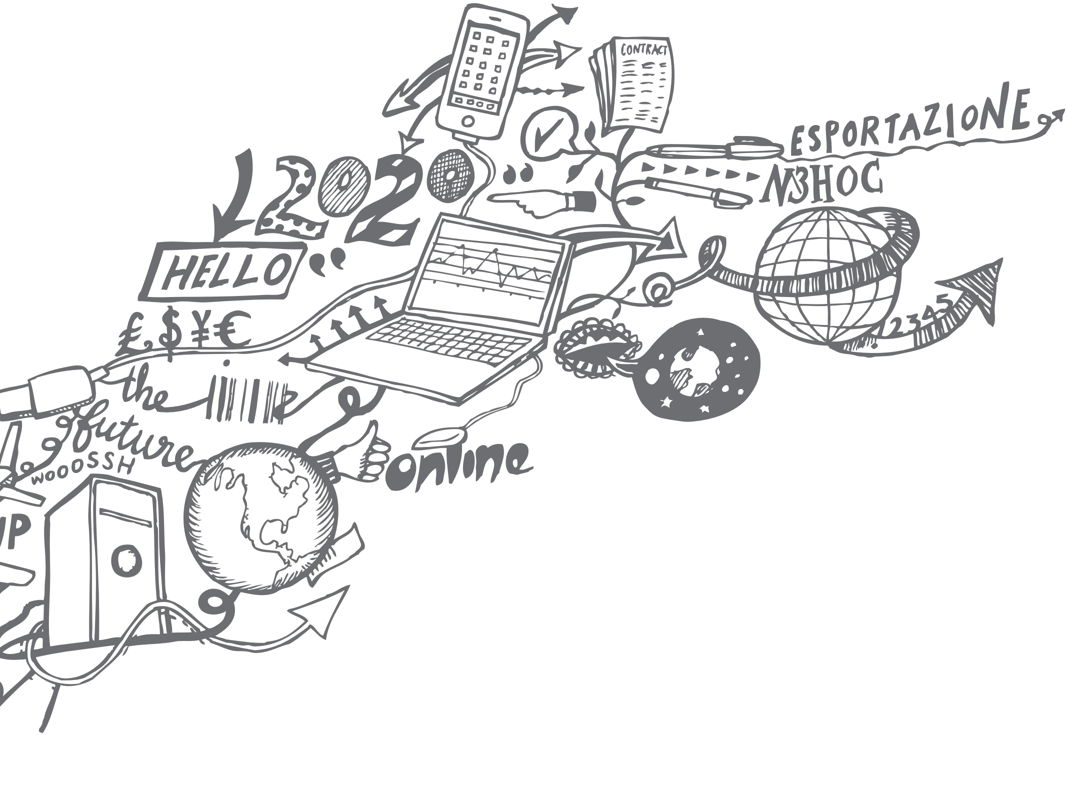
Content



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Executive summary

The Indian economy is expected to be the third-largest economy after China and the US by 2020 with a share of 5.8% of the global GDP in purchasing power parity terms[1]. It is expected to grow at an average rate of 8%–9%. In the long term, India could grow even more quickly than China due to its relatively young population. The sustainability of strong projected growth hinges on multiple factors and the participation of all sectors. Economic growth must also generate employment, reduce poverty and narrow the rural-urban divide. Unless these factors are balanced, growth will likely be unsustainable. Overcoming these challenges will require sustained economic reforms. Aspects such as fiscal discipline, deficit reduction, and increasing expenditure in the areas of health, education and infrastructure, expediting financial reforms, and introducing agricultural reforms will be critical to growth.

The projected economic growth has strong implications for the banking sector, with bank credit expected to grow nearly fivefold from the current level. Despite the strong growth that the banking sector has witnessed, its coverage remains limited to urban and semi-urban regions of the country, with exclusion in the east and northeast regions being acute. The Government of India (GoI) and the banking regulator realized the situation and disparities caused due to a large excluded population and have been making efforts to strengthen the presence of banking services. Banks have been asked to formulate board-approved financial inclusion plans, and in 2010, the GoI and regulator announced plans to award new banking licenses toward this objective.

Banks are experimenting with various initiatives for furthering financial inclusion, but have not been able to make a significant impact, given the magnitude of the problem and difficulties in reaching the excluded population due to lack of rural infrastructure, customer illiteracy and the widespread inability of customers to save. Many of the initiatives lack adequate understanding of the customer and are focused on covering the individual without actually helping the customer generate income or effectively perform economic activities, thus driving them to withdraw from the inclusion net.

This thought leadership report attempts to outline a two-pronged approach based on economic activity. Investment in agriculture has been found to be effective in reducing poverty and providing added economic benefits. Contributing 14.6% to the national GDP, agriculture requires substantial investments, especially as it supports the livelihood of 89 million[2] rural farm households. Moreover, 46 million rural farm households are excluded from the financial services net.

The first part focuses on ways to boost the agricultural sector through a more engaged contract-farming approach that will likely benefit farmers through technology transfer, capital inflow and the creation of assured markets for crop production. The 7,157 markets under the APMC Act, as on March 2010, can be used to reach, educate and service farmers. The second aspect focuses on leveraging the non-banking financial company (NBFC) sector for asset creation and retail loans due the reach and capabilities they offer in asset financing. Microfinance institutions (MFIs), such as non-governmental organizations (NGOs) and NBFCs, among others, have emerged as important sources of micro-finance delivery.

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1 "International Financial Statistics and World Economic Outlook/UN/national statistics," *Euromonitor International website*, http://blog.euromonitor.com/2010/07/special-report-top-10-largest-economies-in-2020.html; accessed 26 May 2011

2 "C Rangarajan Committee Report on Financial Inclusion, 2008," *NABARD website*, www.nabard.org/financial_inclusion.asp; accessed 26 May 2011

Chapter 1: macroeconomic scenario

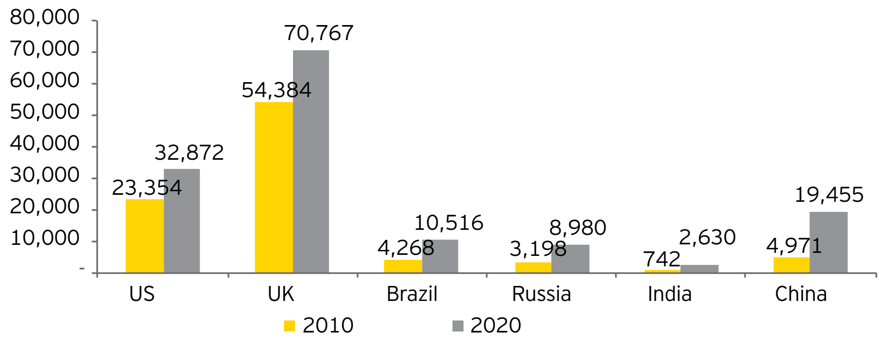
Introduction

The economic reforms initiated in the early 1990s saw the Indian economy witnessing average GDP growth of 6% in the nineties and 7.5% in the past decade. The country is expected to sustain this growth momentum in the near future and grow at approximately 8%–9% in the next decade to reach a real GDP of approximately US$2.2 trillion at today's prices. The sustainability of strong projected growth hinges on multiple factors and the participation of all sectors. The share of agriculture in the national GDP declined from approximately 18.9% in 2004–05 to 14.6% in 2009–10, while the share of services increased from 53.1% to 56.9% in the same periods.

