

Financing of agricultural marketing **- Case studies from Asia**

by

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Introduction

Purpose of study. This paper reports on a study of how traders of grains and horticultural produce in Asia finance their activities and how they use that finance. "Traders" is interpreted broadly, and the paper considers activities from large-scale paddy milling to small-scale rice retailing, and from small-scale rural assembly of horticultural produce to large urban wholesalers. Input traders are excluded although as Hendriks (1994), among others, has noted, one person can "engage in the sale of farm inputs, the milling of rice, the purchase of farm products, (and) the finance of production, all with the same farmer." The study was carried out in 2001 using country case studies of Cambodia, India, Myanmar, Nepal, Pakistan, the Philippines and Vietnam.¹

Marketing finance rarely studied. Meyer and Nagarajan (1992) define "informal" finance as farmer credit from traders, input suppliers, moneylenders, friends and relatives and savings clubs and associations, since these financial service providers are not regulated and supervised by the national financial authorities. There is a vast body of literature on such informal finance because knowledge of how it works is considered central to efforts to improve the availability of agricultural finance and microfinance. There have, however, been few studies on how traders source finance and on the credit interactions between them. This may reflect a perception that finance is not a major problem for traders. It may also, however, be indicative of an anti-trader bias among the academic community, other researchers and those who fund them.

Importance of financial linkages. The general conclusions of this paper are that lack of working capital is not a major constraint to the functioning of agricultural marketing systems in Asia. That is not to say, however, that some actors on the marketing chain could not benefit from additional working capital sources. Lack of investment capital does appear to constrain both entry of new participants and expansion by existing participants, particularly processors such as paddy millers. One reason why the availability of working capital does not appear to present too many problems is the existence of many vertical financial linkages within marketing systems. These pivot around millers in the case of staples and wholesalers in the

NOTE: The paper is presented as a draft for discussion. Comments, please, to Andrew.Shepherd@fao.org

¹ The authors of these studies were: Cambodia: Srey Vuthy; India: T. Haque; Myanmar: U Kyaw Myint and colleagues; Nepal: Rajendra Singh; Pakistan: Muhammed Iqbal; Philippines: Edison Villasis; Vietnam: Nguyen Minh Tien. Appreciation is due to Mark Stickevers who, working under FAO's Volunteer Programme, carried out an initial review of the literature on the topic. Prof. Richard Meyer provided much valued advice at an early stage of the analysis of the case studies and commented on a draft of this report. Thanks are also due to Frank Höllinger, David Kahan, Åke Olofsson, Edward Seidler, Anthon Slangen and the case study authors, for their comments on earlier drafts.

case of horticultural produce. Both millers and wholesalers lend to traders who buy from farmers and these traders may, in turn, make both production and consumption loans to farmers. Wholesalers and millers also lend in the opposite direction, to distributors and retailers. Farmers are significant providers of finance to the marketing system, by being prepared to accept short-term deferred payment. This paper concludes that such linkages seem to be generally non-exploitative and serve primarily to secure supply, guarantee markets and reduce transaction costs. Some commentators have suggested using the marketing system as a way of channelling government or donor funds to farmers. There appear to be significant problems with such a proposal in that actors in the marketing system only lend money to those with whom they have had a longstanding relationship or can easily supervise. Thus increasing the flow of funds into the marketing system will not necessarily significantly increase the amount of money being lent.

Problems with institutional finance. Sources of working capital, apart from others in the marketing system, are own funds, friends and family and local moneylenders. Banks rarely offer a satisfactory alternative to these sources, even if interest rates are less than those of moneylenders. Without suitable collateral they are generally reluctant to lend and, even when they would be prepared to make loans, their procedures are usually too slow. Working capital needs are often unpredictable and loans are often required immediately. In most of the case study countries banks do not presently appear organised to provide such a service. Millers, other agroprocessors and traders in need of investment and working capital are often reluctant to provide collateral in order to secure loans, and this appears to be the main constraint to increased loans by banks to the agricultural marketing sector. Banks should examine whether they can develop loan products more adapted to the needs of the agricultural sector, while still providing the safeguard of collateral.

Previous studies of trader financing

(i) Credit linkages within the marketing system

“Suki” relationships in the Philippines. An exception to the general lack of attention paid to trader credit relationships in Asia is found in the work of Hendriks (1994), who examines the "mutually beneficial" *suki* (regular customer) relationships among traders on Cebu island in the Philippines. She notes that credit is the "pivot" of trade and that "tied loans" for vegetables reach all the way from the central wholesale market to retailers and consumers in one direction and to farmers in the other. *Suki* credit linkages serve primarily to bind people in order to ensure regular supply and disposal of produce. In times of shortage assembly traders will feel obliged to reserve at least part of their supply for wholesalers with whom they have *suki* relationships, while wholesalers will reserve part of their supply for their *suki* retailers. In times of surplus, wholesalers will give priority to buying from their *suki* assembly traders, and retailers are expected to buy from their *suki* wholesalers. However, Hendriks notes that the system is not without its problems. "When supplies are low people tend to "forget" their *sukis* to gain some extra profit." This can cause problems and violence is not unknown. Hendriks also notes that there are other traders who avoid *suki* and deal only in cash. In this case they take a greater risk of being unable to sell or obtain sufficient stock but this risk is offset by the absence of the risk of non-payment. She notes that such trading appears to be a growing trend in the Cebu wholesale market. Another study of *suki* arrangements, this time in the context of fish marketing in the Philippines, also concluded that transactions between traders and fishers were symbiotic rather than parasitic (Pomeroy, 1992).

Trade loans in Bangladesh viewed as exploitative. A further detailed study of trader finance was carried out by Crow and Murshid (1994) in Bangladesh. Unlike Hendriks, Crow and Murshid do not see the various relationships as being mutually beneficial, but rather as a way in which the larger, more-powerful traders tie smaller traders to them. An initial loan requires that all subsequent trade be conducted with the lender until the loan is repaid. The authors see this as establishing a "personalized monopsony or monopoly.....the borrowing trader cannot refuse the conditions.....because less onerous forms of finance are unavailable and alternative livelihoods are scarce." Tied loans are common in both directions of the marketing chain, e.g. from a miller or rice broker to a rice retailer or from a miller to a small trader collecting paddy from farmers. Such loans were found to be more common in the relatively backward areas of Bangladesh where there is less market competition.

Trade loans used for onlending. In some cases loans between different stages of the marketing chain are not used solely to provide short-term liquidity for the borrower, but are also used for onlending. Village-level traders borrowing from large traders located elsewhere and using the money to make crop production loans are described by Ghate (1992) as "almost universal." It may also be the case that loans from the formal sector eventually filter down to farmers through the informal sector. Ghate (quoting Alam, 1989) suggests that in parts of Bangladesh three-quarters of informal loan volume originated with banks. In Thailand, 22 percent of informal rural credit (mainly extended by grain traders) came from banks, but evidence from the Philippines suggests that banks are not important sources of funds for onlenders (Ghate, 1992). Harriss-White (1994) has argued that in India traders have for a long time been acting as unofficial credit agents for the formal sector. Various Government programmes had extended subsidized and commercial credit to input suppliers, retailers and agribusiness on a "massive scale", despite regulations designed to restrict the flow of state funds for trading purposes. Beneficiaries included fertilizer dealers, landowners and small-scale industrialists, many of whom were also crop buyers. Although few of these funds were lent for the purpose of onlending to farmers, that is in fact what happened.

(ii) Credit to farmers through the marketing system

Linkages between credit and marketing. Ghate (1992) observes that in Asia the timing of credit needs of paddy farmers for inputs and consumption tends to correspond with the accumulation of seasonal surpluses by millers. Sanderatne (1992) stresses that farmer credit linked to produce marketing is well known in Sri Lanka, especially with vegetable cultivation. Farmers sell produce to "commission agents" who have earlier given them loans. Sanderatne hints at the problem of analysing the effective cost of such credit to the recipient; in Sri Lanka there is no explicit interest charge but prices paid for the produce may be lower than if the transaction involves a cash payment. Also in Sri Lanka, Southwold-Llewellyn (1994) found that farmers would frequently borrow small amounts from copra merchants, as advances on future harvests. Bouman and Moll (1992) note that in the Indonesian collecting and distributive trade, "informal lending permeates every sector....and is as much a supply-securing as purchase-promoting device." For example, vegetable traders in West Java provide credit for inputs, with the standing crop serving as collateral. As in Sri Lanka there is no interest charge but farmers pay a higher price for inputs and receive a lower price for their crops. Bouman and Moll calculate the true interest cost at 30 percent a month. Esguerra and Meyer (1992) refer to the required sale of output to trader-lenders as a "collateral substitute." Their study in Central Luzon in the Philippines found that 106 out of 172 trader-lender loans to rice farmers carried this condition. Unlike in Sri Lanka, farmers in the Philippines receive the prevailing market price, from which principal and interest are deducted. Esguerra and

Fabella (1991) note the tendency of the output credit linkage between trader and farmer to expand with growing commercialization. Evidence from the Philippines suggests that the likelihood of such linkages rises with farm area, repayment enforceability and demand elasticity and the availability of marketable surpluses.

