

(51)

A Note on Internal Resource Management in Arid Regions  
Small Farmers-Credit Constraints: A Paradigm

SUMMARY

Small farmers and agricultural labourers have very limited investment opportunities in rain-fed regions. The institutional efforts to reach them through viable projects and other policy measures have not been very successful. This note describes the internal resource management of the small farmer through a paradigm that raises issues vital for more purposeful project design. Credit is one major input that largely determines the decision-making options of a small farmer vis-a-vis his entire farm family and social interaction process. The paradigm suggests that projects for bettering his lot should not only be concerned with the manipulation of the internal variables of a projects package, but would have to be so tuned as to fit in with the internal dynamics of a rational small farmer.

INTRODUCTION

Small Farmers and Agricultural Labourers have very limited investment opportunities in rain-fed regions. Therefore, any analysis to identify the type of project interventions needed to make this class of farmers viable, has to start with an understanding of initial resource management by small farmers. Their capacity to manipulate the terms of exchange vis-a-vis various institutional agencies and informal sources offering credit, input and advice is highly limited due to various factors which form an integral part of their internal cashflows. A paradigm presenting this aspect of small farmers' conditions is given in Fig. 1.

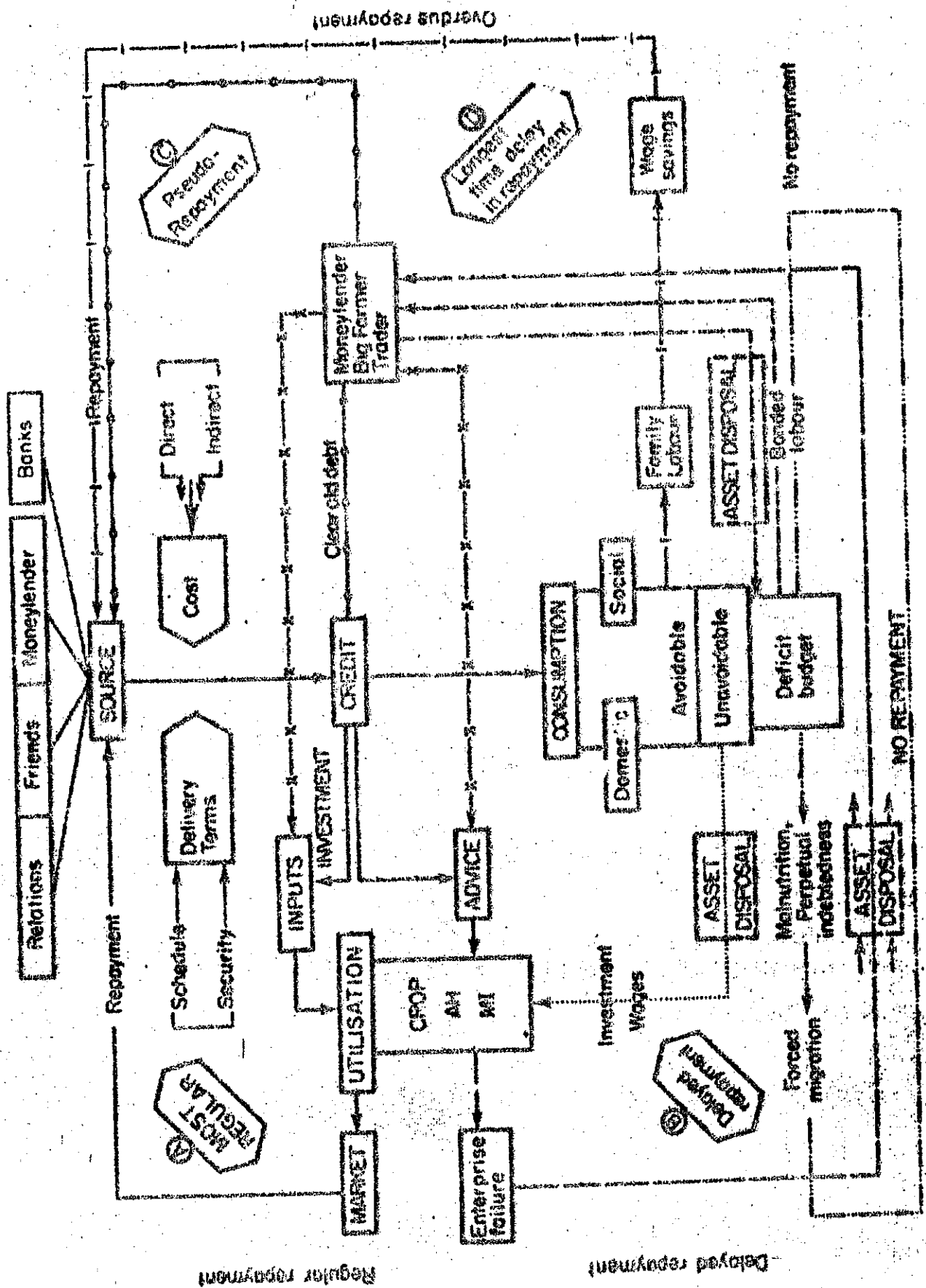


Fig. 1. Small farmer: credit constraints—repayment behaviour.

SMALL FARMERS - CREDIT CONSTRAINTS: A PARADIGM  
THE PARADIGM

The factors such as source of material and financial inputs, their delivery mechanism, allocative efficiency of such a farmer vis-a-vis his decision making options and capacity, generation of marketable surplus, prices and re-cycling of funds, etc., influence the internal cashflow of the farmer. If the economy of the farmer is in deficit, the relative role of these factors could be modified depending upon the nature, extent and timing of deficit.