A recent World Economic Forum (WEF) report `More Credit Fewer Crisis' suggests that the global credit stock (includes retail, wholesale and government borrowing) doubled from US$57 trillion to US$109 trillion between 2000 and 2009 and is expected to double to approximately US$196–220 trillion by 2020. Credit is linked to social objectives and is economically sustainable only if it also meets broad social objectives and economic development.

The banking and financial sector's role in supporting growth by channelizing capital at reasonable costs is pivotal. The Indian banking sector has witnessed impressive credit growth at a CAGR of 23.3% during the last decade. However, the coverage of adults and households has not increased at the same pace, with only 48% of adults using formal or semi-formal financial services. The challenges facing the Indian banking sector are primarily increasing coverage, supporting large credit requirements of rapidly growing economy and sourcing adequate levels of capital to fund growth. The challenge for policymakers lies in making credit sustainable and aligning it with the country's social objectives. By 2020 the banking sector outstanding credit is expected to reach US$3.2 trillion, approximately 4.5 times the current level of US$744 billion. The capital required to support this growth will rise from US$91.5 billion currently to US$402 billion, approximately US$31 billion annually, for the next 10 years. The governments' social objective will require US$3.0 billion each year to reach approximately US$40 billion by 2020. At these levels of projections, per capita bank credit will increase from US$742 to US$2,630 by 2020. However, it would still be half of where China and Brazil are today, at US$4,971 and US$3,198, respectively.

Exhibit 1: Per capita bank credit (US$)



Sources:- Banco Central DO Brazil

Agriculture sector

Accounting for 14.6% of the country's GDP in 2010–11, agriculture is one of the major contributors of the Indian economy[3]. In the first half of 2010-11, the farm sector achieved growth of 3.8%, and the full-year growth in this sector was estimated at 5.4%. Substantial expansion in the area and production of major crops was witnessed in both the kharif and rabi seasons.

According to the Department of Agriculture & Cooperation (Ministry of Agriculture), the total expenditure in the first four years of the Eleventh Plan is estimated to be US$9.98 billion, up from US$3.36 billion in the entire Tenth Plan period. Gross capital formation (GCF), or investment, in the agriculture sector related to the GDP in this sector showed a substantial rise from 15.8% in 2005–06 to 22.3% in 2009–10.

Table 1: Agriculture GDP (INR billion)

	2006-07	2007-08	2008-09	2009-10	2010-11
GDP of the agriculture and allied Sector	6,191.90	6,550.80	6,541.18	6,569.75	6,924.99
As a percentage of the GDP	17.4%	16.8%	15.7%	14.6%	14.2%

Source: Ministry of Agriculture 2010-11 annual report

Table 2: GCF in agriculture at 2004-05 prices (INR billion)

Year	GCF in agriculture	Agriculture and allied activities		GCF/ GDP in agriculture and allied activities (%)
		GCF	GDP	
2004-05	691.48	760.96	5,654.26	13.5
2005-06	787.94	866.11	5,944.87	14.6
2006-07	820.99	907.10	6,191.90	14.6
2007-08	960.30	1,050.34	6,550.80	16.0
2008-09	1,189.49	1,286.59	6,541.18	19.7
2009-10	1,229.95	1,333.77	6,569.75	20.3

Source: Ministry of Agriculture 2010-11 annual report

[3] Ministry of Agriculture 2010-11 annual report

Flow of credit to the agriculture sector

With an outstanding amount of INR4,161 billion in FY10 at a five-year CAGR of 27.3%, bank credit to the agriculture sector has increased sharply. Public sector commercial banks financed around 5.42 million new farmers in FY10[4], while private sector commercial banks funded 0.57 million new farmers. Further, regional rural banks (RRBs) financed 1.77 million new farmers during this period. Thus, the total number of new farmers financed by commercial banks and RRBs collectively was 7.76 million, against the target of 5.0 million for the year. In addition, cooperative banks financed 1.34 million new farmers during this period, taking the total number of new farmers financed by the banking system to 9.1 million. The rural sector's credit absorption capacity depends on factors such as agriculture infrastructure, the availability of suitable technology, extension services, marketing facilities, transportation and storage. Creating this support infrastructure will enable stronger participation of the rural economy.

The GoI also bears a considerable direct and indirect subsidy burden for the agricultural sector.

Table 3: Subsidies in the agriculture sector (at current prices), INR billion

		2005	2006	2007	2008	2009	2010
Direct	Fertilizer	158.79	184.60	262.22	324.90	766.03	529.80
	Irrigation	122.90	142.80	169.78	194.57	236.65	NA
	Other subsidies	36.40	56.47	47.64	151.00	331.60	NA
	Total	**318.09**	**383.87**	**479.64**	**670.47**	**1334.28**	**NA**
Indirect	Electricity**	179.77	194.31	197.29	206.61	274.89	NA
	Food subsidy	257.98	230.77	240.14	313.28	437.51	560.02

Source: Central Statistical Organization

[4] Ministry of Agriculture 2010-11 annual report

Social objective: financial inclusion

The Indian experience

The rapid ascent of India's economy in the last few years has led to considerable wealth creation. However, for the country's economic growth to be sustainable over the long term, "inclusive growth" is extremely important. To facilitate inclusive growth, the GoI and the Reserve Bank of India (RBI) have made financial inclusion one of their missions.

The GoI's focus on financial inclusion is likely to aid the provision of basic financial services (such as savings, credit, payment, remittance facilities and insurance) to unbanked or financially excluded households at affordable costs. From the GoI's standpoint, financial inclusion remains a challenge. However, from the financial services industry's perspective, it offers immense opportunities, but not without challenges.

State of financial inclusion in India: rapid growth the need of the hour

India has the second-highest number of financially excluded households in the world. Approximately 40% of the country's population has bank accounts, and only about 10% have any kind of life insurance cover, while a meager 0.6% has non-life insurance cover. Furthermore, there are 600,000 unbanked villages in India and only 38% of the country's bank branches are in rural areas. Although efforts have been made to expand the branch network from around 8,700 at the time of bank nationalization in 1969 to around 87,000 presently, only about 32,000 branches are present in rural India.

India lags behind other developing and developed economies in terms of providing the unbanked populace with access to financial services (Table 4).

In India, various entities — including public and private sector banks, urban cooperative Banks, RRBs, MFIs/NBFCs and self-help groups (SHGs) — are executing the inclusion mission. These entities are executing the mission, specifically alleviating the problem of limited reach in rural India, through business correspondents (BCs) and mobile banking, among other models.

Banks and financial inclusion

There has been a renewed interest among Indian banks in providing banking services to the unbanked. The RBI's initiatives have promoted and supported this interest. While banks were looking to expand reach in rural areas, the RBI was preparing them by introducing focused products such as no-frills accounts (no pre-condition, low-minimum balance maintenance

Table 4: Financial penetration in various countries

	Deposits			Loans			Outreach (Branches per 100,000 adults)		
Country	Accounts per 1,000 adults	Value (% of GDP)	Average account value (% of income per capita)	Accounts per 1,000 adults	Value (% of GDP)	Average account value (% of income per capita)	Total	Urban	Rural
India	680.5	51.0	110.0	123.8	38.2	453.2	9.3	3.5	5.8
Developing economies									
Brazil	-	28.7	-	390.1	33.6	119.1	12.2	-	-
Mexico	1,013.6	13.6	19.0	-	16.6	-	14.0	-	-
Indonesia	484.3	41.8	119.6	180.6	29.7	227.7	6.7	1.7	-
Bangladesh	318.7	49.0	235.1	42.4	38.1	1,374.6	5.2	2.6	2.6
South Africa	788.1	103.7	192.8	296.9	101.0	498.2	8.0	-	-
Developed economies									
US	1,760.8	39.8	28.5	-	46.9	-	35.4	25.7	9.7

Source: Financial Access database, Consultative Group to Assist the Poor (CGAP), 2009

accounts) for the rural market. No-frills accounts provide access to an easy financial savings facility for the population at large, which acts as a means of their entry to the formal banking system. At end-March 2010, 50.6 million no-frills accounts were opened with an outstanding balance of INR53.9 billion.