Extent to which loans tie farmers to traders. Harriss-White (1994), referring to work in India by Olsen (1991;1993), argues that trader loans to farmers are generally non-exploitative in accessible areas with competitive markets. However, this does not apply in more remote areas with a monopolistic market structure. Her earlier study of a region of West Bengal in India found that credit to farmers from traders (including input suppliers) accounted for twice the volume of credit from nationalized and cooperative banks (Harriss, 1991). Selvaraj and Sundaravaradarajan (1999) found that in south India loans tied to output repayment were beneficial for farmers. Refusal to accept a tied contract had an adverse effect on production. In Pakistan, Smith, Stockbridge and Lohano (1999) found no evidence of surplus extraction by traders from loans to landowners (zamindars). On the other hand, Crow and Murshid (1994) estimated the rate of interest of tied loans to farmers in a backward area of Bangladesh to be of the order of 130 percent p.a. Seventy-five percent of farmers took such loans, repayment of which accounted for 20 percent of paddy sales. In contrast, the advanced area of Bangladesh studied by the same authors had no examples of traders financing farmers. Wells (1980)² found that in Malaysia produce buyers provided a little more than half of rural informal credit.

Changing nature of financial linkages. Financial arrangements between traders and farmers are anything but static. As noted, Crow and Murshid (1994) report different patterns in advanced and underdeveloped areas. It can be assumed that as development takes place so credit transactions will change. Bell and Srinivasan (1985, quoted by Ghate) found that in the Punjab linkages of credit with output marketing accounted for 60 percent of informal credit but in Bihar, which has a small marketable surplus, such loans are uncommon. Ghate (1992) notes that in the Philippines a significant shift has taken place, largely as a result of land reform and increased fertilizer use. Landlords were first replaced as credit sources by input dealers and subsequently by paddy traders.

Credit received from farmers. The extent to which traders receive short-term credit from farmers has been virtually ignored, although Ghate (1992) notes that in the case of Bangladesh "it is not clear whether the production sector as a whole is a net borrower or net lender vis-à-vis the processing and trading sector." He reports that the practice is for 40 percent of payment to be deferred for 15-30 days, "by which time prices are generally higher." Short-term credit exchange between traders at the same level of the marketing chain is also rarely discussed, although both Ghate (1992) and Coulter and Shepherd (1995) note that this is common amongst wholesalers in the Indian rice trade.

²Quoted by Ghate (1992)

Review of the Asian Case Studies

(i) Financing arrangements for staple crop marketing and processing in Asia

Marketing channels. As can be seen from Diagram 1, marketing channels for paddy (palay in the Philippines) and rice can be extremely complex, and systems of marketing differ across the region, making comparison between countries somewhat difficult. Usually, the pivotal point in the chain is the large commercial miller but in Myanmar large-scale wholesalers, rather than millers, seem to be the dominant actors. A marketing chain can be lengthy. In Pakistan and India, paddy may pass through two or three hands before being milled. Large millers often finance agents who buy on their behalf for a commission. These, in turn, finance local buyers who assemble commercial quantities for the agents. In other countries, on the other hand, direct sales by farmers to mills are common and mills may also carry out contract milling on behalf of farmers, who are then responsible for marketing their own rice. Marketing channels for rice can be even more complex. A mill in a surplus area may sell to a large wholesaler who, in turn, may sell on to a large wholesaler in a deficit area, who will sell to smaller wholesalers from whom retailers make their purchases.

Financial linkages. There are many vertical and some horizontal financial arrangements in the various marketing chains. Such arrangements are not consistently applied, but largely depend on factors such as supply and demand conditions and seasonality. While traders and millers have trading partners with whom they have longstanding business arrangements, the nature of their financial transactions can and does vary depending on these factors. For example, the case study of Pakistan notes that when there is a bumper crop, farmers are under immense pressure to dispose of their paddy and are therefore willing to accept deferred payments. When there is a production shortfall, on the other hand, sales are invariably for cash. In the Philippines in 1995, when there was a shortage of rice, the common practice of supplying retailers with rice on a consignment basis more or less ceased temporarily and cash payment was demanded. Similarly, the need of traders and millers for formal or informal finance largely reflects seasonal conditions and the size of the harvest, although this does not often seem to be recognised in the formal loan products available to the sector. In Myanmar, a Yangon wholesaler reported taking a commercial bank loan for trading purposes and then depositing most of that loan in a deposit account paying 4.5 percent p.a. less than the cost of the loan. He was unable to access the loan as and when required, being forced to take the entire loan in one lump sum.

Sources of investment capital. Investment capital requirements of mills are largely met through a combination of the miller's own resources and bank loans. Moneylenders do not appear to be a source of funds for capital investments, presumably because the interest rate would be prohibitive. In Pakistan, millers have only limited access to investment loans, as a result of huge loan defaults among those able to exploit rent-seeking opportunities in the past. Some agencies are promoting leasing as an alternative. In Nepal, the smaller mills surveyed had used own or family resources while larger mills had mainly obtained funds from commercial banks and the Agricultural Development Bank of Nepal (ADB/N). In Vietnam, state-owned mills financed their facilities and equipment with loans from the Vietnamese Bank for Agricultural and Rural Development (VBARD) and commercial banks. In contrast, private mills are reported to be largely self-funded or funded with loans from family members. This is considered to be a constraint to the development of larger, more efficient private mills in the country. In Cambodia, however, only three out of 67 rice mills surveyed in

2000 had borrowed from banks. In the Philippines very small rice mills are mainly self-financed but medium and larger investments depend on bank loans.

Sources of finance for working capital. With regard to operating costs, over 60 percent of mills' costs for day-to-day operations in Pakistan are reportedly financed by banks, although the study sample size was small. The picture in India and Nepal is similar. On the other hand, financial institutions in Cambodia appear to account for a relatively small percentage of operating capital of millers. Specific information is not available for the Philippines, but bank finance is reportedly relatively easy to obtain if the applicant has a good track record, suggesting that people wishing to start up in the business without a track record are likely to experience entry difficulties. Friends and relatives also seem to account for a higher proportion of loans in the Philippines than in other countries. In Vietnam, financial institutions provide significant operational finance, but much of this is taken up by state-owned mills. Smaller, private mills often resort to moneylenders and to friends and relatives. In Myanmar, millers, who are mainly small scale, rely on both commercial banks and moneylenders, but their own funds and those of relatives remain the dominant sources.

Table 1 Sources of funds for operating costs of millers (% of finance)

	Own funds	Family, relatives and friends	Moneylenders	Deferred payment to farmers/traders	Financial institutions	Other
Cambodia*	73	13			12	2
India	41				59	
Myanmar	60		10		20	10
Nepal	30				60	10
Pakistan	15			13	63	9
Vietnam**		20	10		67	3

