ISSN 2250-3153

Financial Innovation and Poverty Reduction

Mohammed Avais

The Business School, University of Jammu
Bhaderwah Campus (J&K), India

Abstract- Financial sector has witnessed many changes over the last few decades. The economic development of a country is correlated with the financial sector. For the growth of financial sector the participation of every individual of a country is needed that is reflected in the motive of financial inclusion. Since in developing countries or LCDs large proportion of population is dependent on agriculture, but in most of rural areas of these countries financial intermediation has a poor performance and is unable to meet sustainable development. Financial inclusion at a broader level for poor is still a dream for most of the countries. Financial innovation therefore may be the only way to make financial facility available for poor at all levels of income. Some of these products are especially designed targeting the poor. New financial products for poor will be able to remove poverty in rural areas and can play a crucial role in socio-economic change in the rural society. This paper discusses literature review of financial innovation, its impact on rural areas and discusses how some of the innovative financial products helped in financial inclusion for poor people. Moreover it reflects use of technological advancement for innovative financial products that helped in financial inclusion and poverty alleviation. It also gives some suggestions for new financial products to bring more rural poor people in the ambit of financial inclusion for their financial needs. The data and facts used is secondary data from world bank and other agencies reports.

Key Words-financial innovation, financial inclusion, poverty alleviation, development
JEL Classification-P23, P36, P45, P46

I. Introduction

Financial sector has witnessed many changes over the last few decades. There was increase in financial institution, large capital inflows, regulatory bodies, deregulation in the sector and many innovation in financial instruments. All the necessary steps were taken to broaden the scope of the sector and to be accessible for more and more individuals. Developing countries are taking many necessary steps to include the poor in the ambit of financial sector. Research interest in this sector has been developed because of importance of financial sector in the economies of today. There is ample macroeconomic evidence suggesting that the development of a country is strongly correlated with the development of financial markets (see e.g. Banerjee and Duo (2005). Greenbaum and Haywood(1973) reviewed the history of American financial market and argued that the growth of wealth is the determinant of demand of financial innovation. Financial markets play critical roles in mobilizing savings, evaluating projects, managing risk, monitoring managers, and facilitating transactions. Therefore the development of financial markets is critical for a nation's innovation (Schumpeter, 1911).

What is Financial innovation?
Financial markets have continued to produce a multitude of new products, including many new forms of derivatives, alternative risk transfer products, exchange traded funds, and variants of tax-deductible equity. A longer view suggests that financial innovation like innovation elsewhere in business is an ongoing process whereby private parties experiment to try to differentiate their products and services, responding to both sudden and gradual changes in the economy.(Miller,1986). "Financial innovation is viewed as the "engine" driving the financial system towards its goal of improving the performance of what economists call the "real economy."In a wide sense financial innovation is the creation of new approaches for the financial industry. It can be in the form of new types of security or money management process. In financial innovation new instruments are designed for investors that have never been offered before. Financial markets have continued to produce a multitude of new products, including many new forms of derivatives, alternative risk transfer products, exchange traded funds, and variants of tax-deductible equity. Financial innovation includes: "new financial instruments, new decision processes and criteria, cultivation of new markets for financial instruments, new organisational and managerial practices and new institutions" (Bhatt, 1995:9). Frame and White (2004) defined financial innovation as "representing something new that reduces costs, reduces risks, or provides an improved product/service/instrument that better satisfies participants' demands" (Frame and White, 2004:118). The principal role of financial innovation is to make markets more complete so that firms, households and governments can better finance, invest and share risk among each other (see for example Allen and Gale, 1997, or Acemoglu and Zilibotti, 1997). Zhou and He (1985) remarked that financial innovation is the diversified economy phenomena, including the appearance of new financial assets, new financial market and new medium of payment. Empirical studies of the adoption of financial innovations have focused on the introduction of automated teller machines (Hannan and McDowell (1984, 1987) and Saloner and Shepherd (1995)), patents (Lerner (2002)),off-balance sheet activities of banks (Molyneux and Shamroukh (1996), Obay (2000)),junk bond issuance (Molyneux and Shamroukh (1999)) and corporate security innovations (Tufano (1989).

