ANNEXURE 4.1

Suggested Financial Services for rural clientele

4.1. Access to credit and other financial services such as savings and insurance products is increasingly considered as an important factor contributing to enhance welfare of the target clientele and their income growth.

4.2. Rural Banks on amalgamation have become bigger business entities and even those, which are yet to be amalgamated, have to strive to become big to withstand the competition. If the RBs have to make profit on a sustainable basis, they have to tread a new path with regard to their business portfolio. Some of the facts verifiable through published data indicate the RRBs / RBs are doing business at just 1/5th of their commercial bank peers. While their branch network & service area villages are almost equal to their counterparts.

4.3. Since the business portfolio needs an immediate push, these RFIs need to look at the gaps existing with regard to garnering the clients, coverage of the eligible adult population in their service area by opening at least one account.

4.4 (a) Every RRB has products to suit the customer's requirement. The RRBs are originally mandated for providing loans and advances to the weaker sections of the community. Presently their exposure is nominal in the high value loans. They have not ventured into financing high value loans, SMES etc.

(b). RRBs may be permitted to take up issuance of Bank guarantee, extending financial assistance to the trade and services sector, extending financial assistance for housing, village infrastructure, participation in the consortium advances etc.

(c) The restrictions for financing only target groups may have to be removed. This requires amendment to Section-18 of chapter –IV of the RRB Act 1976. The RRBs may have to keep exposure norms for the various kinds of activities. It is recommended that 60% of the RRB advances may be channalised to the priority sectors and at least 40% of aggregate credit shall go for the agricultural purposes. 40% of the advances in the RRBs can go to non-priority sector including commercial lending. The RRBs may be advised to increase the CD ratio to 80% by 2008. While there is no need to fix the exposure limit for Agricultural and SSI, exposure limit for trade, infrastructure etc. may have to be fixed. Lot of emphasis may have to be given for providing financial assistance for education of the individual and for setting up of Educational institutions in the rural areas.

4.5 It is disturbing to see that in majority of the states whose population aggregates more than 60% of the nation's population, the coverage of adult population is less than the National average of 59% as evidenced below:

State/ Union Territory	Current Accounts	Savings Accounts	Total Population	Adult Population (Above 19 years)	Total No. Of accounts	Acc/100 population
Rajasthan	689657	12139302	56473122	28473743	12828959	45
Arunachal Pradesh	10538	209073	1091117	544582	219611	40
Assam	378729	5071058	26638407	14074393	5449787	39
Manipur	12514	200593	2388634	1222107	213107	17
Meghalaya	24305	458779	2306069	1088165	483084	44
Mizoram	3441	117885	891058	476205	121326	25
Nagaland	13819	195452	1988636	995523	209271	21
Tripura	33257	638241	3191168	1784212	671498	38
Bihar	464511	13225242	82878796	40934170	13689753	33
Jharkhand	166007	5834341	26909428	13737485	6000348	44
Orissa	228160	7030004	36706920	21065404	7258164	34
Sikkim	4097	125365	540493	288500	129462	45
West Bengal	942733	21544753	80221171	45896914	22487486	49
Chhattisgarh	192067	3346898	20795956	11209425	3538965	32
Madhya Pradesh	553381	11731918	60385118	31404990	12285299	39
Uttar Pradesh	1324509	45804350	166052859	82229748	47128859	57
Andhra Pradesh	1156405	23974580	75727541	44231918	25130985	57
ALL INDIA	16552856	304349534	1027015247	541031553	320902390	59

Irony is the existence of very large number of RRBs / RBs branches in these states amounting to approximately 70% of the total RRB branches as detailed below:

Assam	2	27	397
Manipur	1	9	29
Meghalaya	1	4	51
Mizoram	1	8	54
Nagaland	1	5	8
Tripura	1	4	87
Bihar	5	38	1475
Jharkhand	6	21	387
Orissa	8	30	836
Sikkim	0	0	0
West Bengal	9	20	876
Chhattisgarh	5	17	429
Madhya Pradesh	19	47	1034
Uttar Pradesh	20	71	2852
Andhra Pradesh	8	23	1170
Total	96	364	10716
Total excluding North Eastern states	88	301	10073

This has brought out the fact that if these RFIs have to make progress, they should in the immediate future raise their coverage beyond national average and should go all out to reach 100% coverage levels.