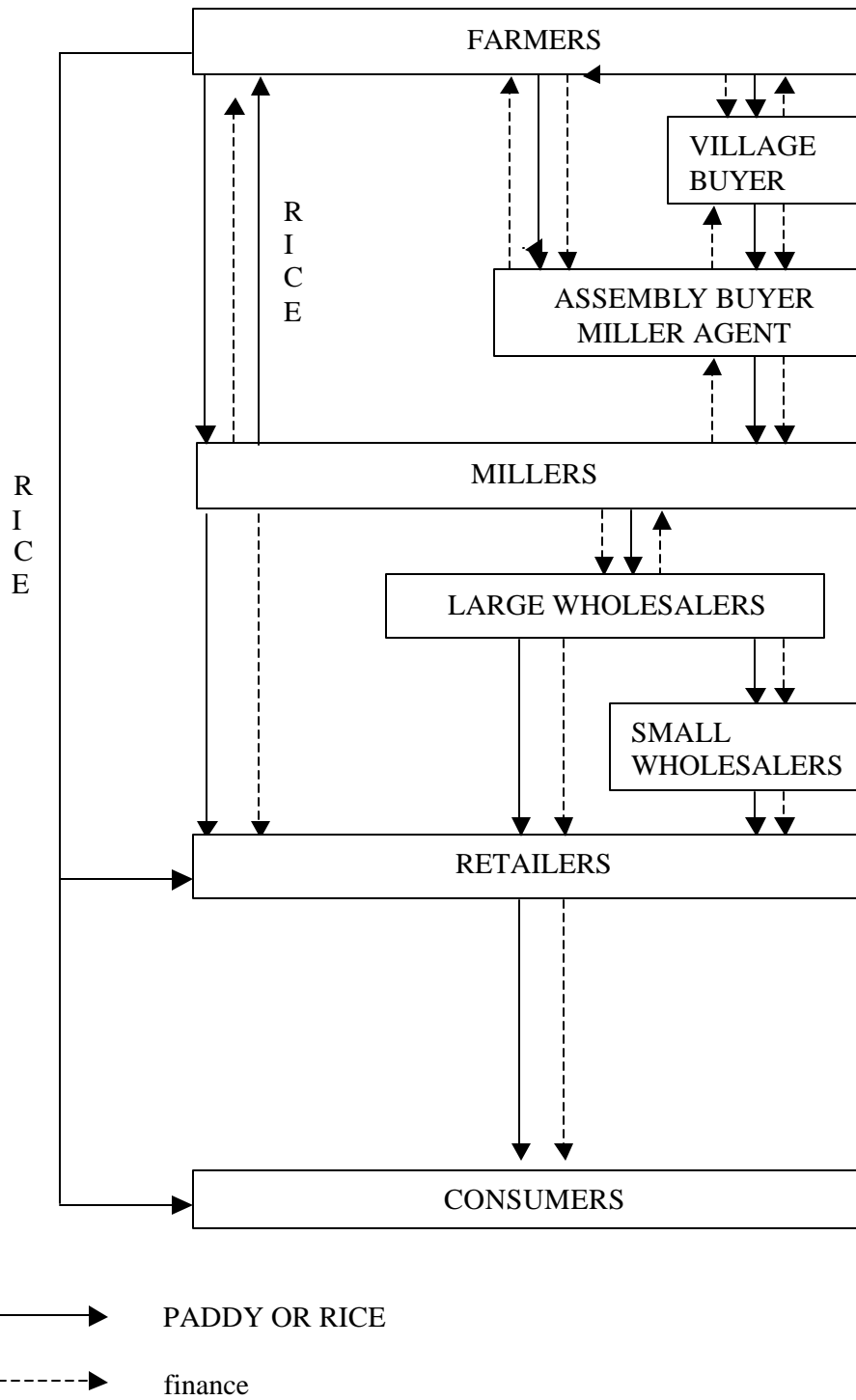
nb figures are estimates derived from limited interviews in the course of the case studies and must be regarded as indicative only.

Note: * including capital investments

** including state-owned mills

Diagram 1

MARKETING AND FINANCING FLOWS FOR PADDY AND RICE IN ASIA



N.B. The chart represents a generalised view of flows of produce and finance in the region as a whole and does not apply to any particular country.

Reasons why finance for working capital is required. Millers require finance both for day-to-day operations and in order to build up stocks of paddy and rice. While stockholding of paddy can be speculative, in order to exploit seasonal price rises, and is often viewed as such, it generally has a more straightforward function. It can be seen as a defensive mechanism necessary to guarantee supplies at competitive prices rather than as an attempt to exploit temporal arbitrage possibilities. Paddy stocks guarantee a higher throughput and utilisation of the installed processing capacity and thus minimise or avoid altogether the period when the mill is idle. Millers have fixed costs and must cover those throughout the year and not just in the harvest season. Similarly, they have obligations to their rice buyers and need to guarantee regular and sufficient supply in order to meet the needs of their longstanding customers throughout the year. Few retailers are in a position to make large advance purchases of rice and depend on their suppliers having stock at all times. This can be achieved either by having adequate stocks of paddy for milling throughout the year or by milling large quantities after the harvest season and holding stocks of the processed product. Both approaches appear to be followed, although the general preference is to store paddy, as the risk of losses is less. In the Philippines, rice milled from palay that has been stored for some time commands a premium price. It is far from the case that all mills store. In the Philippines forty percent of mills contacted did not store for more than a few days. In Nepal, millers tend to be concerned about sudden price fluctuations in response to increased supply from India, and store very little. In Myanmar millers store paddy but dispose of milled rice to wholesalers within a few days.

Inventory credit. Financing for stockholding is available in the Philippines through commercial banks and the Quedancor, which allows millers to borrow against the value of goods stored on their own premises (inventory credit). India has public warehousing facilities that offer warehouse receipts, which depositors can use as collateral for loans (Coulter and Shepherd, 1995). Other countries have similar programmes. In Pakistan, banks provide credit up to 70 percent of the value of the hypothecated stocks, but the loan can be revised upwards if the value of the stocks increases. Vietnam, on the other hand, presently lacks certified warehouses, thus making the provision of inventory credit difficult. In Myanmar, some millers avoid financing charges but guarantee throughput by offering free storage on their premises to paddy traders. This involves a commitment to sell at the prevailing price to the miller who provides the storage, at a time the trader considers opportune.

Financing of paddy purchasing. Millers use the funds available to them not only for stockholding and day-to-day purchases but also to finance both those agents who buy on their behalf and farmers. In India, up to 50 percent of the expected purchase cost of paddy is reportedly paid to farmers in advance, either as a short-term advance or as a seasonal loan for input supply. Much of this is channelled through traders, who either buy from farmers on their own account or act as commission agents on behalf of the millers. In the Indian case study, 66 percent of Indian traders indicated that they traded on a commission basis, with funding from millers. In Nepal, traders often buy a truckload of paddy, take it to Kathmandu for contract milling and then sell the rice to retailers. This is largely self-funded, with some credit from both customers and suppliers. There is little evidence of millers in Nepal financing traders or farmers, possibly because the mills tend to be small and remote from the main producing areas. In Cambodia, mills do not appear to finance paddy traders, although they do provide credit to rice retailers. In turn, the paddy assembly traders rarely provide advance payments to farmers. A few millers do provide small amounts of credit directly to farmers. There is no stated interest rate but the farmer is usually obliged to sell paddy to the lender at less than the prevailing market price. In Myanmar, mills in rice surplus areas buy about 25 percent of their

requirements through agents. However, relatively few of them finance their agents. Where they do, the agents either sell the paddy to the mill at the prevailing price and then pay back the advance or first have the rice milled before selling it to the miller. In Vietnam, millers rarely provide loans or advances to farmers or buying agents. Millers in the Philippines provide loans to farmers for input purchases, but advances to traders are uncommon.

Financing of rice distributors. In some countries mills accept deferred payment from their customers. A notable exception is Myanmar where the large-scale rice wholesalers play a much more dominant role in the marketing system than do the millers, who are mostly fairly small. Indeed, in Myanmar some wholesalers provide loans to their miller suppliers. This also occurs in Vietnam where the practice is regarded more as an advance payment than a loan. In India, almost all small rice wholesalers take advantage of 15-day interest-free loans, or consignment credit, from millers. Around 60 percent of them also sell to retailers on a commission basis on behalf of millers. Interest-free consignment credit of 10-15 days is offered by Cambodian millers to rice traders with whom they have longstanding trading arrangements. The duration of the loan is not clearly specified but is more related to the time it takes the trader to resell the quantity purchased from the miller. In Myanmar, large wholesalers provide credit to their regular buyers, who meet half the cost in cash and the remainder one-two weeks later at the time of the next transaction. In the Philippines, a common practice is for the miller or wholesaler to consign around 30 cavans (1500kg) of rice to a retailer, every other day collecting repayment for the quantity sold by the retailer. Supplies consigned in this way cost about 1.3 percent more than cash sales. In Nepal, on the other hand, millers apparently accept a two-week delay in payment by retailers with no interest charge.

Financial linkages with farmers. As noted in the literature review, relationships between farmers and those who buy their crops are complex and open to varying interpretation. In-depth analysis of such relationships requires a rather anthropological approach and is beyond the scope of this paper, which can only give a broad indication of the practices in the Asian region, which involve both credit from traders to farmer and farmer credit to traders. This two-way flow of credit is sometimes interlinked. For example, in Pakistan, commission agents who work on behalf of millers provide loans to farmers for both input and consumption purposes. There is no formal, stated interest charge but farmers availing of such finance are obliged to sell their paddy through the person making the loan and to accept delayed payment. To a certain extent the "interest" owed by the farmer and the "interest" owed to the farmer by the trader even out. The farmer's loan to the trader is for a shorter duration, but the value of the loan is greater. On the other hand, in Nepal, as already noted, rice traders in Kathmandu Valley collect a consignment of paddy from farmers, have it milled and then sell the rice to retailers. Acceptance by farmers of deferred payments is common but such credit is not extended beyond the duration of one trip. It does not appear to be related to the earlier receipt of loans from traders, although some traders do make payments in order to ensure that supplies will be available when they arrive in the village. In the Philippines, there is little evidence that traders receive credit from farmers. However, loans to farmers are common, with the majority of traders providing inputs and, sometimes, rice for family consumption. Repayment terms are either based on a lower purchase price than the prevailing market price or, in some cases, an explicit interest rate of around 5 percent per month. In both Cambodia and Myanmar, loans by traders to farmers are rare, as is the acceptance of deferred payment by farmers.

