

International Conference on SDG 2030

Key Note Speech

SDG 17

Finance and Technology: Challenges and Solutions

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G'Day, Salamats Pagi, Salamats Siang to every one! Many thanks to Prof Grahita Chandrarin and her colleagues for inviting me to deliver a key note speech and for your participation at this International Conference on Sustainable Development Goals 2030.

1. Opening remarks

The theme of the conference is the challenges to achieving the sustainable development goals and the possible solutions thereto. The Asian Development Bank¹ lists the 17 sustainable development goals and progress there under in their report titled the *Asia Pacific Sustainable Development Goals Outlook* released recently. The last of these goals, SDG 17 refers to finance, technology and trade. I will focus on the challenges in achieving this goal and possible solutions thereto based on my experience as a development banker for nearly two decades. Before becoming a banking and finance academic in Australia, I worked for nearly 20 years in the Reserve Bank of India and its outfit the National Bank for Agriculture and Rural Development (NABARD). As an academic, the focus of my research is micro finance and the use of financial technology. I will draw up on the studies conducted by me.

According to the World Bank (2016)², 10.7 percent of the world's population or 767 million people lived on less than US\$1.90 a day in 2013 as compared to 1.85 billion in 1990. Despite these achievements, the ADB (2017) report found that 400 million people in our region are living with incomes less than USD 1.90 per day. These people need to be pulled out of poverty before 2030. By any standard, this is an enormous task and to achieve the goal would require strengthened cooperation, shared understanding, development of coherent policies and finding innovative solutions to address the issues at hand. Access to finance is

¹ https://doc-04-c8-apps-viewer.googleusercontent.com/viewer/secure/pdf/8q5c4je0k6vljckul700o5v9urcncjhh/c1ooqh0hnd9cmk4se8g1k6tga7gp2i4t/1501977975000/gmail/08043099523186638504/ACFrOgCBkMIMSFwGml63ISfKY2LW0V3yBrc4iMoTydL6Mwl7Ma_ypwtQi1GPdIJFUF95ud6iYo7BjSq8EtbG9IBs5Gz6Er7CNc4raMWy5oSRbUeVVq9DTThFIN4ywMw=?print=true&nonce=clu9jia4ih7ps&user=08043099523186638504&hash=ma9gcqqt4m3luu7bt085rr5643t9mi30

² <http://www.worldbank.org/en/topic/poverty/overview>

considered as a catalyst that could help pull people out of poverty. Accordingly, government and financial institutions, in many countries have devised programs to provide access to finance to those who have remained out of the net of the formal financial institutions. No doubt they have contributed significantly over the years towards the achievement of the SDG 17, yet a lot needs to be done.

It is well recognised that financial inclusion is the key to lift people out of poverty. But banks face several challenges in reaching out to the poor. What are these challenges and how can these be overcome? Many studies have been conducted across the world to answer these questions.

I propose to answer these questions with insights from the three relevant studies that were conducted under my leadership in recent years. The setting of these studies was unique. They were conducted in hilly and remote regions and a remote Island. The study in India³ focussed on the tribal women residing in the remote Himalayan region of Arunachal Pradesh and West Bengal while the study in Australia focussed on Indigenous Australian⁴ women located in the Northern Territory including the remote Tiwi Island. Both these studies were funded by the Australian government and carried under my leadership. The study funded by a competitive research grant from the University of California/ Bill Melinda Gates Foundation focussed on Mobile Value Added Services (MVAS)⁵ as a possible technology solution to overcome the barriers faced by Fijian women micro-entrepreneurs. The challenges to financial inclusion and solutions thereto identified in these studies fit well in the goals and challenges of SDG 17 and are enumerated below:

2. The challenges faced in finance and technology

The challenges that banks face could be divided in three categories: (a) challenges faced by the poor (b) institutional challenges and (c) environmental challenges.

Challenges faced by the poor

Lack of education and financial literacy was found to be a major barrier. The majority of the target group respondents did not have a bank account or a credit or debit card, consequently cash was the only method used. Similarly, the lack of institutional network nearby meant considerable transaction cost involved in going to the nearest bank branch even if the poor had a bank account (the nearest

³ The report is available in digital form up on request.

⁴ The report is submitted to the Australian government and not available.