Financial innovation and poverty reduction:
Since financial innovation contributed a lot in development of new securities and financial market but it also helped financial sector to be accessible for a common man also. Researches in this area shows that development of a viable financial sector is vital for both economic growth and poverty reduction (World Bank, 2004; DFID, 2004a) . After realising the fact that economic development of a country cannot be possible without the involvement of rural area and poor, many new financial institutions and instruments were framed keeping in view of financial inclusion of the poor but even then Financial exclusion was substantiated by the fact that as per the World Bank estimate in 1995,in most developing countries the formal financial system reaches only the top 25 percent of the economically active population (Sinha, 2004). For the growth of a country and its overall development financial inclusion was necessary thus it became the one of priority for rural section of society thus Financial inclusion has been discussed in recent years, particularly in banking circles with the main objective of delivering affordable banking services to the disadvantaged sections of the society,

i.e. clients who belong to the unorganised segments of the economy and per force have to depend upon non-institutional sources of finance (Rao, 2007; Ray and Singh, 2006) . Research also suggest that in many of the least developed countries (LDCs) the rural financial market is often fragmented and unable to meet the finance needs of the rural population, especially for investing in agriculture, the predominant sector. (Besley, 1994). Generally rural economy is financially very insubstantial and there is lack in the availability of credit facility at a reasonable rate. They need finance for up gradation of method of production and for new technology. Finance is also required for commodity marketing, sometimes through inventory-backed financing, which offers rural producers, traders and processors the opportunity to improve household income through adopting better produce marketing and raw material procurement strategies (Coulter and Onumah, 2002). According to world poverty report 2011 there are one billion people who live in poverty in rural area and large proportion of poor and hungry are children and young people. Recent estimates shows that only 2.7 billion people around the world have no access to formal financial services. And only 10 per cent of even the most basic formal financial services reach rural communities (IFAD,201I).

Need of financial service for poor:

The population of the developing world is still more rural than urban: some 3.1 billion people, or 55 per cent of the total population, live in rural areas. Despite massive progress in reducing poverty in some parts of the world over the past couple of decades notably in East Asia – there are still about 1.4 billion people living on less than US$1.25 a day, and close to 1 billion people suffering from hunger. At least 70 per cent of the world's very poor people are rural, and a large proportionof the poor and hungry are children and young people. (Poverty Report 2011)WWB research shows that the poor save, generally in small amounts, an estimated 10 to 15 percent of their monthly income. The need for formal savings options is crucial: without them the poor are forced to keep cash at home or in informal savings groups which are risky and money can be lost.

The poor need sustainable financial services for different reasons they need;

Micro savings deposit facilities for:

- the safekeeping of savings
- consumption-smoothing
- emergencies
- accumulation of resources
- self-financing of investments

Microcredit, with access to loans of various sizes and maturities for:

- external financing of investments
- consumption-smoothing
- emergencies

Microinsurance, including specialized insurance services (life, health, accident or cattle insurance) and nonspecialized services (providing social protection through access to one's savings or to credit in cases of emergency) for:

- risk management
- social security
- loan protection.IFAD,(2000)

New Innovative Techniques and poverty Reduction:

Mobile Banking

Mobile banking empowers retail and corporate banking customers to access the banking services. Information and communication technology (ICT), particularly mobile phones, is bringing a revolution in information even to remote rural areas. Use of mobile phones is expanding exponentially, and handsets are now affordable for many poor rural people. Mobile phones have greatly reduced market transaction costs for smallholder farmers, making it possible to find out product prices from markets (thus reducing risks related to unequal access to information), contact buyers, transfer money and arrange loans. More and more (short message service [SMS]-based) services of relevance to poor rural people are now provided by mobile phone. (World Poverty Report 2011) .There are 5.6 billion mobile phone users in the world. This can help to provide banking services to those who are presently an unbanked portion of society specially the poor in rural areas of developing countries. The Financial Facility Remittance projects also promote the integration and use of new technologies, such as mobile money transfers and mobile banking, that benefit remittance recipients in rural areas.(World Poverty Report 2011).Many countries are even concerned in this like The Ministry of Finance has recommended consistent tax treatment for mobile banking operations to support national outreach to rural and remote areas. In Mexico, a series of diagnostic and data gathering exercises carried out by or on behalf of the financial authorities identified both gaps and barriers in critical areas. These issues were addressed in Mexico`s recently issued regulation on agents, including mobile network operators to set up agent networks and manage mobile accounts on behalf of banks; mobile banking scheme and specific regulation for mobile banking accounts (simplified regime) and limited scope banks "niche banks"(ATISG Report 2010) . The use of this service can be availed only if the users are aware of the service that how to use and are financially literate. Mobile money's first big success in serving poor people came when Kenyans discovered how useful it was to be able to "send money home" safely, quickly and cheaply through M-PESA. As mobile money moves from transfers into savings and loans, it will need to demonstrate a similar leap in the usefulness of its products. (CGAP Microfinance Blog , March 21,2012) What poor people need is: first, convenience, being able to transact near where they live and work; second, trust, putting their money with organisations that seem to care for them and who they feel are going to be there for them when they need them the most; and, third, affordability – being able to transact in small amounts at reasonable cost (Mas,I).