Farmer acceptance of deferred payment. In India, as already noted, four out of every five mills provide inputs or make advance payments to farmers. About 50 percent of traders provide such advances. Loans from farmers account for around thirty percent of small traders' financing requirements and involve an implicit interest rate of between two and four percent per month. The buying price quoted by the mill or trader assumes that such credit will be granted for between fifteen and thirty days and payment is often made in the form of a post-dated cheque. Farmers requiring cash have to accept a two- percent deduction in the price paid. There does not appear to be a strong link between credit provided by millers or traders to farmers and the obligation on farmers to accept deferred payment.

Table 2 Sources of funds for Paddy Buyers (% of finance)

	Own funds	Family, relatives and friends	Moneylenders	Financial institutions	Deferred payment to farmers	Other
Cambodia	75	10	15			
India (small)*	48	7	15		30	
India (large)*	70	8			20	
Myanmar	75		25			
Pakistan	22	8		51	12	7
Philippines	80	5		15		

nb figures are estimates derived from limited case study interviews and must be regarded as indicative only.

* excluding credit from mills or larger traders

Sources of funds for traders. From Table 2 it is noticeable that, with the exception of Pakistan, traders buying paddy from farmers are much more dependent on their own funds than are mills, for whom financial institutions are the main sources of funding in all except Cambodia and Myanmar. The need for seasonal financing is addressed in Cambodia, India and Myanmar by resorting to moneylenders, while deferring payment to farmers is an important tool in India and Pakistan. Although borrowing from moneylenders, and sometimes from friends, relatives and farmers, can involve high explicit rates of interest, such loans are generally considered preferable to dealing with banks, because they are easier and quicker to obtain, involve lower transaction costs and offer greater flexibility in terms of repayment.

Rice retailers. A final category of trader to consider is the rice retailer. In most countries these are mainly very small operators who, as noted above, are often able to take advantage of consignment credit from wholesalers or millers. In Pakistan, for example, supplier credit accounts for over 30 percent of retailers' financing. The availability of such credit means that they have little need to seek out alternative funding sources. In most cases the stated interest rates for loans from banks or microcredit institutions may be less than that charged by suppliers although, in view of the small amount of finance required, the costs and complications of borrowing would probably push the effective rate of interest beyond informal market rates. The Philippines study notes that many retailers have gone bankrupt as a result of over-indebtedness due to taking too many loans, and this has led to a reluctance to borrow on the part of others. In India, loans from financial institutions are reported to account for 25 percent of retailers' requirements, with average loan exposure being around \$100 for a period of three months. In Cambodia, up to 20 percent of rice retailers have taken 3-6 month loans from moneylenders who are based at the markets. Interest is ten percent per month charged monthly, and the principal is repaid at the due date. However, consignment credit is by far the most important source of funds.

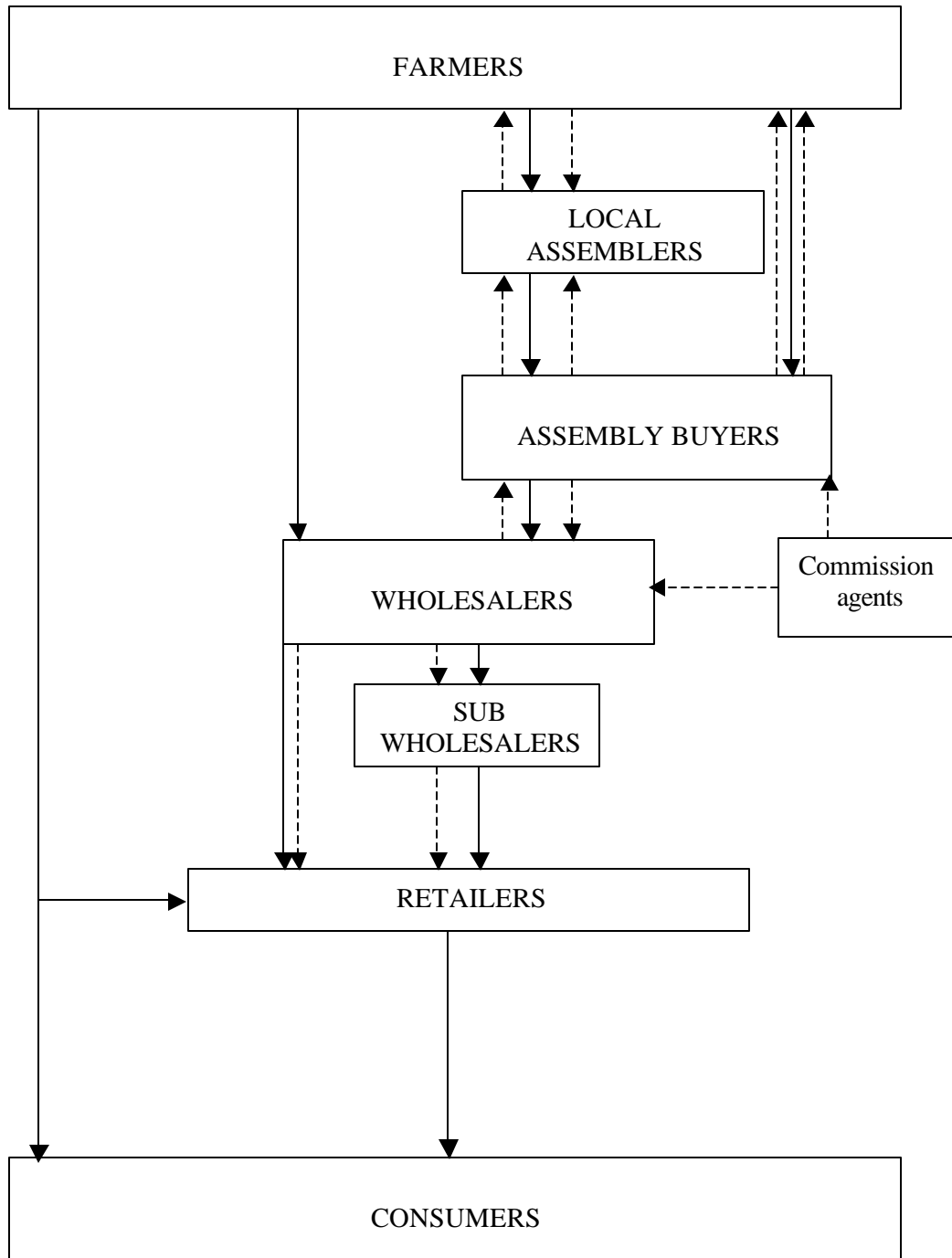
(ii) Financing arrangements for horticultural marketing in Asia

Marketing channels. A diagram of horticultural marketing in most Asian countries is shown in Diagram 2. A large number of farmers sell their output to a relatively small number of traders who, in turn, supply wholesalers, who are usually to be found operating in wholesale markets. These, in turn, supply retailers from whom consumers make their purchases. Within this basic model, of course, there are many variations. Traders who buy from farmers may sell to other traders before produce reaches the wholesaler. In some cases the crop may be purchased in the field or on the tree before it reaches maturity. Some retailers buy from sub-wholesalers rather than directly from the wholesale market. Some wholesalers take title to the produce, while others function only as commission agents. Some traders buy on their own account, while others buy for wholesalers on a commission basis. Some wholesale markets function as redistribution centres for other parts of the country, e.g. Delhi wholesale market in the case of apples from the hills of the Himalayas. The list of permutations is almost endless, but while there is considerable diversity there are also many similarities. As far as financing of these trading operations is concerned, the central point of the chain, the wholesaler, invariably plays the most important financing role.

Financial linkages. The description of marketing system linkages in the Philippines by Hendriks (1994) has already been noted. From our own research, the case of Myanmar is particularly informative. Wholesale traders operating in the main Yangon market provide credit to farmers, through agents working in the producing areas, for inputs such as fertilizers and organic manure, pesticides and seed. They also provide short-term working capital to retailers in Yangon. Such credit arrangements do not appear to be designed to exploit either the farmers or the retailers. Rather, the purpose seems to be to secure supply on the one hand and guarantee sales on the other. In the case of linkages with farmers, Yangon's wholesalers report that such arrangements are essential in order to have produce available for sale throughout the production periods. Many have supply commitments to other traders in towns outside Yangon and also need to be in a position to ensure supplies to and guarantee the trust of their regular retail buyers. A further reason given for providing credit to farmers, not apparently noted in previous literature on the topic, is the efficiency gain of being able to group together farmers for crop collection purposes. If traders have no formal linkages with farmers they have to drive around from farm to farm until they have a truckload, with consequent high marketing costs. If, on the other hand, they can tie a large number of contiguous farmers to them with credit arrangements, the procurement process is simplified and costs go down, to the benefit of both traders and farmers.