4.6 Ensuring coverage of all eligible would improve the Deposit portfolio of the RRBs / RBs since their share is languishing at 7% for more than two decades. Intensive efforts could therefore, be initiated in 301 districts of the country, covering nearly 80,000 -100,000 villages (coverage reckoned @ 8-10 villages per branch). Even if 100 families or 200 adults per village are brought into the banking stream, they may add 80 - 100 lakh new accounts and 160 to 200 lakh new customers. This is equivalent to a new business of around Rs. 10,000 crore at the initial levels of operation.

4.7 ADVANCES PORTFOLIO

With regard to advances portfolio, majority of the RRBs/ RBs have a skewed portfolio tilted towards low earning activities (though they pertain to the mandate) and also easy businesses which can be done without any effort like loans for retail trade, small business, housing repairs, salary earners (especially State Govt. employees). If substantial part of the advances portfolio pertains to agriculture, approximately 90% of the same is in the crop loan category earning 7%. Despite the directives, even while doubling the credit during the past 2 years, the diversification portfolio remained at a meager 16% as evidenced below:

AGENCY	2005-06 (Amount Rs Crores)		
	Crop loan	Term loan	Total
Com Bks	93309 (88%)	12842 (12%)	1,06,151
Coops	32697 (88%)	4554 (12%)	37,252
RRBs	11768 (84%)	2308 (16%)	14,076
TOTAL			1,57,479

4.8 FACTORS AFFECTING THE PORTFOLIO

While studying the characteristics that differentiate Good & Bad RRBs, it was observed by BIRD that Good RRBs who had a very strong advances portfolio have adopted some good practices like:

1) Surveying the operational area for potential
2) Going through NABARD' PLPs and identifying various feasible activities
3) Looking into backward & forward linkages of various activities to decide on the financial feasibility and bankability
4) Preparing a perspective budget for the ensuring year and allocating the same branch-wise, sector –wise
5) Making a difference even in Generic products like KCC & SHG financing by putting some frills or some more attractive features

Besides the above, the Good performing RRBs have also attempted Market and Client segmentation to make a differentiation in the product offered. These practices had endeared even high net worth clients to the RRB and the ability to borrow higher amounts for diversified activities had enabled the banks to get higher yields on advances and resultant higher spread/ financial margin.

Diversifying the portfolio and also improving its quality has a direct correlation with HR practices since the Good performing RRBs have

- Participatory approach while deciding on the product, designing the features and launching it

- Since the product evolved out of consensus, staff could do the Credit Marketing with conviction
- Delegation of sanctioning powers had given further fillip to their beefing up a qualitative portfolio

RBs / RRBs have to fight for a space since the Commercial Banks which were in existence for quite sometime had loyal clientele as they were there in SPECTRUM – SCARCE AGE when it was much easier to make a lasting impression on consumers mind. But the RBs / RRBs which were neither existing nor had any impact in the initial years have to CO-CREATE BRANDS / PRODUCTS by collaborating with their customers if they have to survive in the current economic context. In view of this they may need to look into every conceivable opportunity to become a one-stop-all entity. The areas, which they can look for business, some of them might not have been touched hitherto, are: -

4.9 CROP LOANS

KCC has become a major instrument for delivering the crop loans. However, RBs/ RRBs may take care that their crop loan portfolio did not have an excessive slant towards Fine Cereals since they are not only losing their sheen as default proof advances due to progressive dismantling of MSP and also the recent non-hesitancy on the part of Government in importing food grains mainly to keep the consumer happy. In that event, with the stagnant productivity in those crops, the excessive loaning given may prove to be futile and the advances may turn NPAs. This situation coupled with the environmental disaster gaining momentum due to overdraft of ground water for cultivation of paddy & sugar cane (water guzzlers) may jeopardize the long-term interest of the RFIs if Crop Loan portfolio is again skewed towards one or two crops.