Branchless Banking

Providing financial services without relying on bank branches is another step to include more individual to access the financial services in remote and rural areas. Branchless banking is "the delivery of financial services outside conventional bank branches using information and communications technologies and non-bank retail agents, for example, over card-based networks or with mobile phones." (CGAP 2009).The technological brawn, sophisticated banking and widespread financial literacy seemingly required to deploy mobile-money programs are, of course, heavily concentrated in the developed world. It can help to access financial services in more convient way and at low cost.According to the World Economic Forum's "Mobile Financial Services Development Report," roughly 10% of Kenya's 40 million people use mobile-money initiatives like Safaricom's M-Pesa. The branchless banking platform enables users, armed with only their mobile phones, to pay bills, deposit and withdraw money as well as transfer funds to M-Pesa's users and non-users alike. (Wall Street Journal Market Watch 28 Feb. 2012) **.**The essential proposition of branchless banking that financial providers can reduce fixed costs by using existing facilities and devices, whether owned by the customer (e.g., mobile phones) or by agents has caught the attention of providers. Success in branchless banking ultimately depends on offering customers a service proposition that is superior to existing options. Poor people in the unserved majority will use new electronic services when these services meet real needs (CGAP,DFID 2009**) .**

Microfinance:

Microfinance services have always focused poor and targeted to make productive investments. Ledgerwood defines microfinance as the provision of financial services like savings, credit, insurance and payment services to low-income clients, including the self-employed (Ledgerwood, 1999). It is thus the provision of a board range of financial services such as deposits, loans, payment services, money transfers and insurance to poor and low income households and their micro enterprises (Sriram and Kumar, 2007).For the last few decades microfinance has played an important role in meeting the financial needs for the poor. Microfinance institutions provide a variety of financial services designed for poor clients like (savings products, microcredit, payment services, micro leasing remittances and micro insurance etc.) and has emerged an important tool with the use of new technology, policy reforms and financial innovation across the world. Microfinance institutions (MFIs) have multiplied since 1990; despite the high transaction costs and risks associated with operating in the rural areas, they are getting ever-better at reaching out and responding to demand there. The most innovative are experimenting with ways of enabling the poorest rural people to access financial services. (World Poverty Report 2011). Financial Access 2010 reviews that survey responses from 142 economies and updates statistics on the use of financial services found that many nonbank institutions also provide financial services and some even have specific financial inclusion mandates. These include cooperatives, specialized state financial institutions, and microfinance institutions. In a number of West African countries—Benin, Burkina Faso, Côte d'Ivoire, and Niger deposit-taking microfinance institutions have more depositors than do commercial banks, which suggests that nonbanks can be an important player in providing basic deposit services. Commercial banks mainly target urban areas. Most bank branches are located in urban areas, representing 88 percent of all financial institutions in urban areas. On average, only 26 percent of all bank branches are in rural areas, compared with 45 percent for cooperatives, 38 percent for specialized state financial institutions, and 42 percent for microfinance institutions . (Financial Access 2010)

Islamic Microfinance:

Islamic banking is growing at a rate of 15% for the last three decades. Islamic microfinance is a new concept in microcredit that caters needs of poor all over the world. -Islamic microfinance is becoming an increasingly popular mechanism for alleviating poverty, especially in developing countries around the world. The Islamic finance industry as a whole is expected to reach over $2 billion dollars in 2012 and is a continually growing sector due to its ethical principles and prohibition of riba (interest). (International Islamic News Agency, 22 Feb. 2012). Since traditional microfinance is based on interest though very low in some cases where as Islamic microfinance is based on interest free principle and favours investing only in those projects that are in compliance with Shariah principle and benefits society at large. Funds to Islamic microfinance may be provided by religious contributions through the institutions of Awqaf, Zakat, Sadaqat, Qard-Hasan and other charities.