Moreover, banks now submit board-approved three-year financial inclusion plans (FIPs) with targets for March 2011, 2012 and 2013. Banks have identified about 73,000 such habitations for providing banking facilities by March 2012. During 2010–11, banks covered approximately 29,000 villages and the remaining villages are to be covered during 2011–12. These habitations have been allocated to commercial banks, RRBs and cooperative banks for providing banking facilities on time. In 2010–11, banks opened 5,214 new branches, deployed 25,403 BCs/customer service centers and provided banking services in 43,337 villages (of these, 525 villages were covered through rural brick-and-mortar branches, 42,506 villages through BCs, and 306 villages through other modes such as ATMs and mobile vans).

MFIs/SHGs and their role in financial inclusion

MFIs have been an important component of the financial inclusion process in India. Microfinance is defined as a provision of thrift, credit and financial services and products of a very small amount to the poor in rural, semi-urban and urban areas to help them raise their income levels and improve their living standards. The microfinance program is being executed by the Self-Help Group-Bank Linkage Programme (SBLP), NGOs and NBFCs/MGFIs, among others.

The SBLP and the microfinance program have grown with rapid strides over the years (Table 5). In 2009–10, 1.59 million new SHGs were credit-linked with banks, and bank loans of INR144.5 billion (including repeat loans) were disbursed to these SHGs.

Table 5: Loans and savings of SHGs and MFIs

	SHGs			
	Number (in millions)		Amount (INR billion)	
	2008-09	2009-10	2008-09	2009-10
Loans disbursed by banks during the year	1.61	1.59	122.5	144.5
Loans outstanding	4.22	4.85	226.8	280.4
Savings with banks	6.12	6.95	55.5	62.0
	MFIs			
	Number		Amount (INR billion)	
	2008-09	2009-10	2008-09	2009-10
Loans disbursed by banks during the year	581	691	37.3	80.6
Loans outstanding	1,915	1,513	50.1	101.5

Source: Reserve Bank of India

Following the immense growth that the microfinance sector has witnessed, micro-housing has also become a focus area for NBFCs. NBFCs are extending small-ticket loans to home buyers. Banks do not find it viable to extend loans when the income is not documented. However, these NBFCs, which offer loans to the tune of INR0.2–0.6 million to borrowers with a monthly income of INR6,000–12,000, aim to tap the emerging middle class in rural and semi-urban areas.

Inclusion presents its own challenges

The opportunities that the underpenetrated rural market offers do not come without their challenges. Each entity involved in, and each model used in, the implementation of financial inclusion faces challenges that deter the success of this mission.

Coverage: Reaching the unreached

The biggest impediment for the FI mission is the inaccessible nature of rural India. In urban India, infrastructure and the presence of the internet and mobile phones have helped financial services companies reach the population with ease. However, lack of basic physical and social infrastructure (roads, transport and communication facilities) and IT infrastructure increases the cost of serving unbanked areas and makes accessibility a significant challenge.

Viability of the customer segment

Financial inclusion as a concept offers immense potential for the financial industry, but the target customer segment has some inherent issues that need to be resolved. Financial illiteracy, the inability to save and lack of trust are some of the issues that this customer segment needs to overcome.

Financial literacy is of utmost importance if inclusive economic growth in the economy is to be achieved. Awareness levels regarding zero-minimum balance accounts and the financial inclusion drive are extremely low in financially excluded areas. Although the RBI has implemented various initiatives to improve the literacy rate, a large chunk of the population is not reachable and lacks trust in the system.

Such issues, coupled with the inability to save due to low income levels resulted in limited success of RBI's 'no-frills' initiative. While no-frills accounts have grown considerably, it is a challenge to keep these accounts operational, as many such accounts are found to be dormant. More than 75% of the accounts opened under the financial inclusion drive remain inactive due to financial illiteracy. The average account balances in savings accounts have been very low at uneconomic levels for banks. In order to keep these accounts operational, banks have been advised to provide small overdrafts and until March 2010, banks provided INR275.4 million as overdrafts in such accounts.

Further, extending services to low-income groups comes with certain risks such as fear of loan losses or the inability to recover such loans, especially since such people do not have assets to pledge as collateral.

Ensuring the percolation of government programs to the targeted beneficiary

The GoI's initiatives such as the MGNREGA and Swabhimaan are facilitating the FI mission. However, these initiatives face a similar challenge as the FI initiatives — to enhance the prospects of these benefits reaching the genuine customer. In rural India, the documentation of income and identity proof is scarce, which has made it difficult for commercial banks to offer loans and other financial services. However, NBFCs have hired locals to effectively and easily oversee credit appraisal and background checks of customers. With the introduction of the UID, identifying an individual customer is likely to become effortless, and maintaining data on the target customer segment is expected to become possible.

Risk management

Strengthening presence in the rural market in India to provide financial services will require effective risk management, if the services are provided via the BC or mobile banking models. A several transactions in financially excluded areas are in cash, warranting high-cost cash-handling operations and additional operational risks. Moreover, clients tend to perceive that BCs are the principals themselves and not banks' agents. Recipients of BC services are mostly illiterate and unfamiliar with banking services, which increases their susceptibility to misguidance by the BCs. Banks not only need to see that BCs are authentic institutions/individuals, but also that they handle cash appropriately. The increased use of technology such as smart cards and mobile phones to transfer funds electronically could help contain the risks involved in handling cash.

Irregularity in accounting is another risk that banks have to counter. This has have been observed in the accounting of clients' withdrawals and deposits by BCs. As a result, there are delays in accounting for transactions with banks.

Cost-effective delivery

Delivering financial services in rural India attracts high costs in terms of operational costs and the cost of loan losses. The operating cost of maintaining a deposit account, particularly when average deposits in an account are low, could make it an economically unviable proposition for banks to extend banking services to such customers.

Operating costs — staff salaries, traveling expenses, commissions not classified under financial costs, expenses on the promotion of groups, staff-welfare expenses, depreciation and amortization, rent on hired buildings, and other overheads — are higher in the case of small loans. According to the Planning Commission of India, the operating cost of MFIs is around 10%–14% as compared to the 3%–4% that banks incur to service their average borrowers.

To overcome the issue of costs, the industry has adopted technology that could help expand reach. The Inter-Ministerial Group on Framework for Delivery of Basic Financial Services Using Mobile Phones has suggested that the use of mobile phones in operating bank accounts could help promote financial inclusion and facilitate the participation of small banks. Cashless payment can reduce costs considerably, and the Real Time Micro Transactions (REMIT) system holds immense potential to facilitate a large number of real-time transactions at low costs.

The technical glitch

IT infrastructural bottlenecks are a major concern in India, especially in rural India. Technology has definitely helped reduce costs while expanding reach. However, lack of IT infrastructure is a challenge for branches in rural areas. A simple banking transaction in villages takes several hours to complete, which leaves scope for errors and the misuse of funds. According to the RBI, poor internet connectivity and power failure are the main reasons for delays in transactions. Without effective and efficient IT infrastructure, financial inclusion via technology may not create a significant impact.