Diagram 2

**MARKETING AND FINANCING FLOWS
FOR HORTICULTURAL PRODUCE IN ASIA**



—> Produce
- - -> Finance

Sources of short-term working capital. An interesting aspect of the Myanmar horticultural marketing system is that there appears to be no flow of credit or, more precisely, acceptance of deferred payment from farmers to traders. All transactions are reported to be in cash. This inevitably increases the financing requirements of wholesalers, particularly in peak periods, when they may run into cash-flow difficulties. Wholesale market traders are used to dealing with banks for the remittance of sales proceeds to their agents or traders in producing areas, but when they require short-term funds they go to moneylenders in the market, paying interest rates somewhat less than those applied to the smaller amounts borrowed by retailers, in preference to dealing with banks. This seems to be because funds are often required in a hurry and banks do not offer the necessary speed or flexibility. This experience seems common to most countries. Wholesalers are generally self-financing but, in peak seasons, they may have to borrow from the informal sector to meet their needs for short-term cash.

Investment finance requirements. The seasonality of horticultural production in many countries is also one reason why traders buying from farmers have only limited financing requirements for capital investments. Traders prefer to use hired vehicles rather than invest in their own and then not use them for much of the year. Even if they have year-round requirements for a vehicle, many traders prefer to leave vehicle operations to specialist transport operators. Few wholesale traders are large enough to consider investing in cold storage and cold storage requirements are also seasonal. When required, wholesalers rent space in commercial cold stores and, in Pakistan, are often financed by the cold storage companies. The only major capital expenditure most wholesale horticultural traders face, therefore, is the premises they occupy in the market. The extent of their financial needs for market premises depends on the fee structure of the market, and there are many variations. In the new Thiri Mingalar market in Yangon, for example, wholesalers had to purchase stalls, for which purpose many used bank loans, whereas the new Kalimati wholesale market in Kathmandu, Nepal allocated spaces and charges monthly rents. In most countries traders self finance their capital requirements or borrow from friends or relatives.

Linkages with commission agents. In some countries wholesalers operate on a commission basis to link buyers to sellers in wholesale markets. In Pakistan, such commission agents advance interest-free loans to village assemblers and pre-harvest contractors who, in turn, provide farmers with interest-free loans for inputs and family requirements. Commission agents also finance wholesalers (pharias and mashakhors) and may also guarantee repayment of credit advanced by wholesalers to retailers. These business practices have been developed over a long period and the linkages are the result of longstanding trading relationships. Our research did not allow for any realistic assessment of whether such arrangements can be regarded as exploitative, although some wholesalers did express a need for bank finance in order to avoid being tied to one particular commission agent.

Deferred payment to farmers. The practice of farmers accepting deferred payment for their produce seems common in Pakistan. Both pre-harvest contractors and village assemblers indicated that such arrangements accounted for around 35 percent of their financing of day-to-day purchases. In normal years such arrangements seem to work satisfactorily, but when there is a poor crop and competition between traders for the limited supply farmers are able to demand cash. Thus a poor crop can have the same impact on a trader's need for cash as can a good crop at the peak of the season. In Nepal, traders in the two main markets finance their agents in producing regions. These, in turn, provide finance for inputs to farmers. This flow of funds down to the farmer is to a certain extent reciprocated at harvest time, as acceptance of deferred payment by farmers is widespread. In the case of transactions with wholesalers'

agents in producing areas, accepting payment only after funds have been received from the wholesaler in Kathmandu seems more or less obligatory. Independent traders, on the other hand, usually pay cash. Around 40 percent of financing requirements of Indian fruit and vegetable traders are met through deferred payment to farmers, when interest of around 3.5 percent a month is payable and the loan duration is either 15 or 30 days. Such arrangements contrast with the Philippines, where farmer sales on consignment are based on the trader paying for the produce on his or her next trip, which can often be as soon as the following day. In Cambodia, market wholesalers receive credit from those who import produce from Vietnam and Thailand but there appears little evidence of such credit within the domestic marketing system.

Financing requirements depend on perishability. Credit needs of traders anywhere clearly vary according to the storeability of the product handled. Those handling potatoes and onions in Kathmandu report greater financing needs than those handling more perishable produce. Bank finance is sometimes used to meet storage costs, although as banks are reluctant to lend for trading the loan is reportedly sometimes obtained for other purposes and then diverted. Limited short-term finance is available through a traders' cooperative based in Kalimati market.

Table 3: Sources of funds for Wholesale Horticultural Traders (% of finance)

	Own funds	Family, relatives and friends	Money-lenders	Deferred payment to farmers/traders	Financial institutions	Other
Cambodia	65	25		10		
India		45	10	40	5	
Myanmar	60	20	20			
Nepal*	40			40	20	
Pakistan**	48			37		15***
Philippines	57	43				

nb figures are estimates derived from limited case study interviews and must be regarded as indicative only.

* Potato wholesalers ** Wholesale commission agents; *** Cold stores

Supplier credit to retailers. In Myanmar, as elsewhere, horticultural retailers often purchase produce at the wholesale market one day and pay for it the next when they go to market to pick up new supplies, in the case of very perishable produce, or a few days later in the case of less perishable produce. From the standpoint of the wholesaler this arrangement has a number of advantages. It facilitates rotation of produce (there are no cold storage facilities) and minimises quality and quantity losses. It provides guaranteed sales because retailers must visit the wholesaler to repay the debt and will invariably take new supplies from the same wholesaler. Credit provision can also be a way of increasing the number of regular buyers in a competitive wholesale market. Advantages for retailers are less clear cut. There is a benefit in that there are no interest charges, compared with the 5-10 percent per month charged by moneylenders operating in the market. Offsetting this is the fact that retailers receiving credit are sometimes obliged to accept poorer quality produce than those paying cash and that they are more constrained in price negotiations with wholesalers. These costs could theoretically exceed the costs of borrowing from moneylenders, although it may be fair to assume that if the cost of dealing on credit terms with one wholesaler was too onerous retailers would simply switch to other suppliers. Also, if the main aim of wholesalers is to maximise sales through increasing the number of retailer customers they are unlikely to jeopardise potential outlets by following practices likely to alienate those retailers. From the Myanmar study it is

interesting to note that retailers taking purchases on credit tended to buy more than those relying on cash do. Those paying cash largely used their own funds, although if they arrived at the wholesale market and found that prices had risen significantly they were sometimes obliged to take short-term loans from moneylenders. Even when retailers were able to take advantage of supplier credit they still had to meet the costs of getting their products to the retail market, for which small loans were sometimes required.

Heavy dependence of retailers on credit. Despite the relatively small sums involved retailers throughout the region seem to be heavily dependent on supplier credit. The importance and role of such credit in Myanmar has already been noted. In India fruit retailers obtain credit from wholesalers for 7 to 15 days while more perishable vegetables are supplied on credit for up to seven days, depending on the product. In the Cambodian banana trade around 30 percent of banana retailers pay for their purchases the following day and in Vietnam over 70 percent of retailers receive less perishable goods on consignment. In the Philippines, one third of retail traders reportedly obtain stocks on a 2-3 day consignment basis. Credit from suppliers accounts for over one third of the finance received by retailers in Pakistan, with the period of credit varying between one and four weeks. Other sources of finance in the region include moneylenders. In Phnom Penh, some retailers take daily loans at a daily rate of interest of ten percent (borrow ten - repay eleven). In Manila in the past, daily loans were sometimes made on a borrow five - repay six basis. The Philippines case study reports that these eventually fell victim to laws against usury, although it is difficult to see how such laws could be effectively enforced. Less onerous loans are available from moneylenders on terms such as borrowing 5000 and repaying 6000 after one month, with equal daily repayments (interest of around 40 percent per month) and similar arrangements exist in Phnom Penh. In Myanmar, on the other hand, interest rates for retailers are reported to be between five and ten percent per month.

Table 4: Sources of funds for horticultural retailers (% of finance)

	Own funds	Family, relatives and friends	Deferred payment to suppliers	Moneylenders	Financial institutions
Cambodia	60	7	10	18	5
India	35	20	33	12	
Pakistan	56	8	36		
Vietnam	50	5	30	4	11

nb figures are estimates derived from limited case study interviews and must be regarded as indicative only.