In view of this, RBs may encourage financing the crops whose Water Use Efficiency is high and at the same time have marketability.

In order to get returns on sustainable basis, the RRBs may look into the following activities also.

HORTICULTURE

POMOLOGY

1) Fruit orchards
2) Grape gardens
3) Straw berry fields
4) Citrus fruits in non- traditional areas
5) High Density Mango

OLERICULTURE

1) Regular vegetables
2) Hybrid varieties
3) Exotic vegetables
4) Export oriented vegetables
5) Green house for productivity & quality
6) Mushroom – industrial scale

FLORICULTURE

1) Traditional culture
2) Shade net / Poly house for domestic consumption
3) Green house & State –of –the – art Technology for export

AGRO & FARM FORESTRY

1. Poplar
2. Eucalyptus
3. Bamboo
4. Jatropha
5. Acacias
6. Bixa
7. Medicinal & Aromatic plants

FISHERIES

Inland

1) Fresh water fisheries
2) Fresh water Prawns
3) Fresh water Pearl culture

Brackish & Marine

4) Brackish water – extensive
5) Brackish water – intensive
6) Trawlers, Bay liners & Purse seines

ANIMAL HUSBANDRY

1) Dairy Farms
2) Sheep Farms
3) Horse Breeding farms
4) Poultry Farms – Integrated
5) Exotic birds – Emu & Ostrich

OTHER SCHEMES

1) Lift Irrigation Schemes
2) Sugar mill financing - Cogeneration, Ethanol refineries
3) Cold storages & Reefer Containers
4) Rural Godowns
5) Agri Marketing Infrastructure schemes
6) Watershed development
7) Rural Infrastructure
8) AEZ & Contract farming

PROCESSING INDUSTRY

1) Cereal milling & Marketing
2) Fruit & Vegetable processing
3) Fresh fruits & vegetables export
4) Cold chain & CA containers
5) Fish processing
6) Dairy Milk route, Bulk coolers, Chilling plants, Processing & Exporting Units
7) Poultry meat processing units
8) Egg powder units
9) Ready to eat snacks/ wafers

OTHER INDUSTRIES

1) Paper & Rayon industries
2) Ply wood
3) Biomass based power
4) Eco friendly industries
    a) Neem based
    b) Microorganism based (*Trichoderma viridi)*
    c) TBOs
5) Seed Industry

Other Innovative areas

1. SHGs for outreach
2. Micro enterprises
3. MLFV
4. JLG
5. ITES related

To develop a qualitative portfolio, the banks may also think of offering some innovative products like:

4.10 **Rural credit cum debit card**:

While it may take a few weeks to months for the bank to come out with a new product or refinements and revisions in the existing products (based on customer needs) on account of various stages involved in new product development or product refinement; the bank will be able to offer immediately two products to the client. While one of them could be a *no frill savings bank account* (to meet the thrift needs of a client), the other could be a *General Credit card* (to meet his emerging credit needs) or the bank could club both these products in to a single instrument, where the bank could pay interest on credit balances at SB rates and the customer could pay interest on net debit balance. In the initial stages, this could be a pass book to be operated through cheque leaves and withdrawal slips in the branch. With the computerisation of the branch and introduction of PDAs, the bank could graduate this product to a biometrics based smart card This could not only reduce the cost of intermediation, but would also provide unlimited services to the client.