Government initiatives: UID and financial inclusion

Government initiatives such as the Unique Identification (UID) project and the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) have played pivotal roles in furthering the financial inclusion mission.

While the UID project will help benefits or services reach targeted customers even at the bottom of pyramid, initiatives such as the MGNREGA are bringing an increased number from the rural population into the ambit of banking services.

UID number, or the *Aadhaar* number project

As the UID project reaches scale, it is expected to effectively address the question of identity. The initiative will also make front-end authentication and complete de-duplication (multiple identities or accounts in a system) a possibility. With the confirmed identification of targeted beneficiaries, the financial inclusion drive can be expected to reach a new level, as enhanced planning and payment distribution, especially under the MGNREGA, are likely to improve significantly.

Swabhimaan

The GoI launched Swabhimaan, a nationwide program on financial inclusion, in February 2011 to provide basic services such as deposits, withdrawals and remittances using the services of BCs, also known as "bank saathis" (companions). The BCs will help make banking facilities available to the interiors through various handheld mobile devices and other technologies that reduce cost and record banking transactions, and communicate the record of such transactions to banks using the internet or GPRS. This initiative also enables government subsidies and social security benefits to be directly credited to the accounts of beneficiaries so that they can draw the money from BCs in their villages. The GoI hopes to provide the masses with the benefits of micro-insurance and micro-pension products through this banking linkage. It will now be possible for a large number of migrant workers in urban areas to remit money to their relatives in distant villages quickly and safely.

Other initiatives

The GoI and RBI are also focused on other initiatives such as establishing funds with National Bank for Agriculture and Rural Development (NABARD) to sponsor financial inclusion efforts. They have established the Financial Inclusion Fund (FIF) to meet the cost of developmental and promotional interventions of financial inclusion and the Financial Inclusion Technology Fund (FITF) to meet the cost of technology adoption. Each fund consists of a corpus of INR5 billion, to be contributed by the GoI, RBI and NABARD in the ratio of 40:40:20 in a phased manner over five years, depending upon the utilization of funds. Moreover, in the 2010-2011 Union Budget, the corpus was increased by another INR1 billion.

Chapter 2: implications for the banking sector

What does this translate into for the banking sector?

Credit growth and capital requirements

The banking system is the most dominant segment of the Indian financial sector and has been the major driver of the country's growth. The transformation of banks over the past decade-and-a-half has served them well, with business growing at 23.3%. The sector has been an innovator in technology adoption to build capacity and reengineer processes for increased efficiency. With economic growth and rising disposable incomes, the demand for financial products has increased, and banking habits have evolved. However, a large section of the population is yet to be tapped, which is inhibiting the sector from realizing its full potential. Increasing the coverage of the unbanked is a huge opportunity for the banks. With a strong projected economic growth of 8%–9% over the next decade, the sector is expected to play a major role and grow its credit portfolio approximately fivefold from INR34,970 billion in 2010 to INR164,181 billion by 2020, at a CAGR of 16.9%.

The projected credit growth will require the scaling up of capital from INR4,300 billion in 2010 to approximately INR20,095 billion by 2020, or INR 1,579 billion annually. At the projected levels, banks may face a 50%-85%

shortfall in capital supply considering the implication of government ownership. This will likely seriously hamper the growth of banks and the economy.

Sources of capital: tier-I and tier-II capital and financial markets

Capital markets play a vital role in the efficient use of capital to fund growth. They make long-term stable funds available to corporate entities as well as intermediaries to fund growth. Indian financial markets have grown significantly over the last two decades, driven by liberalization reforms in the country. The capital market has active equity, government bonds, commodity and currency segments on exchange-traded platforms and corporate bonds and currency forwards on over-the-counter platforms. According to Prime Database, Indian corporate entities raised INR494.41 billion from 47 issues in FY10 and INR556.13 billion from 67 issues in FY11 through IPOs.

Table 6: Funds raised through capital markets

	2009-10		2010-11	
	Amount raised (INR billion)	Issues	Amount raised (INR billion)	Issues
IPOs	494.41	47	556.13	67
Rights issue	83.21	29	95.94	24
Preferential issue	152.94	122	290.07	287
Qualified institutional placements	439.68	67	246.74	47
Corporate debt (private placement)	1,894.90	806	1,896.51	806

Source: Prime Database

The need for vibrant bond markets cannot be over-emphasized. This is true more so for fast-emerging economies such as India, where the flow of capital is absolutely critical for companies to sustain their growth momentum. Corporate debt markets can play a crucial role in helping banks raise tier-II capital. The participation of banks in the corporate debt market is also likely to have a major impact in deepening the market. While the primary market for corporate bonds has been robust, the secondary market is underdeveloped and lacks liquidity and transparency of price dissemination. A range of other issues such as regulatory overlaps, taxation and stamp duty also contribute to the secondary market for corporate bonds not witnessing the rapid rise seen in equity markets.

Most corporate entities depend upon loans from banks and institutions. The banking sector can help develop the corporate bond market by encouraging their good credit-rated customers to tap the market instead of extending term loans to them. They should also use their extensive branch network to distribute corporate bonds among depositors and earn fee-based incomes. Banks as well as corporate entities today are quite comfortable with the existing scenario of loan relationships as this bilateral nature gives flexibility. However, in the near future as the projected shortfall of capital constrains the expansion of credit books, corporate entities and banks will have to look at the corporate bond market for raising capital.

Impact of Basel-III

The BASEL-III accord lays down standards for capital and liquidity, including increased and enhanced quality capital for minimum capital, a capital conservation buffer and a countercyclical buffer for capital, a liquidity coverage ratio, and a net stable funding ratio for liquidity. The proposed capital requirement raises the minimum core capital stipulation, introduces counter-cyclical measures, and enhances banks ability to conserve core capital in the event of stress through a conservation capital buffer.

Key changes in the Basel-III framework

- Focus on common equity as opposed to tier I: BASEL-III requires common equity of at least 3.5% by 2013 and 4.5% by 2015.
- Deductions from capital to be met through common equity: Deductions are currently made out of tier-I and tier-II capital, but BASEL III requires deductions from common equity.
- Increase in overall capital requirements: Total capital requirements are currently at 9%. Total capital requirements are expected to cross 9% in 2017 and to increase to 10.5% by 2019 (excluding counter-cyclical buffers).
- Introduction of capital buffers
  - No capital buffers are currently in place.
  - Discretionary counter-cyclical buffers are up to 2.5%
  - Capital conservation buffers from 2016 are projected to increase to 2.5% by 2019.

Basel-III will also require a change in capital charges on assets:

- Credit risk
  - Credit risk capital charge is computed under the standardized approach.

- Moving to internal rating-based approaches can reduce capital charge by up to 30%.
- Market risk
  - Market risk is currently computed using the standardized duration-based approach.
  - Moving to the internal models approach is likely to increase the requirement of market risk capital on account of equity and forex portfolios.
  - On the introduction of a general risk charge on the available-for-sale portfolio will further enhance capital requirements.
- Operational risk
  - Operational risk capital charge is computed under the basic indicator approach.
  - Moving to advanced measurement approaches has the potential of reducing capital charge by up to 5% of the gross income, i.e., by approximately 33%.

Indian banks are unlikely to be affected but may be impacted by the shifting of deductions from tier-I and tier-II capital to common equity.

Chapter 3: models of financial inclusion

Indian experience

Models banks use for the unbanked

There are basically two routes to reach the rural population –the brick-and-mortar model and branchless banking. Branchless banking has gained significant importance and has two subsets – BC and mobile banking.