Institutional support to retailers. From the above table it is particularly noteworthy that financial institutions play only a small role in financing horticultural retailers. This is, in part, because existing resources, coupled with deferred payment from suppliers, appear to largely meet retailers' requirements and unless they are seeking to expand their businesses they have only limited and occasional need to borrow money. According to the case studies retailers continue to borrow more from moneylenders than from financial institutions, despite the rapid explosion in microfinance institutions in recent years. This may be because most MFIs are location specific, and operate in areas not covered by the case studies.

The relationship between traders and financial institutions

Requirement for collateral. Most formal-sector loans for agricultural marketing are for investment capital purposes and, with the exception of millers, banks presently do not play a significant role in funding of working capital costs. Provided that borrowers are in a position

to offer collateral, there does not appear to be any shortage of loan funds in most countries. The main problem faced by the agricultural trading sector is that most of those involved in marketing are either not in a position to offer suitable collateral or are reluctant to do so because of the risks associated with their businesses. Moneylenders were reported to be more flexible in accommodating temporary repayment difficulties than traders believed banks to be, and were thus preferred sources of funds, despite the higher interest rates charged.

With suitable collateral loans are easy to obtain. In Nepal, banks were reported to be "pushing" mills to take loans and millers, in particular, reported no problems in accessing funds. In the Philippines, those with adequate collateral have few problems in obtaining credit lines from banks. Unlike the case in Myanmar mentioned earlier, where the trader was obliged to take the entire approved loan sum and had to deposit most of it in a savings account, borrowers in the Philippines can borrow up to an approved maximum overdraft on their current accounts. In Pakistan, banks continue to finance working capital requirements but, as noted earlier, new loans for investment purposes have all but dried up in response to the default culture of the 1990s and the impact on the lending capacity of banks. Businessmen with a good track record are much in demand by banks and are able to negotiate favourable terms, but new investors find it extremely difficult to get capital loans. Problems with large-scale loans have led to emphasis on the development of small and medium enterprises and a Small and Medium Enterprise Bank has been set up in the public sector through the merger of two finance corporations.

Problems faced in dealing with banks. Lengthy procedures, corruption and high rates of interest have been identified by those involved in agricultural marketing in Pakistan as the main constraints they face in dealing with banks. Private millers and traders in Vietnam identified lack of collateral, complicated banking procedures and lack of the "right connections" as being their main constraints. In India, fruit and vegetable processors reported particular difficulties in obtaining loans, but this seems clearly related to the bad repayment record of that sector. "Complicated" loan-disbursement procedures are seen by borrowers as a constraint in Nepal although these may be no more than the prudent requirements of the banks. Such procedures are explained well in the Myanmar case study:

"..... bankers consider the purpose of loan amounts, repayment, and security. (Borrowers) provide title of immovable properties,..... taxation records, business licences, , fire-risk insurance and other supporting evidence of business activities. The assessor estimates the value of properties based on the market price and the bank's lawyer verifies title clearance."

After such a process, borrowers in Myanmar can borrow up to about 50 percent of the estimated value of their collateral.

The perspective of banks. Although banks can and do seize collateral this can prove to be a cumbersome and costly procedure and something that they prefer not to be involved with, both for these reasons and because asset seizure does nothing to improve their image in the areas where assets are seized. Thus, in many cases the request for collateral seems to serve more as a preselection criterion. Banks do not want to become involved in loans to traders because of the risk, the small size of most loans and the cost of making them. Rather than examining each loan request on its merits, at great cost, banks avoid this by establishing collateral criteria that they know that most small traders will be unable or unwilling to meet. Banks also argue that a constraint in lending to traders is the fact that many do not keep

proper records. Consequently, the viability of their businesses cannot be assessed. It is unlikely, though, that many traders could be persuaded to start keeping proper records in order to benefit from loans from the formal sector. For small traders the costs of record keeping could well outweigh the potential benefits unless products tailored to their needs, such as are now being offered by some MFIs, are developed.

Collateral more important than the business proposition. Even where banks are prepared to consider loans, such as to mills, the appraisal of loan applications is often based more on the collateral offered than on the business proposition put forward or the loan repayment capacity of the prospective borrower. The ability to offer collateral is thus almost essential in dealing with banks. In Vietnam, 84 percent of loans from the Vietnamese Bank for Agricultural and Rural Development were secured using collateral on buildings or land or other real assets. Such collateral seems to be required from state-owned companies as much as private ones. In Nepal, loans without collateral are reported to be exceptional. Millers in Cambodia regard lack of access to bank loans as a major problem constraining their expansion, but this seems to be related mainly to their reluctance to pledge assets as collateral. Indeed, a prevailing theme in the country studies was the fact that most of those involved in marketing are far from certain of their ability to meet fixed repayment schedules imposed by banks and are hence reluctant to jeopardise their available collateral.

Risks faced by banks. From the perspective of banks, lending to the agricultural sector can be extremely risky. Reasons given by banks in India for the perceived low rate of loans to traders and processors included the previous poor repayment rates of existing clients and the lack of creditworthiness of new applicants, lack of collateral, legal difficulties in enforcing repayment, and the general fact that many applicants present business proposals that are clearly not profitable. Similar reasons are given by banks in Pakistan. New applicants who are also new to the business are seemingly faced with a "Catch 22" situation. They cannot access loans without a creditworthy track record. However, they cannot establish such a track record without making start-up investments, for which they require loans.

Difficulties in identifying suitable financial institutions for a marketing loan. Borrowers involved with agricultural marketing and processing can experience difficulties in identifying suitable banks to approach for a loan. In some countries the commercial banks are solely located in the major urban areas and are primarily interested in lending to known larger clients. For such banks, the processing costs and overheads involved in making small loans to the agriculture sector make such loans unattractive. On the other hand, agricultural banks are often oriented to farmers and are sometimes not even allowed to lend to traders. A common complaint is that commercial banks do not understand the agricultural sector and are thus ill-equipped to assess the viability of investment proposals. Of course, an alternative interpretation is that they understand the sector and its risks very well, which is why they are reluctant to make loans to it.

Impact of interest rates. All country studies reported that potential borrowers were often put off by high market interest rates for loans. In the Philippines, millers and traders reportedly have a concept of what is an acceptable rate (around 16 percent) and will not borrow at rates beyond that. Over the decades governments have attempted to interfere with agricultural credit markets, either by subsidising credit or by insisting that financial institutions earmark a percentage of their loans for agricultural purposes. Some countries continue to intervene in financial markets. In Myanmar, both loan and savings rates are fixed by the Government, even for commercial banks. In Pakistan, the private sector is crowded out by government

agencies who benefit from subsidized loans. Borrowers from the private sector pay 16 percent p.a. while borrowers from the state sector pay 12 percent. However, it is now broadly accepted that there is little to be gained by trying to influence the nature of investment decisions in this way, and that past attempts of directed and subsidised credit have largely failed. Those involved in agricultural marketing should expect to pay market-based interest rates for their loans and the effective demand to borrow money should be clearly based on prevailing market levels of both nominal and real interest rates. Nevertheless, there may be cause for concern about high interest-rate spreads applied by banks and differential lending rates, with large companies often being able to borrow at significantly lower rates of interest than smaller companies or individuals. It may be questioned whether such differences accurately reflect the greater costs and risks associated with smaller loans, or whether higher rates, like collateral requirements, are quoted to smaller borrowers as a way of dissuading them from approaching commercial banks in the first place.

Conclusions

Sources of finance. The agricultural trade sector in Asia finances itself through a combination of self-financing, bank loans, and informal credit assistance from friends and relatives, suppliers, customers and moneylenders. Loans from banks are important to millers, accounting for over 60 percent of their finance in India, Nepal, Pakistan and Vietnam, and are used both for investment and working capital purposes. With lower or, in some cases, non-existent financing requirements for investment capital, combined with an inability to offer collateral, paddy, rice and horticultural traders are insignificant users of loans from financial institutions, with the apparent exception of paddy traders in Pakistan. Traders rely mainly on own funds, advances from millers or wholesalers, acceptance by farmers of deferred payments and, in times of peak financing requirements, moneylenders. Working capital finance requirements are greater for those dealing with non-perishable commodities. While traders dealing in perishable horticultural products turn over their capital in a matter of a few days, or can rely on farmer finance for that period, those dealing in storable products such as paddy, potatoes, onion or garlic require finance of a longer duration.

