

INNOVATION IN PRODUCT DESIGN, CREDIT DELIVERY AND TECHNOLOGY TO REACH SMALL FARMERS

Y S P THORAT¹

[A] INTRODUCTION

I am extremely pleased to have been invited to speak today. I would like to thank the UCO Bank and the IBA for having afforded me this opportunity. Over the years this forum has evolved as an important platform for discussing issues pertinent to the Banking Industry and the theme for this Conference, – namely “Opportunities at the bottom of the pyramid” is extremely relevant for all of us.

However, the specific subject assigned to me reads like a ‘mini speech’ and I would like to reduce it to manageable proportions. May I, therefore, Sir with your permission redefine it as “Innovations in Product Design, Credit Delivery and Technology to reach SF/MF/TF etc.” If during my presentation some of the aspects are excluded, we could deal with them during the questions and answers session.

In the main I propose to deal with the products and delivery methodologies for reaching credit to small, marginal and sub-marginal farmers, who are located at the base of the

¹ Managing Director, NABARD

pyramid of the farming community. By the yardstick of numbers, Indian agriculture has increasingly become 'small farmer agriculture'. Small and marginal farmers together constitute nearly 80% of the total cultivators cultivating fragmented land holdings averaging around 1.41 hectares. For these groups of farmers agriculture is not merely an economic activity but a livelihood issue. For the growth initiatives on the anvil - particularly in agriculture - we have to consider empowering this category of farmers and finding solutions and innovations which enable them to be mainstreamed in the overall credit delivery system. A growth rate of 4% for agriculture may not be possible only on the strength of large farmers.

To begin with let us see whether and to what extent S/M farmers etc are included within the financial system. In this context the results of the recently published NSSO Survey 2003 read with the WB-NCAER survey of the same year are relevant.

[B] LEVEL OF FINANCIAL ACCESS

[i] NSSO 2003 RESULTS

Let me begin with the results of the NSSO 2003.

The survey points that out of the 147.90 million rural households in the country, around 89.35 million households or roughly 60% are cultivator households. Of

the cultivator households, roughly 49% (43.40) are indebted to either formal sources or non-formal sources or to both. By implication, nearly 51% of cultivator households translating into 45.6 million household are not indebted at all. The question to ask is “why?” Is it because 45 million cultivator households in India do not want credit or is it because they cannot access credit? When one notes the survey result that in the non-indebted category, 88% of the households are headed by SF/MFs with farm holdings of less than 2 hectares, the answer is clear. The action point for the banking system is to recognise this exclusion and find ways and means to reach out to this category of households. If this can done, it will go a long way in improving both volumes and outreach at the branch levels.

The second point is that of the 43.40 million households which are indebted to either formal or non-formal resources or both, ONLY around 54% translating into 23.3 million households, are indebted to formal sources. Here the question is whether this level of outreach adequate? How is it that despite the best efforts of the banking system the proportion of borrowers accessing the informal system continues to be as high as 45%. How has the informal sector managed to hold its own? What are the learning points for the banking system?.

The third point is that the outreach of the banking system at a 23.30 million cultivator households, when scrutinized

with reference to size of lands holding shows a distinct bias towards households with larger holdings. Data show that in regard to very small land holdings of say around 25 cents, the system's outreach is hardly 23%, while in regard to farm holdings between 5 and 10 acres it is around 65%. The issues here are as to how can this bias be corrected? What kinds of measures are required? How can we further simplify the credit delivery process and design products which are easily accessible by those with small land holdings. We also need to ask as to whether sub-marginal farmers are fundamentally risky and unviable credit propositions – or whether there is hope. Can such farmers be made viable merely by providing them credit or is financing of sub-marginal farmers a credit plus issue? What measures can we take to build the capability and capacity of such farmers? And is the banking system capable of meeting this challenge through its present mode of distribution of credit?

The fourth point is that of the indebted households at 23.30 million, if the five states of Andhra Pradesh, Tamil Nadu, Punjab, Kerala and Karnataka which show high levels of indebtedness to the formal and informal system are netted out, the overall level of indebtedness falls by nearly 6 percentage points from 48.6 to 42.7. What is more disturbing is that the level of indebtedness to only formal sources by cultivator households in the remaining states drops to barely 20%.