BC model

In the BC model, banks have been permitted to use the services of various entities such as NGOs/ SHGs, MFIs and other civil society organizations (CSOs), companies registered under Section 25 of the Companies Act, 1956, retired government/bank employees and ex-servicemen to act as BCs. The RBI aims to drive financial inclusion by pursuing a branchless banking approach where banks outsource activities to BCs in financially excluded areas. The BC model is currently active through various forums:

- Common service centers, including grocery, medical and fair-price shop owners; public call office (PCO) operators; petrol-pump owners; agents of small savings/insurance schemes and retired teachers. These people are in a trust circle of local inhabitants and, are thus, more widely accepted. Moreover, they enjoy a large number of footfalls, which allows them to help solve the problem of fewer transactions. These centers can help market and promote financial literacy as they themselves have bank relationships and are incentivized to promote banking.

- Challenges: Common service centers do not possess the capacity to install requisite infrastructure and have been known to exploit or misguide customers for their personal motives. Moreover, the possibility of accounting misappropriations due to lack of adequate training does exist, and this may damage a bank's reputation.

- SHGs: SHG-led micro finance approaches help reduce the burden of heavy transaction costs that formal financial institutions in India face. Various empirical studies have also revealed that microfinance through the SHG bank linkage program has enabled SHG members to improve their socioeconomic status through the availability of various microfinance services. Currently, this approach reaches 58 million individuals, making it the single-largest microfinance "system" in the world.

    - Challenges: Such groups are active only in a few parts of India, primarily South India, so their limited presence may not drive financial inclusion to the extent required.

- NGO/ MFIs: These entities are permitted to serve as BCs and charge low interest rates.

    - Challenges: Banks have traditionally lacked the incentive to engage BCs, since a few NGO programs have had a large enough presence to attract significant attention as potential BCs.

- Technology service providers: Most Section 25 companies, trusts or societies that banks appoint as BCs have been floated by technology service providers that offered smart card or biometric solutions for account openings and others.

    - Challenges: High barriers to entry exist for new technology providers due to investment requirements, long gestation periods and low compensation/commissions.

- Mobile network operators (MNOs): In September 2010, the RBI issued a revision enabling MNOs to become BCs. MNOs can leverage their reach, resources and sophistication to create access points for delivering the financial services.

    - Challenges: Such outlets are available only in places with telephone connectivity. Thus, the target of 100% financial inclusion may be difficult to achieve. Distance from work location to such sites can also act as a deterrent.

Mobile banking model

Mobile banking offers significant potential for driving financial inclusion for the following reasons:

- Teledensity in India has rapidly increased over the last few years (66%), and now there are more than 525 million mobile subscribers in urban India and more than 260 million in rural India. Financial inclusion holds significant potential, as about half of the country's mobile subscribers do not have a bank account.
- A mobile banking transaction is far less expensive than a branch banking transaction. According to industry estimates, a mobile banking transaction costs around INR1–3, whereas a branch banking transaction costs around INR15–40 for transacting institutions. Furthermore, it costs just between INR25,000 and INR40,000 to set up a micro-banking outlet. Research indicates that the number of footfalls at a bank's branch has decreased drastically following the installation of ATMs.
- Furthermore, mobile banking offers customers ease of use due to the convenience it offers by saving customers time, effort and costs.
- Mobile banking operators are allowed to offer mobile-linked, no-frills accounts, which are similar to no-frills accounts that can be operated using a mobile phone, but they must to be through a bank. The minimum balance requirement for these mobile-linked, no-frills accounts is zero.
- Mobile banking can broaden access to financial services, as mobile technology gives banks the ability to cross-sell their other complex banking products and services such as vehicle loans and credit cards. Mobile technology also facilitates the transfer of funds of various government schemes such as social security pensions and wages paid under the MGNREGA, to a mobile-linked account.

However, collaborations between banks and mobile operators aimed at offering services to the unbanked on a large scale have not yet materialized due to the following challenges:

- Network security and connectivity
- Customer privacy and informed consent
- Liability for incorrect transactions
- Fraud prevention/authentication mechanism

- Interoperability/standardization between various handsets and mobile operators
- Insufficient funds, affordability and delay in the implementation of government policies
- Need for multilingual service and voice-based service support for illiterate users
- Need for introducing separate laws for mobile banking India
- Customer trust in mobile banking for services other than bank account balance queries and small-ticket transactions

International experience

Regulators the world over perceive financial inclusion partly as a distribution issue. Thus, a great deal of emphasis is being placed upon creating an environment conducive to financial inclusion and developing infrastructure to facilitate the outreach of financial services to financially excluded areas cost effectively.

Successful models in various countries

This section is an attempt at deriving learning from the strategies or measures other countries adopt in their bid to attain a high degree of financial inclusion. A study of some of the countries that have been successful in their efforts in this direction reveals that the methods they used can broadly be classified under either or both of the following two models — the BC model and the mobile money (MM) model.

Model I: BC model

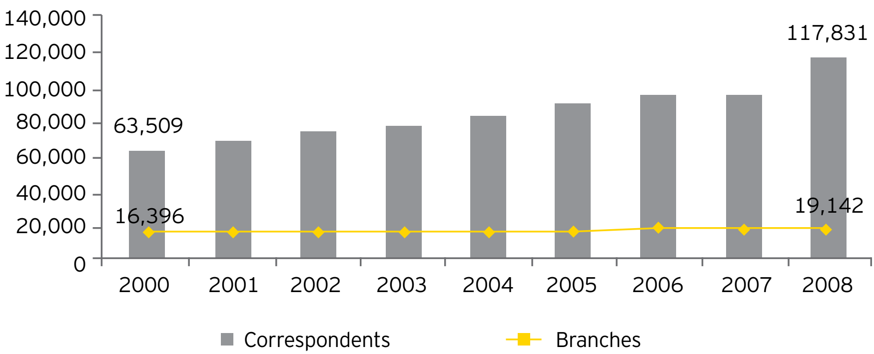
Brazil is regarded as a leader in financial inclusion due to the success that its agent (or correspondent) model has achieved. Spanning 8.5 million sq. km, the Latin American country has 5,564 municipalities and around 190 million inhabitants. Of these, 20 million live in areas with very thin population densities, so traditional bank branches in these areas are very expensive to operate.

As such, Brazilian authorities started exploring innovative ways to promote financial inclusion. Banks started leveraging correspondents as early as the 1970s, but important regulatory changes since 1999 provided notable impetus to the model. These regulations broadened the range of services that agents could provide besides lifting all restrictions on agent business and location. As a result, all municipalities had access to financial services by 2002, and by 2009, correspondents represented around 62% of the total number of points of service within the financial system.[xv]

By September 2010, the number of agents had grown to 163,569, reaching even the most remote areas of the country. Agents conducted 2.8 billion transactions in 2009, representing 5.88% of 47.6 billion bank transactions, up from 4.75% in 2003.

Enhanced access to financial services has also helped the Government of Brazil manage its social safety net programs effectively. The agent model benefits it that it reduces the transaction costs of providing social payments. Most of the 12 million families that benefit from Bolsa Família, a state-sponsored social welfare program that provides financial aid to poor Brazilian families, are now able to withdraw their allowances locally, without traveling long distances or paying someone else to conduct their transactions.