Risk and uncertainty, inherent in arid environments, weave in a very precarious homeostatic balance to support the small farmer in his social and ecological context. This balance often acquires the form of negative homeostasis (due to heavy indebtedness, traditional technology, risk and drought effects, etc.), implying a tendency on the part of the small farmer to adjust towards sub-optimal levels of input investment to ensure lesser but certain production. The paradigm describes different paths that different classes of farmers in different farm situations may take to survive in a given socio-economic situation.

Referring to Fig. 1, one can observe that having decided to enter the investment cycle, a farmer may avail himself of a loan from say friends, relations, farmers, traders, moneylenders or bankers. However, before actually getting credit, the farmer has to agree to certain delivery terms and bear the direct and indirect costs of the transaction.

In the process of credit delivery, the farmer may have to forgo several investment options, depending upon the credit terms, including repayment schedule, security, collaterals, etc. for example, in the case of a moneylender being the input supplier as well as the source of advice, the process the farmer has to undergo, how and at what cost, is pre-determined in the credit market. The product and labour markets may well get inter-penetrated by the credit market if the same person also purchases the produce and labour of this farmer, either partly or wholly.

In the case of the ideal sub-set (entitled Most Regular-A), assuming that the farmer gets the desired inputs with the necessary technological advice, he may invest the credit in such enterprises as Crop, Animal Husbandry, Minor Irrigation, etc., hoping to get enough marketable surplus to pay back to the initial source. Obviously, this is the shortest cashflow cycle running into a single run of the enterprise. However, those who are familiar with the farmers' condition in rain-fed regions know that such an ideal situation rarely obtains.

In cases where there is a high possibility that the enterprise may fail for reasons of nature or otherwise, the farmer has to approach another moneylender or trader for more credit either to enter the investment cycle again or pay back the original source. Pseudorepayment, so resulting, may also occur if the farmer prefers to clear his old debt owing to others and, as and when the need arises, take further credit from a new source to pay back to the old source. Some implications of such adjustments may be that he resorts to asset disposal, sells his labour (or becomes bonded), or simply

ANIL K. GUPTA

migrates. Obviously, such cycles lead farmers to a state of perpetual indebtedness, pauperisation, and social and economic hardships of different sorts.

The next path before a farmer could be that he consumes his credit for any domestic or social purpose which, again, might be avoidable or unavoidable.

At this stage, he may, after having consumed the credit, enter the investment cycle through saving of wages plus some further borrowings so as to repay the credit from the first source. This cycle as mentioned in sub-set B would be the case of delayed repayment. Enterprise failure may strike here too, together with implications of asset disposal, indebtedness, migration, etc. He may, on the other hand, also choose to forgo the opportunity of investment either due to lack of access to further inputs or reduced faith in future returns and he may choose to invest his and his family's labour at others' farms or in public works, to earn wages. The savings from these wages might help in repaying the original source. Obviously, this will be the case of the longest delay in repayment, as shown in sub-set D.

There are several other possibilities depending upon the extent of the deficit remaining after paying the old source and entering either an investment cycle or a wage-and-saving cycle. Limitations of project management can be visualised because of lack of knowledge about various paths being followed by most farmers in different ecological contexts. Existing project management techniques and supervised agricultural credit programmes often fail to take into account adequately the internal resource management of different classes of farmers. At present, we do not have sufficient data to say which sub-set or combination of sub-sets includes the greatest proportion of small farmers in arid regions. Perhaps this proportion would be different in different situations.

However, it is believed that an in-depth analysis of these paths would help in unravelling the dynamics of decision-making options at the small farm level in rain-fed regions. The philosophical understanding of consumption and production activities of small farmers being inseparable will have to be clearly accepted. The 'Basic Needs' model, which differentiates between these activities of the rural poor, obviously cannot make much headway at the present level of market interactions.

The concept of a project as a vehicle for injecting resources for rural development may thus have to undergo some change. The institutional framework and the built-in flexibility vis-a-vis the access differential operating in rural regions will also need elaboration. Monitoring of projects requires generation of information on all aspects of investment process and impact. The traditional project design strategies do not provide for 'micro' level relationship between project objective and individual resource flow. Hence, the need for re-examination of 'macro' assumptions to make projects deliver the goods at 'micro' level.

Some of the other implications of this paradigm are, for example, that projects suiting sub-set A will merely have to concern themselves with the internal efficiency of the delivery system of credit, because the farmer is able to get the required inputs and advice (probably because of efficient markets) to generate enough surplus to repay the credit. However, in

## SMALL FARMERS-CREDIT CONSTRAINTS: A PARADIGM

sub-set B, projects will have to take into account the consumption needs of the farmer as well as additional credit need for any deficit remaining after unavoidable consumption. In the case of enterprise failure, the project will have to provide for the nursing finance as an inherent constituent of the project design, to sustain the farmers economy. The design will have to be different for high-risk-prone enterprises or regions where flexibility in repayment is essential to keep the farmer solvent. Likewise, the project content and schedule for sub-sets C and D will have to be differently oriented.

The implications for project design have a direct bearing on the indices of monitoring project performance vis-a-vis the target group. It is believed that the typologies so described can be explored further to provide deeper insights for developing a proper theoretical framework for designing rural development projects.

It is argued that the re-examination of functional, sectoral and regional approaches to project design which have not provided any replicable model for developing societies so far, is called for in the light of the foregoing discussion. Undoubtedly, if the paradigm of complicated interpenetration of credit, product, labour and other markets in arid regions holds good, as described, there is a definite need to look for an alternative strategy. Otherwise, fungibility of credit puts at naught any policy that insulates itself from the internal cash-flows of the farmer in arid regions.