(ii) WORLD BANK – NCAER SURVEY 2003

The findings of the NSSO 2003 are broadly corroborated by the Rural Financial Access Survey which was conducted by the World Bank and NCAER in the states of Andhra Pradesh and Uttar Pradesh in the same year.

(iii) SUMMARY

Before going on let me summarise the main points :-

- First, of the total cultivator households at 89.35 million only 49% are indebted to formal or informal sources or both. The remaining 51% (88% of which cultivate holdings of less than 2 hectares) are not indebted at all.
- Second, among the households indebted to the banking system, there is a significant bias in favour of large farmers.

The one line conclusion is that within the agricultural matrix, a large section of SF/MF and TF are presently excluded and need to be brought within the banking fold.

[C] DOUBLING OF CREDIT 2004-05

Having tabled the NSSO results, let me hasten to add that both the NSSO and the World Bank-NCAER Surveys relate to the year 2003. We are today nearly at the end of 2005 and during this interregnum, there has been a development of significance by the banking system under the GoI's scheme for doubling the flow of credit to the rural sector and increasing its outreach. In this, the banking system has shown an outstanding quantitative performance. Data on this initiative have been reported directly by commercial Banks and gathered by NABARD in regard to RRBs and cooperative banks. These data show, *interalia*, that during 2004-05.

- ❖ Overall there was a 32% growth in the flow of agriculture credit by all RFIs from Rs.86981 crore to around Rs.115243 crore.
- ❖ 7.88 million new farmers were financed by commercial banks, RRBs and cooperatives taken together.
- ❖ 1/3rd of the total disbursement at Rs.21875 crore by public sector banks had gone to new farmers. Of this, around Rs.360 crore (or 1.65%) was purveyed to tenant farmers. This is important, because the flow of

credit to tenant farmers in the past has virtually been 'Nil'.

The point is that for correct perspective, the NSSO data therefore need to be seen in context of the performance of the banking system under the doubling of credit. However, even after the corrections have been factored in, it is clear that exclusion at the level of small and marginal farmers is an uncomfortable fact which has to be faced upfront. It is equally clear that significant scope exists for the banking system to expand its outreach to this category of clients through appropriate methodologies.

(D) FACTORS ACTING AS BARRIERS
TO CREDIT ACCESS

What are the factors, which act as barriers to credit access by small, marginal and tenant farmers? These have been well documented in literature and it is not my intention to go through them in an exhaustive way but merely to recount some of them.

From that from the borrowers side, the main factors relate to hassles that go with loan sanctions, including frequency of visits to the branch coupled with procedural and documentational complexities. I recollect that while assisting the Gupta Committee in 1996, many of these factors had been identified and flagged. Subsequent feedback indicated that a large number of the recommendations had been acted upon. Nevertheless, while

recently travelling through the backward regions in some States as part of the Expert Group on Investment Credit set up by the RBI, it was consistently represented to us by small cultivators that hassles and complexities continued to characterise the credit delivery process. The feedback was that in resource poor regions even the instructions issued by controlling offices take a long time to reach. In the sub-marginal category of farmers particularly oral-lessees, share croppers and tenant farmers, the main inhibiting factors relate to the absence of an enabling legal framework at the State level to facilitate credit access to these categories of borrowers. West Bengal is a notable exception where rights of tenant farmers are formally recorded for facilitating the flow of credit.

From the bank's side, the transaction costs inherent in servicing small loans to a large number of borrowers and the perceived risk cost in the absence of appropriate risk mitigation measures, continues to act as a barrier.

From the institutional side, poor health of the cooperatives which have the penetrative reach and which could cater effectively to small and marginal farmers has been an inhibiting factor. Hopefully this situation will improve once the corrective measures suggested by the Vaidyanathan Committee kick in. At the RRB, commercial bank level, particularly amongst branch managers located in backward regions and resource poor areas, inappropriate attitudinal

orientation has been reported. This has hindered access and we need to find ways and means around it.