Exhibit 2: Growth comparison – number of bank branches and business correspondents in Brazil



Source: Branchless Banking and Consumer Protection in Brazil, CGAP

Interestingly, surveys have found that for many agents, remuneration is not the primary motive for running the business. Agents conduct close to 166 transactions per day, earning only US$4.34 in profit, or about US$.0.03 per transaction. Yet, many merchants believe that becoming an agent brings increased foot traffic. The general perception among agents is that giving up their status will have a negative impact on their main business.

The success of the BC model in Brazil is reflected in the fact that even those living relatively close to a bank branch regularly use agents, such as supermarkets or post offices, to conduct their transactions. Brazil's experience with using agents in a country with significant geographic challenges illustrates the potential of agents to expand access to financial services.

Nevertheless, it is important to note that this success story has not been scripted overnight but has resulted from many years of experience, evolving from more restricted possibilities to less stringent licensing conditions, without loosening the monitoring capacity of the supervision authority.

Model II: mobile money (MM) model

Currently, there are nearly three billion mobile phones in use around the world, and the numbers are growing rapidly. This is leading to a reduction in the costs of communications and IT and presents an unprecedented opportunity for using technology to address financial exclusion. Such technological innovation can change the dynamics of cost and access, making it economically viable for financial service providers to reach the underprivileged as well as isolated individuals and communities.

To date, M-PESA in Kenya has achieved the most success among all mobile banking initiatives. This mobile-based money transfer service, operated by Safaricom, was launched in February 2007, and as of January 2010, it had 9.0 million registered customers. This corresponds to 23% of the entire Kenyan population and 40% of the country's adults. By January 2010, M-PESA was being used for persontoperson (P2P) transfers worth US$320 million per month. On an annualized basis, this is equal to roughly 10% of the Kenyan GDP.

The M-PESA experience has also led the thinking on financial inclusion to explore a new "payments-led" approach to evolution, contrary to the "credit-led" or "savings-led" approaches that were being used earlier. M-PESA initially connects a customer to an e-payment system via a low-cost platform. The initial objective is to facilitate a wide range of payment transactions. However, subsequently the platform can be used for several other transactions such as storing money in a savings account, sending and receiving money from relatives and receiving and repaying loans.

The Kenyan example illustrates the potential of mobile phone technology in supporting the extension of access to financial services in developing countries. In developing regions such as South Asia, Sub-Saharan Africa, and the Middle East and North Africa, mobile phone subscriptions have almost doubled every two years. In developing countries, close to a billion people do not have bank accounts but have mobile phone connections. This figure is expected to increase to 1.7 billion in 2012. This indicates that expanding financial access through the mobile phone platform presents a potential business opportunity.

From the regulatory standpoint, it is important to highlight the key difference between the BC and MM models. The BC is a bank-based model, where customers have a direct contractual relationship with a bank or a similar prudentially regulated and supervised financial institution. The relationship can be in the nature of a transaction account, a savings account, a loan, or some combination of banking services — although the customer may deal exclusively with the personnel of one or more retail agents recruited to conduct transactions on the bank's behalf. In the case of the MM model, customers typically do not have a direct contractual relationship with a bank or a similar prudentially regulated and supervised financial institution. Rather, the relationship is with a non-bank service provider such as a mobile network operator or an issuer of stored value payment instruments. Customers receive an electronic record of value in exchange for cash at a retail agent's. This virtual account is stored on the service provider's server.

In other words, a prudentially regulated and supervised financial institution is behind every transaction under the BC model, which is not the case in the MM model. Therefore, before implementing the MM model, it is pertinent to effect necessary regulatory reforms to bring non-bank providers under an appropriate regulatory framework in the interest of customers.

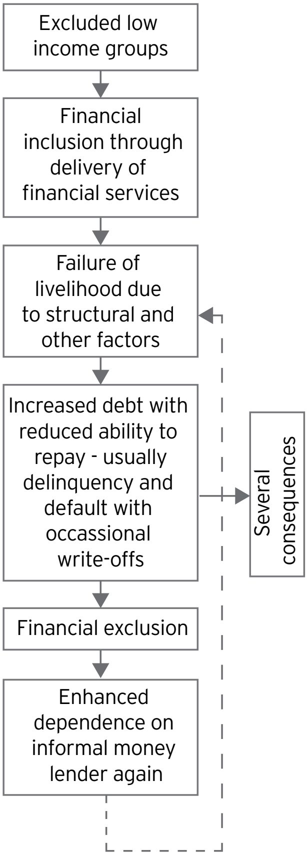
Chapter 4: reducing rural poverty – a model for financial inclusion

Efficient financial systems serve the vital purpose of allocating funds to their most productive uses, among others, including offering savings, payments, and risk-management products to as large a set of participants as possible, seeking and financing good growth opportunities. Access to finance plays a key role in development, without which inequality and economic stagnation are inevitable. Inclusive finance helps equalize opportunities and reduce inequalities. Without inclusive financial systems, poor individuals and small enterprises need to rely on their personal wealth or internal resources, which limit their ability to fully participate in growth opportunities.

The financial inclusion of low-income groups without addressing structural causes that result in the failure of livelihoods simply cannot help. Without addressing the structural issues and livelihood-generation aspects of the rural poor, they are likely to fall into the exclusion cycle. Financial inclusion cannot be restricted merely to opening savings accounts and/or providing credit for consumption/consumer spending. It needs to focus more on enhancing the staying power of the poor[5].

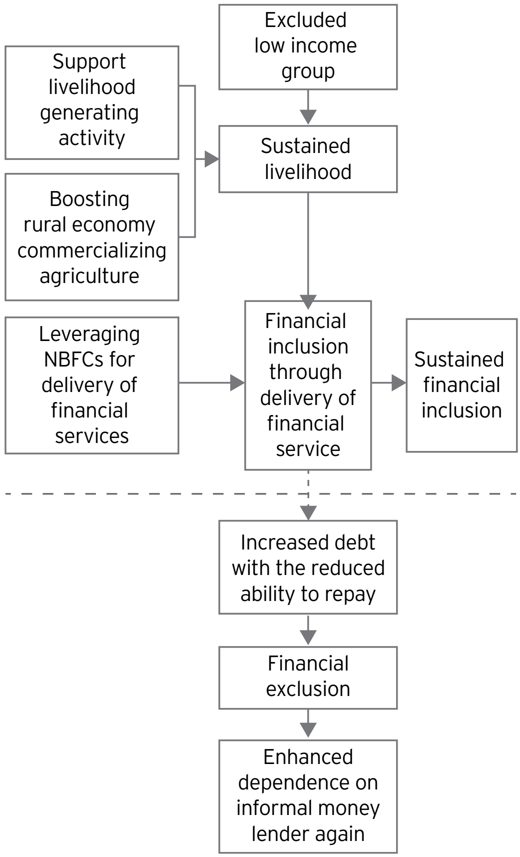
[5] Ramesh S Arunachalam, "Lasting solution to development challenges," UNDP website, www.undp.org.in/content/pub/PovertyReduction/Scoping-Paper-on-Financial-Inclusion.pdf, accessed 29 May 2011

Exhibit 3: Cycle of inclusion and exclusion[2]