⁵ M Sathye, B Prasad, D Sharma, P Sharma, S Sathye (2017) Mobile Value Added Services in Fiji: Institutional Drivers, Industry Challenges, and Adoption by Women Micro Entrepreneurs, *Journal of Global Information Management*, 25 (2), 1-14.

branch was more than 20 km away from their home in most cases in Arunachal Pradesh of India). None of the tribal respondents in the hilly and remote region had access to credit and substantial unmet demand existed. Most of the target group respondents did not have life insurance. The target group had no access to financial advice. Lack of employment opportunities meant the poor had to fend for themselves on casual labour work which too was uncertain. Legal barriers included lack of ownership documentation to property, lack of identity documentation, lack of age proof and lack of a permanent home address –many casual labourers don't have a permanent home address as they move from place to place in search of work.

Challenges faced by financial institutions

From the banks perspective, lack of infrastructure to open branches, lack of critical mass of business required to open and run a bank branch cost effectively, and reluctance of employees to get posting in such remote branches. Physical safety and security of bank staff was another issue especially when they were carrying cash or holding it on the premises.

Barriers to provision of credit services included lack of credit information and permanent residential address, illiteracy and absence of income and expense records, inalienability of tribal land, non-availability of borrower's margin, lack of contractual flexibility and a large gap in the demand and supply of credit. Barriers to providing insurance services were lack of awareness about the need for insurance and non-availability of suitable insurance products. Barriers to providing financial advice included lack of provision of such advice by mainstream financial institutions and lack of appropriate training to self-help-group leaders to whom members turned for financial advice. The inability of the bank staff to understand the credit needs of the poor due to lack of training is a major issue in human resources management.

Environmental challenges

The regulatory framework that required compliance with the Know Your Customer rules also came as a hindrance given the lack of proper documentation with the poor. Similarly, financing women posed particular problems as they rarely had ownership of property in their name. Furthermore, they have little say, if any, in money matters within the household. There are no social security benefits available for the poor. Lack of ICT facilities and non-availability of banking correspondents are additional barriers.

Several ICT infrastructure related issues came up during our study of Mobile Value Added Services (MVAS) in Fiji. These were mainly: lack of enabling policy framework, lack of cohesive ecosystem, and lack of supporting infrastructure. MVAS is yet to be recognised as an industry in Fiji. Consequently, there is no

policy framework defining its growth. If there is a dispute, no redressal mechanism exists. To build cohesive policies an inter-ministerial panel as found in India, for example, is required. Network coverage and penetration of mobile phones in rural areas is critical for MVAS/M-PESA development. The setting up of mobile towers in rural and remote islands is another big issue given that critical mass required to cover costs is lacking. The revenue sharing arrangements between MVAS providers are not transparent leading to disputes. We found that women micro entrepreneurs were willing to adopt MVAS and pay for it if application that address their needs and provide data privacy could be developed. It is also important to make MVAS affordable if large scale uptake thereof is to happen.

The problems of Indigenous Australian women resonated those of the Indian tribal and Fijian women micro entrepreneurs in many ways. The Tiwi Island, for example, doesn't have a single bank branch. While the Indigenous Australians get a Basics Card from the Australian government as a part of social security, it enables them just to survive. Supplies are often sold to them at exorbitant prices. The problems related to ICT infrastructure, critical mass, and cohesive ecosystem were present in remote and hilly regions in all study countries.

3. Addressing the challenges

While some of the challenges such as providing infrastructure may take some time, those on which work can be readily started need to be exploited. We made several suggestion in our study report on India released in 2012 to address the challenges.

Solutions to the challenges faced by the poor

Opening bank accounts

We suggested to the Indian authorities to exploit the potential of the vast post office network (over 150,000 outlets) in addition to about 54,000 bank branches and 150,000 ATMs to improve outreach to remote areas, in particular. The network already provides four of the five services (deposit, remittance, insurance and transactions) that comprise microfinance. Only the access to credit service is missing and with appropriate training, the post office personnel could also provide that. There was strong support for the use of the post office as a conduit for providing a full range of financial services including credit services in the state of Arunachal Pradesh. In 2015, the Reserve Bank of India licenced India Post to function as a payments bank⁶. Prime Minister Narendra Modi's massive drive to open bank accounts saw 260 million new accounts including with zero balance opened in just two years 2014-2016. 'According to the [Government of

⁶ <http://www.livemint.com/Opinion/IRCRPlqFh2RAQIR1BhwwJ/Restructuring-the-department-of-post-for-financial-inclusion.html>

India] under the Prime Minister's Jan Dhan Yojana, in 19 of 28 states all households have a bank account and in the remaining nine states over 99 percent of households have a bank account⁷. Of the Jan Dhan accounts 76 percent have a balance greater than zero.