[E] INNOVATIONS IN ACCESS TO CREDIT

Having dealt with the broad scenario relating to indebtedness, I now turn to innovations in addressing access related issues. I will deal with this under 3 heads. Innovations in products, innovations in delivery channels and innovations in support services. I will close my presentation with brief discussion on the way forward.

The basic question is “What kind of innovations are taking place within the laboratory of rural lending?” The original blue print for product design and process of course, is ‘production-oriented system of lending’. This was drilled into us when we joined as probationers, and despite the vicissitudes of time, this framework has dominated bank lending for agriculture. This is not to say that the banking system has not innovated over time. Far from it, but most of the major innovations by the banking system in regard to product design and processes, documentational simplification and application of technology to rural lending have come about in the post-reform period, starting with the SHG-Bank Linkage initiated by NABARD in 1992. Let us look at some of these innovations, which are interesting and have potential for being further fine tuned and upscaled.

(I) INNOVATIONS IN PRODUCTS

(a) SHG-Bank Linkage

Among innovations in products the most striking one is SHG-Bank linkage. This programme is, in a sense, a child of the reform process. Financial sector reforms motivated policy planners to search for products and services for delivering credit to the poor in a sustainable manner, consistent with high repayment rates. It was observed that the poor tend to come together - or can be induced to come together - in a variety of informal ways for pooling their savings and dispensing small loans. The contribution of NABARD in this regard was to recognise this initiative which had been catalysed by NGOs and to create a formal interface for these arrangements of the poor with the banking system.

From a modest beginning of 500 SHGs across the country, the product now extends to 1.6 million SHGs, linked with 35294 bank branches across the Indian union. Cumulatively, a sum of Rs.6.86 billion has been channelled through this product to the poor and around 24.5 million poor households have gained access to the formal banking system through this programme.

SHGs and SF/MF

In the context of the theme of this session which focuses on SF/MFs, it is pertinent to make a mention of two major studies, one internally done by NABARD and the other by APMAS in Andhra Pradesh. The NABARD study shows that 56% of SHG members are SF & MF and 31% agricultural labourers. The APMAS study corroborates this finding by reporting that 76% of SHG members in Andhra Pradesh are farmers and agricultural labourers with very small holdings. There is a lesson in this which seems to indicate that if small and marginal farmers indeed, even tenant farmers and share croppers, can be organised under appropriate group mechanisms such as a joint liability groups or as in Raitu Mitra Groups as in Andhra Pradesh and linked to banks, the possibility of extending finance to these excluded groups in a sustainable way may well be on the cards.

SHGs as Members of Cooperatives

Another innovation on the same theme is the one being tried out for example in Uttaranchal, where the Cooperative Societies Act has been amended to admit SHGs as members of cooperative banks. The Apex Bank and DCCBs in Uttaranchal are finding this innovation useful for extending outreach. Some of the State Governments have followed suit while others are considering the initiative for replication.

OBC Grameen Project

Oriental Bank of Commerce was one of the first Commercial Banks to pioneer micro finance under their “Grameen Project”. The USP is that unlike the SHG Bank Linkage model where the SHG or its representatives come to the bank branch to transact business, in the OBC model, bank officials go out to the groups on pre-determined dates for transacting business. This was a revolutionary step and one which needs to be emulated.

(b) Credit Cards for farmers

Kisan Credit Card

Having dealt with SHGs I now turn to a set of products broadly classified as Farmer’s Credit Cards. Of these the KCC is the most well known. Introduced in 1998-99, through NABARD, the KCC product was aimed at simplifying the procedures for providing timely and adequate short term institutional credit to farmers while concurrently reducing transaction cost for bankers. The product has done well and the number of KCC issued in successive years has grown steadily. As at the end of March 2005 the number stood at 51 million cards.

Grameen Credit Card

An innovation which could possibly be tried in regard to KCCs is to design a simpler card for households with credit

requirements upto Rs.50,000 called, let us say, the 'Grameen Credit Card'. This card could be structured on the basis of cash inflows and outflows at the farm household level and customised for small and marginal farmers. Depending upon the response of the borrowers and their repayment records, the card could even be extended over time to tenant farmers and oral-lessees.