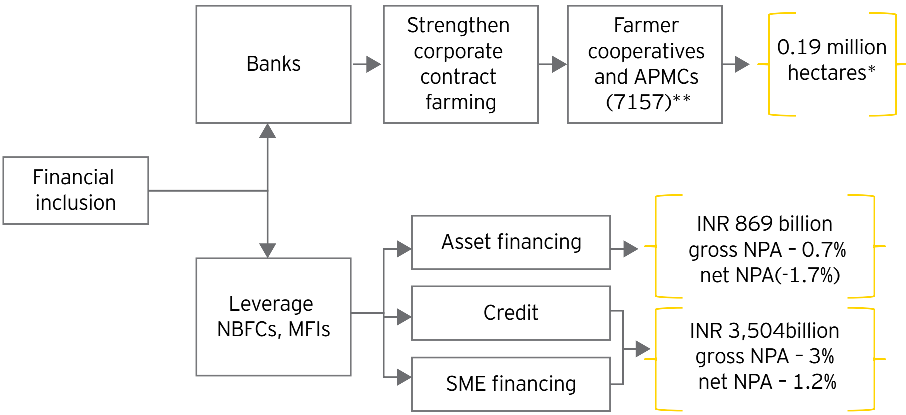
Source: UNDP website

Exhibit 4: Breaking the cycle of inclusion and exclusion



Source: Ernst & Young analysis

Exhibit 5: Approach to financial inclusion



Source: *Trends and Progress of Banking in India 2009-10*, RBI; RBI 2009-10 annual report,

Note: Figures as of March 2010, NBFC data includes NBFC-D and NBFC-ND-SI, *As of 2003, Annual Report 2009-10, DAC, Ministry of Agriculture

Boosting the rural economy: commercialization of agriculture

Of 148 million rural households, 89 million are farm households and 59 million are non-farm households, of the 89 million farm households 46 million are outside the financial services net. Agriculture is a politically sensitive issue and fraught with challenges. However, reforms and a clear policy are required to effectively direct credit flow to the agriculture sector; else, it will end up burdening banks and the state exchequer. According to the Ministry of Agriculture, 9.1 million new farmers were provided bank credit in FY10. Agricultural credit can be a means of furthering financial inclusion, as it would be linked to economic activity.

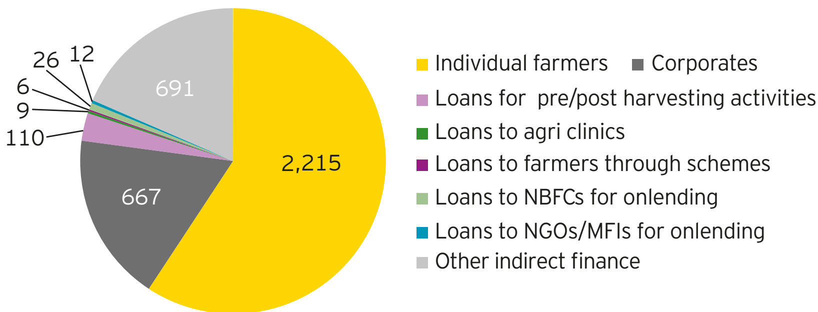
According to the RBI annual report, banks – including co-operative banks and RRBs – met 112.9% of the GoI's target of INR3,250 billion by March 2010. The recovery-to-demand rate was 76.1% in 2009. Additionally, during 2009-10, the GoI provided the following:

i. Interest subvention of 2% per annum was provided to public sector banks, in respect of short-term production-related credit of up to INR0.3 million provided to farmers. This subvention was made available on the condition/precedent that short-term credit at the ground level was extended at 7% per annum.

ii. Additional interest subvention of 1% per annum to public sector banks in respect of those farmers who repaid their short-term production credit within a year of the disbursement of such loans, so that the effective rate of interest for such farmers was 6% per annum. In the Union Budget for 2010-11, the additional subvention for farmers who repaid loans promptly was enhanced to 2% per annum, thereby, reducing the effective rate of interest payable to 5% per annum.

Apart from the Union Government's interest subvention scheme, several state governments have extended additional interest subvention on agricultural loans in their respective states. Corporates can play a vital role in risk management and providing an assured market for agricultural produce, which can benefit the farmers, banks as well as the rural economy. Approximately 18% of credit goes toward corporate entities or organized units.

Exhibit 5: Distribution of agricultural credit, 2009 (INR billion)



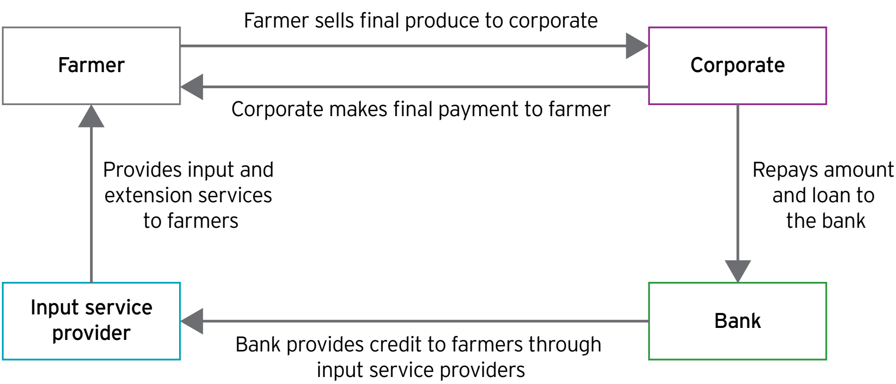
Source: Reserve Bank of India

Contract farming

The United Nations' Food and Agriculture Organization (FAO) states that strengthening the agricultural sector not only improves access to nutritious food; it does more – at least twice as much – to reduce rural poverty than investment in any other sector. Overall, countries with the greatest success in reducing hunger are those with high net investment rates in agriculture per agricultural worker.

The concept of contract farming, in which national and multinational companies enter contracts to market agricultural produce and provide technology and capital to farmers, has gained importance over the past decade. These arrangements have to be promoted as an effective method of linking small farmers to sources of extension, advice, mechanization, seeds and credit and to assured and profitable markets. The total cultivated area sown in India increased by 8.25% from 95 million hectares in 2009 to 103 million hectares in 2010. The area under contract farming amounted to 0.19 million hectares in 2003[6].

Exhibit 6: Farm-firm linkage



Source: FAO

[6] Farm -Firm Linkages through Contract Farming in India" *Food and Agricultural Organization of United Nations (FAO) website*, http://typo3.fao.org/fileadmin/user_upload/contract_farming/presentations/Contract_farming_in_India_2.pdf; accessed 27 May 2011

In most cases, the corporate entity providing the extension activity becomes the managing agent for crop loans. The loan is disbursed in cash as well as in kind. The agent distributes the input, and cash is issued either in the way of a pay order, demand draft or account credit, or in cash, sometimes, to individual borrowers. Repayment is done at the end of the season. Generally, when the farmer supplies the produce to the corporate entity, the loan amount is deducted and the balance is paid to the farmer. In most situations, there is no corporate comfort; however in a few cases, a first loss deficiency guarantee is obtained. The model of contract farming has inherent benefits of risk management for the bank and the farmer.

- High socioeconomic benefits
- Improved efficiency of the entire agri-business system
- Promotion of activities with an income and employment multiplier effect
- Uplifting of agribusiness on a global level in terms of markets, sourcing, technology and competition
- Development of technical, financial and market knowledge to make the system efficient and cost-effective

The participation of the corporate sector in the farming segment will play a crucial role in technology transfer and, capital inflow as well as lead to assured markets for crop production. The working model is where the contractor supplies all the input required for cultivation, while the farmer supplies land and labor. Generally, a farmer's participation is limited to production in the fields. This is mainly because the company provides all material, including seeds, as well as technical know-how, and there is also a purchase guarantee of on the produce after harvest. In most cases, the minimum price of the produce is fixed in advance.

However, the Centre and the States need to frame an effective policy so that the interests of farmers are safeguarded.