Cash payments

After the surprise announcement of demonetisation on 8 November 2016, the deposits in Jan Dhan accounts which totalled \$6.74 billion in mid-October 2016 surged to over \$11 billion. Everyone was issued a bank card to transact on the deposit account. Digital payments soared by 300%⁸.

Remittances

A major issue faced by the poor was sending remittances from a place where the earning member resided to the family residing in a village. The immediate payment system (IMPS) system introduced by banks enabled transfer of smaller payments instantly between bank account and other digital valets. The volumes through IMPS, reached \$1.3 billion per month in February 2015 (13 times the volume sent in September 2013)⁹. The government also encouraged private innovations by promoting payments banks. The Reserve Bank of India licenced 11 payment banks to provide services. These were started, among others, by corporate houses and mobile operators in India. The latter have millions of distribution points for prepaid credit throughout the country and these can be used to load cash on to mobile wallets. A major breakthrough was the launching of a new digital payments app named BHIM – Bharat Interface for Money, where transactions will be possible with just a fingerprint impression¹⁰. It works without the Internet connection and is based on the Unified Payments Interface (UPI) from the National Payments Corporation of India (NPCI), the umbrella organisation for all retail payments systems in India. The BHIM also overcomes the problem of lack of education to some extent in the sense that even an illiterate person can use it for transfer of money.

Transaction cost

The problem of high transaction cost in hilly regions (that our study brought out), was to some extent addressed by the Govt. of India by authorising post offices to provide banking services. In addition, the banking correspondent (BC) scheme, enabled availability of banking services at remote villages. The BC's are generally retired bank personnel. There are more than 200,000 BCs in India¹¹. In addition,

⁷ <http://www.cgap.org/publications/india%E2%80%99s-push-financial-inclusion>

⁸ <http://timesofindia.indiatimes.com/business/india-business/Digital-payments-soar-by-up-to-300-after-demonetisation/articleshow/55902284.cms>

⁹ <http://www.cgap.org/blog/digital-financial-inclusion-india-taking-2015>

¹⁰ <http://indianexpress.com/article/explained/bhim-app-payments-cashless-online-transaction-narendra-modi-how-it-works-shortcomings-4456264/>

¹¹ <http://www.cgap.org/blog/financial-inclusion-20-india%E2%80%99s-business-correspondents>

there are about 30 P2P lending platforms¹² though their operations are limited and not regulated at present by the Reserve Bank of India.

Life Insurance/Accident insurance

The Govt. of India launched in 2015¹³ the Prime Ministers Security Insurance Scheme (Suraksha Bima Yojana) to provide accidental death cover of Rs. 2 lakh (A\$4,000) for a premium of just Rs. 12 (four cents Australian) per year.

Financial advice

There continues to be a near absence of personal financial advice to the poor except what they may receive by talking to the microfinance institution personnel who may not be trained in provision of such an advice.

Solutions to the challenges faced by financial institutions

Infrastructure

The infrastructure related problems of banks are genuine. Consequently, without waiting for the issues such as all-weather roads, or electricity or general law and order to get sorted out, banks have embarked on innovative ways such as the banking correspondent scheme as described above. This low cost option overcomes some of the infrastructure related issues.

Lack of credit information

The information asymmetry problem is more acute in the case of rural poor for a variety of reasons such as illiteracy, lack of proper records, identity-related issues and property ownership records. Banks are overcoming this by financing the self-help-groups operating in the areas where these are available. The self-help-group members know each other well as they live in the same villages. Bank lend to the self-help-groups many times by joint liability group loans.

Insurance products

The Narendra Modi government's accident insurance to all Jan Dhan account holders at a premium of four cents Australian, addresses the insurance issue to some extent. The private insurance players have also come up with some products suited to rural areas which they are pushing through banks. The Life Insurance Corporation of India has covered nearly 20% of below poverty line families so far¹⁴. But this is an area where a lot more work is required. NGOs are currently not approved as insurance agents and this policy needs to undergo change.