Constraints to effective use of finance. A case can be made that the post-harvest sector in many Asian countries is inefficient and that the inability of those working in the sector to finance capital investments is a significant contributory factor to this inefficiency. Certainly, much agroprocessing, such as milling, is carried out using outdated equipment that produces low quality products and leads to high losses. Processors argue that in order to modernize and expand they require access to investment capital that is presently denied them, either because of collateral requirements or because interest rates are perceived to be too high. However, better access to finance, while perhaps a necessary condition for improvement, will not in itself result in greater efficiency unless other conditions are satisfied. Government intervention in markets, such as the forced procurement of over 200kg of paddy per acre in Myanmar (presently accounting for ten percent of the crop, it is proposed to end this practice in 2004), differential pricing of wheat in India, and the unplanned release of stocks by government-owned food agencies in several countries can disrupt market mechanisms, increase risk and remove the incentive for processors to improve their facilities. There is frequently a reluctance on the part of millers and traders to take on loans because of the risks associated with their businesses. Government policy is often a major cause of such risks.

Financial linkages within marketing chains. In the case of staple foods, financial linkages usually pivot around millers, while in the case of horticultural products wholesalers normally

play the central financing function. Financial linkages extend out from the wholesaler or miller to the farmer in one direction and to the retailer in the other. In the case of transactions with farmers the flow of finance can be in both directions as farmers often accept short-term deferred payment for their produce. There is, however, little evidence of financial relations with retailers being in both directions. Retailers take advantage of consignment credit offered by traders but, with the exception of some transactions with state-owned millers in Vietnam, rarely pay in advance for supplies.

Impact of supply and demand. Millers and wholesale traders usually have close business relationships with others at different stages of the marketing chain. This often involves financial arrangements such as provision of advances or consignment credit. However, while such personal trading relationships are often maintained for many years, or even over generations, the nature of the financial relations can change rapidly. In particular, the prevailing supply-demand conditions have a strong impact on the willingness to lend money, even for a brief period. When supplies are tight the usual beneficiary of trade credit finds it much more difficult to obtain, whether it be a trader buying from a farmer who normally accepts deferred payment, or a retailer who usually obtains consignment credit from a wholesaler. Such changes in trade credit relationships alter, in turn, the credit needs of the affected traders and dictate the extent to which they need to resort to informal credit markets to overcome cash shortfalls.

Importance of supplier credit. Virtually all credit extended from one stage of the marketing chain to another is of the nature of short-term advances or short-term supplier credit. Thus we are talking predominantly about trader credit relationships, which enables the various actors to continue to run their businesses in a viable way but does not permit them to expand their operations. While there may, perhaps, be a few examples of larger wholesalers or millers making longer term loans to business partners to enable them to develop their businesses, e.g. by building a store or buying a truck, none was identified by this research. Such business expansion is more likely to be funded by the traders' own or family funds or, occasionally, by financial institutions. Loans from informal-sector moneylenders for such purposes are unrealistic, given the high interest rates charged.

Duration of supplier credit. Apart from loans given by traders to farmers for production purposes, and advances given by millers and larger traders to smaller ones for this purpose, the duration of much trade credit is no longer than it takes to buy and sell the product. Thus, supplier credit is extended to retailers of perishable produce for one or two days, to retailers of potatoes or onions for one week and to retailers of rice between one and two weeks. Acceptance by farmers of deferred payment for their crops is on a similar basis; where fresh-produce traders visit a village on a daily basis payment is expected on the following day; where weekly visits are made payment is expected after a week. An exception appears to be India where 30-day credit is common. Payment to paddy producers can also be delayed for up to a month reflecting, at least in part, the time required by the trader to put together a viable consignment and, in some cases, have it milled and sell the milled rice. Relationships between millers, fresh-produce commission agents and the traders to whom they supply advances in order to buy on their behalf are more complex and some funds may even be lent to other traders and farmers, but the same basic principles seem to apply. The recipient of an advance is required to repay the loan from the proceeds of a consignment of produce before a new advance is made.

Costs of marketing system loans. The effective costs of borrowing within the marketing system are in many cases difficult to calculate. In some cases there are no apparent costs involved. In other cases interest rates are explicitly stated or can be deduced by comparing the price paid in cash for the produce with the price paid when the supplier provides credit. Price negotiation is clearly constrained when the buyer depends on the supplier for credit. There is also some evidence that retailers who receive credit are sometimes obliged to accept lower-quality produce than those who pay cash.

Benefits of trade credit. Although there is usually a cost involved in borrowing within the marketing system, this can often be less than alternative funding sources and there is little evidence that those extending credit do so primarily in order to make money from interest on the loans. Rather, the purpose of providing trade credit is normally to maintain relationships with trade partners, thus guaranteeing both produce supply and markets. A case can be made that such arrangements are beneficial, not only for those doing the marketing but also for farmers and consumers. By providing supply and sale guarantees, trade credit reduces transaction costs, as the time, transport and communications costs required to identify sellers and buyers are less. It also reduces the serious risk of loss through being unable to sell perishable stock, as well as the risk of forgoing profit through having no produce to sell. While the social capital available to traders through their networks of longstanding business contacts could, to a certain extent, offer similar advantages it is questionable whether such personal relations would result in the same trading loyalty without the accompanying credit relations.³

Banks as providers of working capital. The existence of trader credit relationships and the fact that money can flow in both directions is perhaps one reason why only limited use is made of commercial bank finance for operational purposes. There is also strong evidence that many traders are able to fund most day-to-day purchases out of their own resources and only require loans for short periods. Other reasons are that banks are generally unwilling to lend to small-scale agricultural traders; that they impose stringent collateral requirements; that interest rates for smaller traders are higher than they are for larger customers; that loan-application procedures are complex and that small-scale traders, who often do not even have bank accounts, are reluctant or even frightened to approach banks for loans. It may, however, be the case that some loans made for investment purposes are, in part at least, diverted by the recipients to finance working capital purposes, thus providing us with an incomplete picture of bank funding of day-to-day trading operations.

Informal sector preferred as working capital source. For short-term working capital loans, banks rarely provide a suitable alternative to other forms of finance. Even if problems of collateral can be overcome, the cost to a trader of obtaining a small loan can be prohibitive in relation to the amount of money borrowed, and may well push the effective interest rate beyond that charged by the informal sector. Additionally, the informal sector offers greater flexibility in required loan collateral and loan repayments and it is often possible to renegotiate loan repayments with moneylenders if a convincing reason can be given for a delay in payment. Small traders also rarely pay taxes but may need to produce evidence of taxation payments in order to obtain bank loans. Furthermore, and perhaps most importantly, working capital is usually needed in a hurry as a response to seasonal shortfalls or unexpected

³ Although we have noted that in most cases the credit is supplied for one consignment only and thus the credit recipient cannot normally be considered to be "bound" to the provider, the reality is that in order to pay back the loan the borrower has to meet the lender, at which time it is usually easier to take a new loan from the same person rather than approach a (perhaps unknown) competitor.

delays in receiving payment from customers, and banks do not offer sufficient flexibility to meet urgent loan requests, even if other criteria can be satisfied.

Existence of exploitation in financial arrangements? This, albeit limited, research has produced little evidence that financial arrangements within the marketing system are exploitative. That does not mean that traders and processors are social benefactors unconcerned with profit maximization. It does mean that their ability to maximise profits in an "exploitative" way is, in most markets, usually constrained by the existence of competitors. Unequal trading relations may be possible in the very short term but not in the long run as those who see themselves as being exploited will inevitably cease trading. Profits for those in the marketing chain who lend money are more likely to be maximised by adopting a long-term approach. Where exploitation does take place it is likely to be in situations where competition is restricted. Governments often contribute to this situation by introducing licensing and other controls on traders and then allowing rent-seeking officials to allocate licences not on the basis of reasonable criteria but on the basis of who pays the largest bribe. There is some evidence that trader-farmer credit relationships can be exploitative in certain circumstances, most notably in remote, backward areas of India and Bangladesh where there is limited competition among traders and where interest rates of 130 percent p.a. have been identified. However, in most cases the same conclusions can be reached about trader credit to farmers as have been reached about trader credit to other traders; that such credit is primarily designed to facilitate access to supply in order to enable traders to maximise their turnover, with the additional advantage that trading with farmers who are "bound" by credit relations also serves to reduce the costs of searching for supply.

Linkage between credit to farmers and deferred payment. For traders in seasonal crops, extending credit to farmers enables them to put surplus cash to productive use at a time when it is not required for trading purposes. However, they then face the problem of rapidly mobilising that cash at harvest time; that this is difficult to do may be one reason why farmers are often expected to accept deferred payment for their crops. The situation becomes even more complex when traders have borrowed from other traders or millers in order to onlend to farmers; until produce has been obtained from those farmers to whom loans were made and, in turn, the loans repaid to wholesalers or millers it becomes difficult to buy from farmers to whom loans have not been made.⁴ For this reason there seems to be an implicit linkage between trader credit to farmers and deferred payment for farm output. In countries such as India and Bangladesh, where up to 50 percent of the total value of paddy is reportedly advanced to farmers, the linkage may be more explicit.