Role of NBFCs

NBFCs account for 11.67% of the advances of the total financial system. NBFCs have emerged as an important financial intermediary, especially in the small-scale and retail sector. With 12,630 companies registered with the RBI as of end-June 2010, improved capital adequacy ratios and financial performance, NBFCs can play a major role in furthering financial inclusion. One of their major roles has been credit delivery in asset financing and hire purchase. In FY10, NBFCs delivered credit to the tune of INR4,618 billion. For deposit-taking NBFCs, which disbursed credit of INR625 billion, the net NPA was negative 1.8%, while for NBFCs-ND-SI, which disbursed credit of INR3,922 billion, the net NPA was 0.9%.

Moreover, the capital adequacy ratio of 177 out of 216 deposit-taking NBFCs amounted to more than 50% of which 140 were asset finance companies.

NBFCs typically engage in the following activities:

- Funding of commercial vehicles
- Funding of infrastructure assets
- Retail financing
- Loan against shares
- Funding of plant and machinery
- Small and medium enterprise financing
- Financing of specialized equipment
- Operating leases of cars

NBFCs have clearly demonstrated their capabilities in credit delivery and originating good quality assets, and may be looked at to play an even larger role in furthering financial inclusion. They tend have a sound understanding of customer requirements and the ability to time credit disbursal and collection to customer cash flow. Clearly, a more pivotal role for NBFCs can be envisaged under financial inclusion. NBFCs are, in some ways, better alternatives to conventional banks for meeting the various financial requirements of individual and small business enterprises. They offer quick and efficient services without the complex procedures of conventional banking.

Payoffs to public investment[7]

Public investment reduces rural poverty through improved growth in agricultural production, agribusiness development, rural nonfarm employment, reduced food prices, and migration. While there are often considerable time lags between investment and visible impact, investments in agricultural research, education and rural infrastructure are often the most effective in promoting agricultural growth and poverty reduction. Regional analysis within India also suggests that public investment in less-favored areas not only offers substantial poverty reduction per unit of spending but also boosts economic returns.

[7] "Agricultural Investment Sourcebook," *World Bank website*; http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/EASTASIAPACIFICEXT/EXTEAPREGTOPRURDEV/0,,contentMDK:21078219~pagePK:34004173~piPK:34003707~theSitePK:573964,00.html; accessed 27 May 2011

Table 7: Impact of investment in agriculture

	Economic returns*		Returns – poverty**	
	China	India	China	India
R&D	9.59	13.45	6.79	84.5
Irrigation	1.88	1.36	1.33	9.7
Roads	8.83	5.31	3.22	123.8
Education	8.68	1.39	8.80	41.0
Electricity	1.26	0.26	2.27	3.8
Poverty loan	NA	1.09	1.13	17.8

* For China, Yuan total rural GDP/ Yuan exp.; for India, rupee per rupee spending

**For China, no. poor reduced/10,000 Yuan exp.; for India, no. poor reduced/million rupee exp.

Chapter 5: the road ahead

Focus on the overall ecosystem of excluded population

Financial inclusion is one of the biggest challenges facing the banking sector today. However, from a solutions-centric perspective, the entire ecosystem of the excluded population must be taken into account. The underprivileged go through cycles of inclusion and exclusion, and to truly include them in the financial services net, they must be provided with livelihood support. Therefore, banks have to actively support livelihood-generation activities to enable clients to become bankable in the near future. Most credit requirements of the poor, in both rural and urban areas, are for consumption (food expenses account for 53% of total expenditure in the rural area) and not for entrepreneurial activities. A sustainable ecosystem of livelihood generation, coupled with easy microcredit for times of need, will enable the borrower to ascend the curve and become bankable.

Encourage contract farming

Contract farming is an important price risk-mitigation tool. Contract farming also has many more direct benign effects on farm income. Market risks in specialty crops and vegetables are high, thus deterring most farmers from investing. Through price insurance, credit and technological input, contract farming could be an important mechanism through which small farmers can supply high-value crops to urban and international markets, while benefiting from assured increased income. From the viewpoint of farmers, contract farming is a means through which to overcome institutional and market failures prevalent in agriculture in developing countries. Market failure or imperfect markets for technology, credit, insurance, information, factors of production and final products, are factors that influence farmers to opt for contract farming. Factors such as transaction costs, local organizations and crop characteristics influence both farmers and contracting firms. Appropriate policies and standardized contracts must be employed to encourage contract farming.

Innovation and product customization

Banks are undertaking various initiatives to promote financial inclusion, albeit with limited success, while microfinance organizations have been effective in tackling the problem with innovative solutions, for instance, a weekly repayment cycle. The sector views the thrust for inclusion as a social cause. The solution is to convert this view into an economic model through the innovation and customization of products to suit customers. Banks have to think differently and digress from their existing business models to service the excluded population.

The banking sector is poised for strong growth, which will require substantial capital to support credit growth. Now more than ever, banks need to direct credit toward sectors such as agriculture, SME and infrastructure. Increased efforts also have to be made to strengthen financial inclusion. . However, banks will have to alter and realign their business models to serve such diverse requirements.

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Chennai
TPL House, 2nd floor
No. 3 Cenotaph Road
Teynampet
Chennai – 600 018
Tel: + 91 44 6632 8400
Fax: + 91 44 2431 1450

Hyderabad
205, 2nd floor
Ashoka Bhoopal Chambers
Sardar Patel Road
Secunderabad – 500 003
Tel: + 91 40 6627 4000
Fax: + 91 40 2789 8851

The Oval Office
18, iLabs Centre
Madhapur
Hyderabad – 500081
Tel: + 91 40 6736 2000
Fax: + 91 40 6736 2200

Kochi
9th Floor, Abad Nucleus
NH-49, Maradu PO
Kochi, Kerala 682304, India
Tel: + 91 484 304 4000
Fax: + 91 484 270 5393

Kolkata
22 Camac Street
Block "C" 3rd floor
Kolkata – 700 016
Tel: + 91 33 6615 3400
Fax: + 91 33 2281 7750

Mumbai
6th floor & 18th floor, Express Towers
Nariman Point
Mumbai – 400 021
Tel: + 91 22 6657 9200
(6th floor)
Fax: + 91 22 2287 6401
Tel: + 91 22 6665 5000
(18th floor)
Fax: + 91 22 2282 6000

The Ruby
29 Senapati Bapat Marg,
Dadar (W)
Mumbai – 400028
Tel: + 91 022 6192 0000
Fax: + 91 022 6192 1000

5th floor, Block B–2
Nirlon Knowledge Park
Off Western Express Highway
Goregaon (E)
Mumbai – 400 063
Tel: + 91 22 6749 8000
Fax: + 91 22 6749 8200

NCR
Golf View Corporate Tower B
Near DLF Golf Course
Sector 42
Gurgaon - 122 002
Tel: + 91 124 464 4000
Fax: + 91 124 464 4050

6th floor, HT House
18-20 Kasturba Gandhi Marg
New Delhi - 110 001
Tel: + 91 11 4363 3000
Fax: + 91 11 4363 3200

4th & 5th Floor, Plot No 2B,
Tower 2, Sector 126,
Noida - 201 304
Gautam Budh Nagar, U.P.
Tel: + 91 120 671 7000
Fax: + 91 120 671 7171

Pune
C–401, 4th floor
Panchshil Tech Park
Yerwada (Near Don Bosco School)
Pune – 411 006
Tel: + 91 20 6603 6000
Fax: + 91 20 6601 5900

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EYIN1106-063