Returns from rural lending

Financial institutions shun rural lending as far as possible due to the low returns, and high risk of default. Administrative decisions such as that of the UCO bank

¹² <http://www.livemint.com/Money/6KEmfQvVnCKUAeNcfGB9AM/Are-the-P2P-lending-platforms-for-you.html>

¹³ <http://timesofindia.indiatimes.com/budget-2015/common-man/A-rupees-premium-a-month-and-insurance-for-a-lifetime/articleshow/46416723.cms>

¹⁴

<http://www.publishingindia.com/GetBrochure.aspx?query=UERGQnJvY2h1cmVzfC8yNDM4LnBkZnwwMjQzOC5wZGY=>

that loan application of a rural woman borrower can't be rejected at the branch level but must be referred to regional headquarter could help ensure lending to women borrowers to some extent. However, the real dent can be made by the use of technology such as the mobile value added services (MVAS) to provide easy and cost effective access to the rural poor. A study under my leadership in Fiji about the use of MVAS to reach out to micro-entrepreneurs showed a promise. We surveyed 74 women micro entrepreneurs and social influence was the principle driver of adopting MVAS. It impacted perceived usefulness and perceived ease of use and through these the intention to adopt. Accordingly, policy makers and industry need to engage social organizations/networks for advancement of technology adoption in collectivist societies such as Fiji.

Solutions to environmental challenges

Two major environmental challenges are regulation and ICT infrastructure.

KYC

For Jan Dhan accounts, the Reserve Bank of India watered down the KYC requirements. The unbanked poor could open account by self-attesting their photograph in the presence of bank officials and submit other documents within six months¹⁵. Such accounts could be continued for 24 months if the account holder can demonstrate within this period that s/he has applied for relevant documentation. There are also restrictions on the maximum balances the account holder can keep and on borrowing.

ICT infrastructure

With the rising penetration of mobile phones and tablets, the Indian MVAS market is expected to grow at a CAGR of 18.5% during the period 2015-2020¹⁶. As per the statistics released by Telecom Regulation Authority of India in July 2017, there were over 1.2 billion telephone subscribers (of which 1.18 billion were wireless subscribers), achieving a tele-density of 94%¹⁷. The mobile smart phone penetration is 24% and India is the largest market in the world in terms of volume¹⁸. These devices are becoming the preferred devices for banking transactions. Such transactions have seen a CAGR of 306% in recent years¹⁹. Several measures taken by the Modi Government under its Digital India program have helped a rapid expansion of mobile phones even to remote areas facilitating financial inclusion. A basic smart phone is available in India for Rs 2,999 (or A\$60

¹⁵ <http://timesofindia.indiatimes.com/business/india-business/RBI-simplifies-KYC-norms-ahead-of-Jan-Dhan-Yojana-launch/articleshow/41005593.cms>

¹⁶ <http://www.businesswire.com/news/home/20150708005542/en/Research-Markets-India-Mobile-Added-Services-MVAS>

¹⁷ http://www.trai.gov.in/sites/default/files/Press_Release_No50_Eng_13072017.pdf

¹⁸ <http://telecom.economictimes.indiatimes.com/tele-talk/an-overview-of-indian-telecom-industry-in-2016-and-outlook-for-2017/2035>

¹⁹ <http://telecom.economictimes.indiatimes.com/tele-talk/an-overview-of-indian-telecom-industry-in-2016-and-outlook-for-2017/2035>

approx.). The issues of critical mass faced in say Fiji or in Tiwi Islands are not as acute in India given its population of nearly 1.30 billion, 70% of which lives in rural India.

4. Concluding remarks

As a financial intermediary a bank can and does play a key role in the achievement of sustainable development goals. Using technology such as the MVAS and through the self-help-groups, banks can increase their outreach to the poor so that access to finance and other services such as insurance is available.

It seems the challenges faced across the region are more or less identical. Consequently, increased cooperation and exchange of outcomes produced by various policies could provide valuable learning. Towards this end, I suggest that a network of academics and practitioners is established to examine issues and the barriers to the achievement of SDG goals in the Asia Pacific region. Organisation of conferences such as this is very valuable as it provides opportunities for academics and practitioners in different countries of the region to network, exchange information about successful stories and learn from each other's experience to inform policy.

I thank the organisers once again for inviting me and to you all for participating in this conference so well organised by the Department of Accounting of the University.

Teri Ma Kasi!

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