4.11 PORTFOLIO COMPOSITION

In order to have an orderly growth and also withstand the shocks, the RBs / RRBs may have portfolio composition as detailed below:

S.No	ACTIVITY / SECTOR	% of Portfolio	Interest rates
1	Crop Loan Small land holders (<0.5 acre), Tenant Farmers & Agrl. laborers (minimum 20% of total)	40%	7%
2	ATL / AATL	15%	10 -12%
3	RNFS	5%	10 -12%
4	SHGs	5%	10%
5	OPS	5%	10%
6	Rural Credit –cum-Debit card	10%	12%
7	NPS	20%	12%
	TOTAL	100%	

By having a portfolio on the above lines, the RBs / RRBs are meeting their mandated obligations by advancing almost 60% of loans to agriculture & allied and NPS not more than 20%. Further, balancing the portfolio on the above lines would given even higher Financial Yields and thereby increase the profitability.

4.12 NON –CREDIT PORTFOLIO

RRBs may have to seriously look into the non-fund based income generating portfolio like:

1. Demand Drafts on 100% commission basis (Tie up with New Generation Banks)
2. Bank Guarantees
3. As insurance agent
4. As an e-seva entity where all bills can be collected on a commission basis

(iv) RRBs may consider introduction of "Floating Rate Deposits" where in the interest rate on deposit would be linked to a bench mark' or anchor interest rate. Floating rate deposits are unlike fixed interest rate deposits which are in vogue today. Fixed rate instruments are damaging to depositors if subsequent to making the deposit, the market interest rates rise(depriving the depositor of the benefit of higher interest rate) and to the banker if rates subsequently fall. For tackling such interest rate volatility, floating rate deposits are considered appropriate especially for deposits of long maturity- generally 5 years. In case of RRBs, the appropriate bench mark could be the rate for the relevant products of the most important competitor.

(iii) There is a need to reorient the traditional products and redesigning of existing products. Some of the suggestions in the regard are as under:

? Loan against deposit:
  - Introduction of a new product of Over draft limit' against deposit which will have a cheque book facility. The interest rate on the overdraft amount could be 3-4% higher than the deposit (instead of 2% in case of demand loan). Thus the customers will have flexibility to withdraw and repay as per their convenience. There will be no restriction on withdrawals or any such condition that one has to repay the old out standings first to avail any further withdrawals. For this, the customers will have to pay a nominal interest rate extra (1-2%). Since loan against deposit is a very popular product, this facility will make it much more customer friendly and at the same time a more viable proposition for the bank.
  - The above product would be in addition to the existing system of demand loan

? Crop loan
  - Treat Primary Agricultural Co-operative Societies (PACS) as the closest competitors in this segment of business and not the commercial banks.
  - Introduce cash credit limit for the borrowers who show good repayment behavior. This could be on the lines of `Kisan Credit Card' being introduced by many commercial banks.
  - The above mentioned cash credit limit would be in addition to the existing system of crop loan

? Tractor loan
  - This segment is also equally sensitive to non-financial factors like location of branches, time taken for disbursement, etc. Hence the banks need to address these issues.

- This product needs redesigning with regard to margin money requirement, security (informal) deposit mobilization, etc. It is felt that borrowers may be willing to pay extra interest (which would basically be risk cost) for relaxation on some of the requirement

? Consumer durable advance

- Provide over draft limit to employees to the extent of say 75-80% of their salary especially if they deposit salary with the bank
- The interest rate should not be too exorbitant to scare away good customers.

? Staff loan

- Besides the existing subsidized loan schemes for specific items, there is a need for providing liberal and non-subsidised loan to the staff. It is felt that the staff would be too willing to avail loan facility as per the normal procedure and interest rate applicable to consumer advance for general customers.

Similar exercise could be attempted for other products of the banks.