Bhumiheen Credit Card

In this context, the Bank of India has introduced an innovative card called the 'Bhumiheen Credit Card'. This card aims at providing credit facilities to landless farmers/tenant farmers, share croppers etc. for a maximum limit upto Rs.25,000 per head including Rs.1000 as consumption loan. The scheme is open to all eligible farmers sponsored by SHGs, banks or reputed NGOs. I am given to understand that some of the Public Sector Banks have evinced general interest in this product and are working out their own variations.

(c) Grain Banks

In regard to products, a few state/region specific innovations deserve mention. Of these the first is the grain banks of the Eastern Region. The grain banks in the Kalahandi district of Orissa and other tribal tracts are village level mechanisms which enable farmers to pool their

produce at the time of harvest and draw upon it in time of need. This mechanism also enables banks to finance farmers in multiples of the value of grain deposited.

(d) Homestead Finance Model

While the grain bank model is popular in the tribal tracks, the homestead finance model of Kerala looks at the farm activities of small farm holdings in a composite way. Under this model, the peak level credit requirements of farmers are determined through the cash inflows/outflows methodology and a limit given. This product is gaining acceptance by banks in Kerala particularly among those operating in traditional/plantation in dominated areas.

(II) INNOVATIONS IN DELIVERY CHANNELS

(a) MFIs

Let us now turn our attention to some of the innovations in regard to Delivery channels. Of these, MFIs are one. MFIs have emerged as an important innovative channel for lending to the poor. Basically, MFIs are an extremely heterogeneous group, divisible into two broad categories. One set comprises a basket of institutions incorporated under various legislations such as the Indian Trust Act, Cooperative Societies Acts, MACS Act, Sec. 25 of the Companies Act. Institutions under this category are large in

numbers but operate on a limited scale and have a low level of business. The other set comprises a few MFIs which are registered as NBFCs and regulated by RBI. However not withstanding their small number they have outreach and purvey substantial credit.

The MFI channel has potential, provided it can overcome certain limitations regarding rate of interest, high transaction cost, paucity of owned funds and improvement in its governance structures.

(b) Financial deepening through Post Offices

Another channel which is being tested on a pilot basis involves Post Offices. As you are aware there are over a 150 thousand post office outlets in the country with relatively good accounting systems and cash transfer facilities. The Postal system is in need of 'renovation' as a number of its extant services are being phased out or replaced with latest technologies. Seizing this opportunity, a pilot project has been started by NABARD in Tamil Nadu for linking SHGs with post offices for increasing outreach in underbanked/unbanked areas. Basically this involves leveraging the postal network. The pilot project is under observation, but if it works, then perhaps micro finance as a product could be outsourced on increasing scale through this network.

(c) Farmers' Clubs

In the line of innovations, Farmers' Club are important. The club represents a grass root organization built through peoples' participation and aimed at disseminating farmer related information, facilitating the adoption of financial products of the banking system by farmers. The linkage between the rural branches of banks and Farmer Clubs and their beneficial impact is now being increasingly recognized and adopted by commercial banks on a larger scale.

(d) Village Development Boards

In regard to the NER, the general perception is that existing institutional structures have not been successful in achieving outreach. Recognising that the region is characterized by tribal structures, NABARD, in association with State Bank of India and the Government of Nagaland, has launched an innovative pilot project for financing 25 Village Development Boards for onlending to the individual members of local community groups. Under this project, a corpus fund of Rs.1 lakh per VDB is created with contributions of NABARD, State Government and Central Government and the VDB. A corpus fund account is opened and loans are extended to the VDB. All the 25 VDBs in Nagaland have opened their Corpus Fund Account and 5 of them have been already been financed. The innovation is still in its early stage and its performance is being tracked.

(III) INNOVATIONS IN SUPPORT SERVICES
- ENABLING ENVIRONMENT

(a) Agricultural Extension Services

The last set of innovations relates to support services i.e. those which facilitate an enabling environment. Of these extension is the most important. Technological progress and technical efficiency are two important factors, which influence the investment decisions of farmers. Both factors, to a large extent, depend upon the stock of information available and its effective dissemination at the grassroots level. While R & D in agriculture increases the stock of scientific knowledge, the extension mechanism facilitates its dissemination. Historically, this has been the responsibility of the state. In the post 'green revolution' period however, state driven efforts in extension appear to be inadequate in terms of coverage and outreach. While there is no doubt that public extension service should continue to play a lead role in the dissemination of technology, this could - indeed, should - be supplemented by farmer's organisations, NGOs, cooperatives, corporate private sector, input suppliers and MNCs. These entities are fast assuming the mantle of quasi extension agencies and can effectively provide information about the inputs and value addition through post harvest technologies particularly in well endowed regions.