Social Entrepreneur:

Social entrepreneurs plays an important role in reducing the level of poverty among many poor and developing nations. By combining innovative ideas from individuals and investments from public, private, and civil society organizations, such entrepreneurs can guide complex global food systems and rural institutions toward their goals. Social entrepreneurship is a drive for social missions that combine business principles and motivations are emerging as promising approaches to international development. Recent experiences have shown that introducing entrepreneurial spirit into the development process can improve the effectiveness of intervention programs. World history shows that every society produces its own social entrepreneurs to solve their problems. (International Food Policy Research Institute 2007), Villgro is a good example of social enterprise that promotes rural innovation-based enterprises as a business incubator that turns grass roots innovations into commercial enterprises. Since 2001 it has identified and grommed innovation for rural benefits. Villgro empowers rural development by identifying and incubating innovations that can be translated to market based models thus impacting thousands of rural households. In efforts to impact rural life, they promote social entrepreneurship and work with different stakeholders to create and support an eco-system that empowers social entrepreneurship by means of seed funding, mentoring, networking and recognition. They have impacted over 360,000 rural users with technology & solutions reaching the grassroots. They have identified and activated more than 2000 social innovators. Villgro has impacted more than 3.6 lakh lives so far.(Villgro). In Tanzania's Iringa region, an innovative idea to identify village volunteers and train them to monitor child growth as part of an integrated nutrition program helped to reduce infant mortality and child malnutrition substantially. Although successful, many of these advances are largely isolated, typically developed as local interventions that target a limited geographic area. (International Food Policy Research Institute 2007)

Conclusion and suggestions:

For the last two to three decades a lot has been done in the field of financial innovation keeping in view of the demand of particular time but its accessibility to a common man is still a dream for many rural poor. There is a substantial gap between demand and supply of financial services to poor according to their need and accessibility. Steps are needed to make people aware of financial services available to them as most of rural are not financial literate. There can be special awareness camps by financial services provider that enable people to use the technology for cheaper financial services at their door steps. There is need for more financial services that must be compatible according to according to need of people in rural areas. Some of areas that need focus from this aspects are mentioned below.

Micro credit cards:

Financial institution should be encouraged to issue micro credit cards to rural people that must enable them to use it up to a limit depending upon creditworthiness of cardholder but at nominal or very low interest rate. Camp card or my bonus microcredit cards are examples of it but these should be made available at large scale to rural people.

Islamic microfinance:

Some people of Muslim community don't participate in traditional banking system because of component of interest involved in it. Since interest is strictly prohibited in Islam so they prefer to remain out of system of banking. In those cases Islamic banking should be encouraged and govt. should incorporate suitable working environment to operate these institution at par with other institutions.

Using bank facility for wages to daily wagers:

Daily wagers that are employed at low level should be paid cheque or money should be transferred in their account at all low level so that they might withdraw as much money as per their daily need and rest they should keep with bank. This may inculcate their habit of saving.

Opening of more microfinance branches at village level:

There should be more microfinance branches at village level that have no such branches at present so that it must cater their needs in an effective way. These branches should be open in those areas that are either financially excluded or have low access to it.

Developing financial literacy among rural poor:

Majority of poor are not financially literate they have least knowledge of working of financial system and particularly financial products and thus cannot use which service of medium suits best for their need. So some steps are needed to be taken to make them aware of financial services and products that enable them to achieve the most benefits of existing services.

References:

[1] Acemoglu, D., and F. Zilibotti, 1997, "Was Prometheus Unbound by Chance? Risk, Diversification and Growth", Journal of Political Economy, 105, 709-751.

[2] Allen F. and D. Gale, 1997, "Financial Market, Intermediaries and Intertemporal Smoothing", Journal of Political Economy, 105, 523-546

[3] ATISG Report(2010), G20 Financial Inclusion Experts Group, 25 May 2010 Available at http://www.ausaid.gov.au/publications/pubout.cfm?ID=8173_8304_3848_5820_7078

[4] Banerjee, A. V. and Duo, E. (2005), Growth theory through the lens of development economics, in P. Aghion and S. Durlauf, eds, `Handbook of Economic Growth', Vol. 1 of

Handbook of Economic Growth, Elsevier, chapter 7, pp. 473-552.

[5] Besley T. (1994). How do market failures justify interventions in rural financial markets? World Bank Research Observer 9: 27–47

[6] Bhatt, VV (1995) Financial systems, innovations and development. New Delhi ; London: Sage

[7] CGAP,DFID 2009, "Scenarios for Branchless Banking in 2020" October 2009.

[8] CGAP,(2009) ,"Scenarios for Branchless Banking" Focus Note 57.

[9] CGAP,The World Bank 2010,"Financial Access 2010 The State of Financial Inclusion Through the Crisis" 2010

[10] CGAP Microfinance Blog , 2012 "Product Innovation that Provides Useful Services for the Poor: P9 and Jipange KuSave" 21 March http://microfinance.cgap.org/

[11] Coulter, J. and G.E. Onumah (2002). The role of warehouse receipt systems in enhanced commodity marketing and rural livelihoods in Africa. Food Policy 27: 319–337.