Experience from other Countries

Many countries have tried to provide variety of financial services to their rural clientele. The agricultural and rural sectors ,particularly in developing countries are usually characterized by having a lower, often much lower access to financial services compared to urban population and other economic sectors. Some of the products which have been tried in African countries like are listed as under;

1) Credit Guarantees: The introduction of credit guarantee funds (CG) has been widely advocated by DFIs' management's and ultimate client interest groups to overcome credit rationing and collateral requirement that couldn't be met adequately by such clientele. In particular the use of such guarantees were once considered by many as instrumental in assisting small scale farmers, rural micro enterprises and other who were shut out of the formal credit markets due to the high administration costs required to cover the risk of their small loan demands. Six arguments that are frequently voiced to support the introduction and subsidizing of credit guarantee : re listed below :

- Overcoming collateral constraints
  - Offsetting the "excessive" credit risk in lending to small farmers
  - Addressing information constraints,
  - Compensating for low profit margins
  - Modifying intrinsic characteristics of small businesses and
  - Inducing learning and generating lending's additionally

The performance of many CGs, however, increasingly gave rise to counter-arguments on theoretical and practical grounds, mainly underscoring that the CGs' performance reflects a waste of scarce public resources that could more effectively assist development in many other ways. The counter-arguments against the CGs also highlight the lack of similarity between banks in developed and developing countries when the latter have often preferred "inside lending" related to firms that their owners possess and exploit the CG resources in maintaining the inside lending and bailing - out their subsidiaries and deteriorating loan portfolios. CGs were evaluated as costly to operate and that their related additionality is either doubtful or very costly to maintain (including the economic cost of crowding out of other clients

that eventually don't receive credit due to the bias and direction of credit attributed to the CGs).

A pivotal issue in assessing the efficacy of CGs is whether they have an improved way to assess and price risks compared to the banks that benefit from the guarantees. If the answer to that crucial question is negative - which likely reflects the actual situation in many countries - then the verdict is unambiguous, pointing at no sound value added on one hand, and inflated aggregate administrative costs (of the CG and the guaranteed banks combined) on the other, thereby adversely impacting on availability of resources planned to finance (rural) development. In contrast, in the few known cases when the CG has distinctive superior knowledge related to assessment of risks, it could serve in disseminating knowledge to the banks on "how to do banking" - when banking is defined primarily as pooling and managing risks. The latter scenario obviously requires an exit plan when the FIs that benefit from the CGs maturely absorb the relevant know how and become capable of independently assessing credit risk.

Moreover, when the CG has no comparative advantage in assessing risks, there is a risk that banks would engage in opportunistic behavior that could further erode an already shaky financial discipline that leads to poor loan collection performance. Most operating, "development" related CGs price their products in a way that costs are not fully covered and the net worth of the CG is gradually eroded or replenished by the State or the donors. In a world that is increasingly under pressure to cut or to eliminate subsidies, the subsidizing of CG operations is a convenient tool to proceed subsidizing the target clientele because it is more difficult to track and quantify the (economic) subsidies involved in the CG operations and therefore it is also rarely done.

The crucial difficulty in assessing the effectiveness of the CG hinges on whether additionality is actually created. Measurement of additionality is extremely difficult even when only directed credit without CG operations is involved. When directed credit is involved, the generated additionality is not easy to quantify because there is no clear indication how much of the directed, concessionary loans would have been granted without direction and how many of the investments financed by the directed loans would have materialized without such loans. When the CG entered the arena, the additionality namely how much of the investments' value and the related loans would have materialized without the existence of the CG ?

Myers and Nagarajan studied several credit guarantee funds operating in Africa in the last decade and concluded that several CGs were terminated after extending very few guarantees and where CGs remain active, only little impact could be traced. Additionality was hardly noticed and almost no borrowers "graduated" to emerge as non-guaranteed borrowers.

2) Inventory Finance and Warehouse Receipts :

In developed countries inventory credit plays an important role in providing access to credit to agricultural producers and it serves effectively in overcoming credit constraints. Credit extended against commodities stored in bonded warehouses is a mainstay in developed countries where the prerequisites for facilitating such financial transaction (legal, enforcement, skills requirements and the like) are met. In contrast, in many developing countries these unmet prerequisites reflect the rudimentary level of development of the financial sector in general and that of credit inventory sub-systems in particular including transportation and storage facilities.