(b) Market Linkages

Contract Farming and credit bundling

Farmers require not only Extension Services but also backward and forward linkages. In recent times banks have been partners in contract farming schemes, set up to enhance credit. Basically, credit bundling is a doable model because crop loans can be extended under tie-up arrangements with corporates for production of high quality produce with stable marketing arrangements. The only proviso is that the price setting mechanism for the farmer should be appropriate and fair.

Agri Service Centres – Rabo India

Rabo India Finance have developed a variation on the contract farming model by establishing agri-service centres in rural areas in cooperation with a number of agri-input and farm services companies. The services provided are similar to those in contract farming, but with additional flexibility and a wider range of products including inventory finance. Besides providing storage facilities, each centre rents out farm machinery, provides agricultural inputs and information to farmers. It also arranges credit, sells other services and provides a forum for farmers to market their products. This is a useful innovation.

Apni Mandi

Yet another interesting innovation is that of The Punjab Mandi Board, which has experimented with a 'farmers' market' to provide small farmers located in proximity to urban areas, direct access to consumers by eliminating middlemen. "Apni Mandi" belongs to both farmers and consumers, who mutually help each other. Under this arrangement farmers are supplied subsidized crates for packing their produce. At the mandi site, the Mandi Board provides basic infrastructure facilities. At the farm level, extension services of different agencies are pooled in. These include, inputs subsidies, better quality seeds and loans from Banks. Apni Mandi scheme provides self-employment to producers and has eliminated social inhibitions among them regarding the retail sale of their produce.

(c) Credit Risk Mitigation

Crop Loan Insurance

The last set of innovations in enabling support services relates to credit risk mitigation. This is an area of interest both to banks and farmers. The Government of India has experimented with crop loan insurance though the results have not been very satisfactory. The scheme has also not found wide acceptance among farmers because claim assessments are based on crop failure on an area basis rather than on an individual basis. Farmers have

represented that where compulsory insurance is resorted to, it increases the burden of borrowing from institutional sources. Once the transaction costs are added, the overall costs exceed the Prime Lending Rates significantly. This calls for innovation in the existing crop loan insurance schemes.

Weather Insurance Product

In this context, ICICI Lombard General Insurance has launched an index based rainfall insurance with the clients of local Area Bank in Andhra Pradesh. Under this arrangement an index is created based on an analysis of historical correlation between rainfall and crop (groundnut) yield by assigning weightages to critical time periods. The historical weather data is then mapped on to this index to arrive at a normal threshold index. The actual weather data is superimposed on this to arrive at the actual index level. In the event of a deviation in either direction (excess or deficient) between the normal index and the actual index, compensation is paid out to the insured on the basis of a pre-agreed formula. The product which was originally launched in regard to groundnut has been extended to various crops like oranges, coriander, soyabean and groundnut in UP, Rajasthan, MP etc.

(F) WAY FORWARD

Having recounted the innovations being carried out within the system let us now turn to the frontiers of experimentation where the 'Way Forward' lies. As already mentioned, the outreach of the formal system needs upscaling. Further, the delivery of financial services in the rural sector is characterised by high cost, inadequate banking infrastructure and poor communication facilities. Medium to high levels illiteracy and the lack of financial awareness tend to compound the operational challenges inherent in validating the customer at the field level. Technology, while having transformed banking for the urban educated, has not yet impacted the rural customer in the same way. The branch banking structure which has served India's urban centers well, has in its extension to the rural sector been characterised by inadequate outreach and high cost. Notwithstanding this, there is an all round recognition of an untapped market in the rural sector and the need for providing financial services in a sustainable way.