Repayment of farmer credit. Studies of contract farming⁵ have identified as a major problem the failure on the part of farmers to fully honour contracts, by selling to other buyers. However, neither the literature nor our research has identified this as a particular problem in the context of food marketing in Asia. The reason appears to be that loans are not extended by outsiders but by traders who live and operate in the same village as the farmers. Not only do they know of the reputation of each farmer for honesty and reliability but they are also in a position to monitor the farmers' crops while in the ground, can see when harvesting begins and are able to observe the activities of visiting traders. Of course, this local knowledge does have its limitations in terms of the number of farmers that traders can know and observe well

⁴ As noted in the Literature Review, some commentators see the purpose of such credit arrangements as being designed to tie the smaller trader to the dominant one, with it being extremely difficult for the smaller trader to ever clear the loan.

⁵ see, e.g., Eaton, C. and Shepherd, A.W. (2001)

enough to be sure the crop will be sold through them. Similar constraints are experienced by village moneylenders.

Potential for using the marketing system to provide farmer credit. In seeking to address constraints in the delivery of credit to farmers by rural financial institutions, some observers have suggested that (presumably government-sponsored) loans could be made to traders who would, in turn, onlend to farmers.^{6 7} There would appear to be several problems with such suggestions. Firstly, as this paper has noted, traders are limited in the number of farmers to whom they can extend credit by the need to have personal knowledge of those farmers and their activities. If we assume that their existing access to resources is adequate for the number of farmers to whom they can confidently extend loans, additional funds would either not be required or would be used by traders to lend money to farmers about whom they have insufficient information, thus significantly increasing the risk of default. Secondly, many traders presently keep minimal records. Some are illiterate. Government, donor or NGO programmes targeting farmers through traders are, on the other hand, likely to require detailed accounting for loans, possibly on a farmer-by-farmer basis. Thirdly, financial institutions administering such programmes are likely to stick to their established procedures and demand collateral from traders, something that most are in no position to provide.

Onlending by millers and large traders? An alternative proposal to provide farmers credit through the output marketing system is to use the fact that funds provided by larger traders or millers are onlent to farmers by smaller traders. It is argued that if the supply of money can be increased to these more dominant actors in the marketing chain it can filter down to farmer level. However, this proposal is also not without problems. Firstly, it makes the assumption that existing resources for trade credit are inadequate. The jury must remain out on this but neither the literature nor the case studies provide compelling evidence of a major shortage of funds, given the availability of other arrangements such as deferred payment and informal moneylenders who can address short-term cash flow problems. Secondly, in the same way that traders can only lend to farmers about whom they have adequate information, larger traders can only channel funds to smaller agents or traders in whom they have trust. Increased institutional resources for millers or larger traders may thus not directly lead to increased trader loans to farmers unless large traders have trust in a larger number of smaller traders than they are presently able to lend to and the smaller traders have trust in a larger number of farmers than they are presently lending to. Thirdly, some commentators have argued that there is an exploitative nature to credit arrangements between different levels of the marketing system. Providing other than purely commercial finance to the more dominant actors would be likely to increase their dominance. Indeed, so great is the suspicion of the private sector in many parts of Asia that there may be a public outcry if government funds were lent to "middlemen" to allow them to "exploit" farmers and smaller traders. Finally, as with all credit programmes or "schemes" there would be risks of rent seeking and diversion of the loans to other purposes.

Role of deferred payment. The fact that farmers often accept deferred payment has raised the question of whether there is a net transfer of funds from the marketing system to farmers or whether the transfer is in the other direction. It would not appear to be a particularly useful

⁶ See Ghate (1992) Chap. 14

⁷ "Traders represent a restricted clientele which would be cheaply screened according either to collateral or to licence possession and onto whom would be shifted the bulk of costs of loan repayment collection. Traders, in turn, possess low cost information about their clients, which reduces the costs of monitoring and enforcement. Their borrower-producers also face lower transaction costs." Harriss-White (1994)

exercise to try to quantify such flows in order to come up with a definitive answer. Loans made by traders to farmers tend to be of longer duration (i.e. the time it takes for the crop to grow) whereas loans in the other direction are rarely for more than a month, and usually for much less. On the other hand, deferred payment can apply to the entire value of harvest whereas loans are usually for production costs and, sometimes, for consumption purposes. It also appears that many farmers who are obliged to accept deferred payment are not recipients of trader loans. The school of thought that views trader-farmer relationships as basically exploitative may see the practice of deferred payment as another example of such exploitation. It is more instructive to consider the situation that would exist were such arrangements not in place. In that case, the trader would be obliged to pay cash. Obtaining that cash would have a cost that would inevitably be passed on to the farmer through lower prices. Deferred payment, while perhaps superficially an unacceptable practice, has the merit of retaining the full value of production within the trader-farmer marketing system, without any "leakages" to financial institutions or moneylenders.

Complexity of financial linkages. Financial arrangements within agricultural marketing systems, and between those systems and farmers, are complex and funds flow in both directions. They depend for their success on personal knowledge of and longstanding trade relations with the other party and, ultimately, on trust. Such arrangements can reduce the transaction costs involved with buying and selling produce and, by minimising the need for external finance, may serve to retain resources within the marketing system. Any proposals to address perceived problems within the production-marketing system through financial interventions need to recognise the complexity of existing financial relationships and consider the implication of changes, not just on those being targeted but on all stages of the marketing chain. An injection of resources into the marketing system is only likely to be successful as long as traders are able to utilise those resources within their own network of trusted trading partners.

Lack of finance: a barrier to entry. A tentative conclusion is that lack of institutional finance is not so much a constraint for day-to-day operations within existing marketing systems as it is to entering those systems in the first place and to expanding businesses once in. For small-scale trading purposes the combination of funding sources available to existing traders seems adequate, with the possible exception of small retailers, many of whom are unable to self-finance one day's working capital. Only those able and willing to offer suitable collateral are in a position to make capital investments or obtain bank finance to start trading on a large scale and to provide loans to other traders. This may be one reason why so much agricultural marketing in Asia is carried out by a large number of small-scale operators. A consequence of this is that scale economies are not available and that marketing costs may be higher than would otherwise be the case. On the other hand, initiatives to provide institutional finance for trading purposes would likely lead to the expansion of the businesses of those able to access the funds, to the detriment of those denied access. Whether the resulting loss of income-earning opportunities for traders would be balanced by increased marketing efficiency is debatable, although increased marketing efficiency would be likely to produce a net benefit for farmers.

Governments should facilitate rather than intervene. Government financing programmes, even if channelled through commercial banks, tend to misallocate resources and to be non-sustainable. Loans become based on government and donor priorities rather than on the ability of recipients to use them most effectively. Further, government or donor funds are rarely available to all those who want them and decisions on allocation can encourage rent seeking

and eventual failure to repay. Any perceived financing problems within marketing systems would be better addressed by examining the constraints faced by existing financial institutions (including microfinance institutions) in lending money to traders and processors. One fruitful area would appear to be that of inventory credit, which enables millers and others to secure loans against stock. In some countries there remain legal problems preventing the increased use of stocks as collateral. In others a network of certified warehouses does not exist. Overcoming such difficulties may be more beneficial in the long run than the more traditional approach of throwing money at problems, as practised by donors and IFIs.

Developing relevant loan products. The main constraint to increasing loans for agricultural marketing is the question of loan collateral. Those involved with marketing are often reluctant to risk their collateral, assuming they have collateral to offer. Understandably, however, banks do not consider a loan to someone unwilling to pledge his or her own assets to be a safe bet. Nevertheless, there may be a case for commercial banks that wish to extend their portfolios to devote resources to developing an understanding of how their local marketing and agribusiness systems function and the problems faced by the actors in those systems. At the same time, banks need to examine why so many traders are reluctant to approach them and, in some cases, are quite frightened at the prospect. It may then be possible to develop loan products, which, while still requiring collateral, recognise the seasonal resource constraints faced by traders and the consequent need for more flexible repayment schedules that can lead to full repayment without jeopardising collateral. In turn, traders will need to recognise that such favourable consideration involves both costs and risks for the bank and that this will inevitably lead to an interest rate premium. Particular attention should be paid to those in the marketing system who already have longstanding relations with banks. They usually require occasional finance to cover short-term cash flow constraints, particularly in peak seasons. Available loan products, on the other hand, seem rarely tailored to such requirements. The potential for greater use of overdrafts or lines of credit, as opposed to loans of fixed sums, should be explored.

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