Appropriate inventory finance contributes not only directly to an increase in access to credit of producers but also indirectly to reduce the instability of inter-seasonal commodity prices.

Warehouse receipts constitute an effective instrument in ensuring loan security and consequently could add to credit enhancement and transforming of poor and low income farming households from non-creditworthy to creditworthy ones.

An Expanded Range of Collateralisable Assets :
Warehouse Receipts and Inventory

Warehouse receipts refer to the practice of depositing a finished good or agricultural product in a warehouse and receiving a receipt certifying deposit of the good. The receipt can then be used as collateral, with the advantage that the collateral has a high commercial value and can be easily liquidated. Three parties are involved in the transaction the farmer, who takes his goods to the warehouse, the warehouse operator, who classifies the goods and determines their value, and the bank or MFI, who issues a loan based on the receipt issued by the warehouse operator.

In order to ensure a successful warehouse receipts program, it is important to ensure that there is discipline and trust in the warehouse, the operations are on a sufficiently large scale, that there is a thorough understanding of annual price cycles that permits proper valuation and pricing of a stored product at any given moment, proper handling of the product and appropriate oversight.

Creditors gain from warehouse receipts by decreasing their risk, by reducing seasonal price variability, and by increasing liquidity. The drawback to warehousing is the cost of working with a establishing a warehouse. Entrepreneurs gain from warehousing by increasing profitability, price transparency, and food stability. The drawbacks for entrepreneurs are the increased tendency towards speculation associated with warehousing, the shortage of small-scale drying or preservation technologies for agricultural products, an unreliable supply or shortage of storage chemicals, and the costs associated with transporting goods to the warehouse

The Different Forms of Financing Inventory:

When the production marketing and financial "chain" includes an FI, a warehouse and a borrower, it is possible that the borrower would be a large farmer, a cooperative, a miller or a trader. Inventory credit may therefore include:

A. Cash crops for export
B. Imported produce
C. Inventory of stock for domestic consumption could involve borrowing against a presentation of warehouse receipt within the framework of a line of credit. At the harvest time the grain are deposited at the warehouse as security for the bank's loan. If the borrower defaults with respect to the loan repayment the bank will foreclose on the grain and sell it to a third party. This is a relatively simple arrangement that requires, however, meeting several conditions that in many developing countries are not easily met. The establishment of inventory finance requires, a profound understanding of the legal and enforcement framework, based on which reforming the legal system can take place so as to insure that the interests of the parties involved are well considered.

Commodity Price Risk Management provides tools that focus on insuring against downsized price risk by providing a minimum price for agricultural commodities to farmers based on market related instruments, namely put options that are purchased by individual farmers, cooperative of farmers, traders or (and possibly preferable FIs that extend credit to producers/marketers and related cooperative). The bank is motivated to be engaged in such activity by the likelihood of higher loan recovery and improved quality of its loan portfolio that would result from eliminating or reducing substantially the involuntary loan defaults.

Large scale producers in developed countries can choose from a variety of hedging instruments relying on their collateral that constitutes a prerequisites for credit. In contrast, small producers in developing countries are not able to use such hedging instruments (i.e. collars) because their performance risk is perceived as too high or they lack the collateral needed for purchasing the insurance using credit. As a result available strategies used by small scale producers are limited, leading them to opt for a minimum price embedded in a straight put option. Coupling the put option with an established loan agreement as a joint product substantially reduces the transaction costs for the creditor and insured borrower.

This hedging instrument - the use of the put option - is limited, however, to commodities that are traded in a liquid exchange and for commodities the farm gate prices of which are highly correlated with the prices in the liquid international exchanges. This, in turn, would clearly exclude agricultural commodities the prices of which are supported by the state. Also this instrument is not a panacea to a long term trend to price decline of a specific agricultural commodity as the duration coverage of the put option is limited for only few months.