[12] DFID (2004b). The importance of financial sector development for growth and poverty reduction. Policy Division Working Paper. Department for International Development: London, UK

[13] Frame, WS and White, LJ (2004) Empirical Studies of Financial Innovation: Lots of Talk, Little Action? Journal of Economic Literature 42**:** 116-144

[14] Greenbaum S, Haywood C. (1973),Secular Change in the Financial Services Industry. Journal of Money Credit & Banking, 3(2):571-589

[15] Hannan, T. and J. McDowell (1984), "The determinants of technology adoption: The case of the banking firm." Rand Journal of Economics 15 (Autumn):328-335.

[16] Hannan, T. and J. McDowell (1987), Rival precedence and the dynamics of technology adoption: An empirical analysis. Economica 54(May):155-171.

[17] IFAD,(2011),IFAD Annual report 2010.

[18] IFAD,(2000) Rural finance for the poor from unsustainable projects to sustainable institutions,From a presentation by IFAD to a regional microcredit summit, October 2000 Available at http://www.ifad.org/pub/other/rural_e.pdf

[19] International Food Policy Research Institute (2007)" SOCIAL INNOVATION AND ENTREPRENEURSHIP Developing Capacity to Reduce Poverty and Hunger" 2007. Available at http://www.ifpri.org/sites/default/files/publications/beijingbrief_babu.pdf Accesed on 25March, 2012

[20] International Islamic News Agency, 2012 "Islam/Economy: "Islamic Microfinance: A Model for Alleviating Poverty" Feb 22 http://iina.me/wp_en/?p=1006955

[21] Ledgerwood, J. (1998). The Micro finance Handbook: An Institutional and Financial Perspective, SBP Technical Paper Series, December

[22] Lerner, J. (2002), "Where does State Street lead? A first look at finance patents, 1971-2000", Journal of Finance 57(2), 901-930.

[23] Mas,I (2010). "Savings for the Poor Banking on mobile phones", WORLD ECONOMICS , Vol. 11 , No. 4 , October–December 2010

[24] Merton, R.C. (1992), "Financial innovation and economic performance", Journal of Applied Corporate Finance 4(4):12-22.

[25] Miller, M. H. (1986), "Financial innovation: The last twenty years and the next", Journal of Financial and Quantitative Analysis 21(4):459-471.

[26] Molyneux, P. and N. Shamroukh (1996), "Diffusion of financial innovations: The case of junk bonds and note issuance facilities", Journal of Money, Credit and Banking (August) 502-526.

[27] Molyneux, P. and N. Shamroukh (1999), Financial Innovation (John Wiley, Chichester,England).

[28] Obay, L. (2000), Financial Innovation in the Banking Industry: The Case of Asset Securitization (Garland Publishing, New York)

[29] PNB Monthly Review, December, pp. 14-27

[30] Tufano, P. (1989), "Financial innovation and first mover advantages", Journal of Financial Economics 25:213-240.

[31] Rao, K.G. K. Subba (2007). "Financial Inclusion", Economic and Political Weekly, February 3, pp. 355- 60

[32] Ray, Sujit Kumar and Singh, Niraj (2006). "Inclusive Growth – Challenges before Banks",.

[33] Rural Poverty Report, 2011

[34] Schumpeter, J., 1911, The Theory of Economics Development (Cambridge, MA: Harvard University Press).

[35] Sinha, Archana (2004). "Micro Finance for Women's Empowerment", Kurukshetra, April,pp.31-38

[36] Sriram, M.S. and Kumar, Radha (2007). "Conditions in which Microfinance has Emerged in Certain Regions, Economic and Political Weekly , Vol. XLII, No. 49, pp. 67-72.

[37] Tufano, P. (1989), "Financial innovation and first mover advantages", Journal of Financial Economics 25:213-240.

[38] Wall Street Journal Market Watch 2012 "Mobile money faces developed-world challenge" 28 Feb. http://www.marketwatch.com/story/mobile-money-faces-developed-world-challenge-2012-02-28

[39] Women's World Banking WWB website ; Available at http://www.swwb.org/expertise/our-work

[40] World Bank (2004). Investments in Rural Finance for Agriculture. Agriculture Investment Sourcebook, Chapter 7 by Pearce, D., A. Goodland and A. Mulder. World Bank: Washington DC, USA

[41] World Poverty Report 2011.

[42] www.villgro.org Accessed on 25 March, 2012

AUTHOR

Mohammed Avais, MBA-Financial Management
Assistant Professor University of Jammu, Bhaderwah Campus
mavaisju@gmail.com.

Correspondence Author – Mohammed Avais, MBA-Financial Management
Assistant Professor University of Jammu, Bhaderwah Campus 182222
mavaisju@gmail.com. Mob- 09858695298