If this is to be done, we would need to innovate. Perhaps even think of whether we can move out of the traditional branch led model for servicing farmers and rural consumers. If such an innovation is envisaged, various channels could be considered for catering to different

customer segments such as farmers, agri-traders, aggregators and rural non-agricultural customers. Within the caveat that the introduction of new delivery channels and products would require regulatory clearance and satisfaction, I turn to some of the channel innovations which could be considered:

(a) Internet kiosk

Internet kiosks have already been promoted in some parts of the country by Internet Service Providers, agri-business corporates etc. These kiosks use upto date technologies such as wireless in local loop and v-sat terminals. The suggestion is that banks could partner these organisations and set up large networks of such kiosk in the rural sector. These kiosks would be owned and manned by individual entrepreneurs in partnership with the kiosk promoters. Such a partnership would provide an element of comfort to banks in extending finance. The kiosk would be structured to deliver a variety of services including insurance, loans and other financial services at the doorstep of the borrowers.

(b) Credit Franchisee

While the Internet Kiosk Channel could be experimented with at the village or cluster level, the credit franchisee model can be experimented with at the block level. Under

this arrangement, the credit franchisee would provide asset backed loans (auto, gold etc.) and other financial services. He would be an entrepreneur, contribute equity, have a good understanding of the local market and be willing to enter into risk sharing arrangement with banks.

(c) Financing of Marketing & Producer Cooperatives

The third channel relates to cooperatives. In the early 70's, a scheme had been designed by the RBI for financing of Primary Agriculture Credit Societies by Commercial Banks. This idea, with a slight change is still relevant. Commercial Banks could partner with agricultural marketing and producers cooperatives to reach out to farmers where branch networks are not available. Banks could either finance the cooperative for onward lending to members or finance the members through the cooperative structure. Lending to or through cooperative could forge a good synergy between the local knowledge of the cooperatives and the large funds available with the banking system for agricultural lending.

(d) ATM

It is well known that the rural sector continues to depend on the use of cash for transactions. Hence, the primary need for a financial institution, while servicing rural customers is cash disbursement and cash acceptance. In

order to meet this requirement, banks might have to work out low cost ATMs with innovative features, keeping the demand profile of the rural customer in mind. Rural ATMs could have unique features. They could be enabled to accept old notes and offer a variety of services including cash deposits, cash withdrawals, bill payments, third party transfers etc. The authentication of transactions would be undertaken at the back end and the ATM instructed to complete the transaction at the front end by disbursing cash or displaying information, as the case may be.

(e) Smart Card

On the product side it is widely accepted that the present loan appraisal and delivery processes of banks are cumbersome and time consuming. This could be addressed through an innovative product design, using the Smart Card technology for delivery of financial services in a cost effective manner. A one time limit could be set for the farmer by the bank and loaded on to the Smart Card through a secured mechanism. This methodology would lower the cost of operation and ensure timely delivery of the loans.

(f) Credit Information Bureau

Banks often cite the absence of credit information as a major hurdle in scaling up their client base in rural areas. Credit information tracking and sharing through a Credit

Information Bureau could enable lenders to provide incentives to those with good credit history and a strong deterrent to wilful defaulters. It would also facilitate the transition from group lending to individual lending over time. The Ministry of Rural Development has undertaken an initiative to collect information on a census basis of all the households in the rural areas. The information generated from these surveys could be used for supplementing information on the credit profile of borrowers. It seems to me that NABARD should seriously examine the idea of setting up a Rural Credit Bureau as a subsidiary.

(g) CONCLUSION

The innovations that are taking place in the rural hinterland are many. Each of these innovations offers potential to be replicated for the greater good of the poor and the unreached. However, what I have mentioned is merely the tip of the iceberg. A great deal of experimentation is going on—quietly and silently through the banking system. There is no doubt that change is happening. Personally, I find the pace, depth and variety of these changes extremely exciting. As competition among banks intensifies we should see a broadening and deepening of the innovation process. The Indian banking system has one outstanding merit. Given a crises, given a challenge it has always and unfailingly risen to the occasion. I have no doubt whatsoever that it will also

successfully find ways and means to reach the 45 million small cultivators who have not been reached so far at all. I say this not as a pious hope. Having spent over three decades in the financial system I say this as affirmation of my faith in the creative genius of our banks.

THANK YOU