Lessons learnt in the recent years suggest that organizing small scale, low-income farmers is, however, not an easy task. The African banks that lend for coffee and cotton for example have not been found, by large, eager to internalize the advantages associated with introducing this instrument in light of their often conservatism and lack of will to acquire the specific skills needed for introducing this insurance. Possibly, the advantages of introducing this instrument could be discussed at the highest level of the Ministry of Finance of some developed countries and not only with the FIs managements in the region, in light of the embedded benefits that could accrue to the financial and agricultural sectors including the capacity to lay off risk out of the country concerned.

Index Based Yield Insurance provides an incentive-compatible alternative to standard crop insurance schemes, assisting farmers in mitigating their production risks. In essence, the sale of this insurance can be similar to the way lottery tickets are sold, with contracts involving payment of an actuarially calculated premium that result in a payout under the scheme in the event of specific clear outcomes (i.e. when a given number triggers indemnity, such as when rainfall below a given critical predetermined amount during say, 50 days is not reached, or when yields over a given area-but not on a specific farmer's field fall substantially below long term average values).

4) Trade Credit to Farmers - Traders, input suppliers, processors and exporters, alongside to money lenders, are the main source of credit to poor, low-income farming households. The delivery of this credit is carried out as integral part of the inputs purchase and outputs sales. These traders/creditors succeed to overcome or mitigate many of the difficulties that stand in the way of normal creditors namely, asymmetric information, repayment enforcement, high operational costs, high transaction cost imposed on the borrower/client when credit is delivered as a separate, singled out transaction, compared to a small fraction of additional costs

that are needed when the credit is extended as a joint product of sale of inputs or purchase of agricultural produce and credit. These advantages allowed the traders to expand their operations to areas characterized by thin financial intermediation and unavailability of formal credit or formal credit that is offered only for much larger denominated and traditionally secured loans.

The variety of products and the duration of credit that is provided by the suppliers of inputs (fertilizers, seed and pesticides) and purchasers of agriculture produce are limited to short-term seasonal credit and advances. For many farming households this source presents the only option available for credit even when the credit terms reflect high, imputed interest rates that can be derived from comparing buying and selling inputs and produces on cash to their equivalent on credit terms. When the traders possess market power both the prices of the inputs he supplies or the price he paid for the produce, as well as the interest rate associated with the trade finance would reflect the lack of competition. Enhancing competition and organizing farmers to present higher purchasing/selling capacity and better negotiating terms in inputs purchase and marketing cooperative could mitigate the monopoly power exerts by some trade creditors.

Banks may often rightly prefer to lend to these traders when the traders need external finance to supplement their own equity because it may generate substantial saving on transaction and monitoring cost compared to bank's lending directly to a substantially larger number of tiny loans to farmers. Moreover, usually a trader/creditor knows better than the bank the ultimate users of the interlocked credit, how industrious they are and is more effective in ensuring loan repayment particularly when such credit is "self liquidated" and its repaid by subtracting its value and interest from sales to the trader himself. The trader/creditor would usually have the capacity to offer better security to the bank involved than the low-income farmers.

CGAP's mapping of agriculture markets in Mozambique found that lending arrangement between farmers and commodity trading companies are widespread and a critical source of finance. In Zimbabwe Gordon and Goodland found that the number of smallholders that receive input loans from Cotton, a large cotton ginner, exceeds the number of clients of any MFI operating in the country. Cotton and sugar are typical commodities whereby the cotton ginnery and the sugar refinery can easily facilitate advances to growers as they possess local monophony power and it wouldn't pay to a producer to market his produce to a competing processing plant because the transportation cost would be prohibitive. In contrast, commodities like coffee whereby, first stage processing is easy and are less bulky and more expensive per unit of weight or volume are more susceptible to 'side selling' when advances are extended by the trader.

The duration of trade credit vary and can last from few days to all season. Rates of interest also vary as well. Several studies indicate that 5 percent per month as popular benchmark in some countries but only 2 to 4 percent per month for rice farmers in India. Such rates are determined by other factors such as availability of credit from other sources particularly moneylenders, competition among traders, cost of capital and inflation.