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LOOSELY CONNECTED NOTES WITH A USEFUL ATTACHMENT

prepared by

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Acknowledgements

It is not often that one is called upon to work for a project as fascinating as the Afghanistan Agricultural Sector Support Project (ASSP), on issues as diverse as letters of credit, lease financing, seed production and the diffusion of new technology. It was a pleasure to spend an intensive period of two weeks with some of the most competent professionals that I have come across, in a charged atmosphere in which the demand - always and every day - was to produce practical ideas. It is with deep appreciation for the insight, experience and energy from which I benefited that I wish to thank Don Mickelwait, David Gardner, Roger Poulin, Teddy Yiberta, John Soden, David H. and O/AID/REP for making this assignment possible, fruitful and pregnant with possibilities.

Tariq Husain

Preamble

This preamble explains how the original Scope of Work for this assignment get modified into the present report. In the final analysis, all the specific items listed in the SOW have been addressed in this report, but they have also been modified in view of the "felt needs" expressed by project management during the assignment in Peshawar. Thus, Notes No. 2-5 and Note No. 7 have their origins in the SOW. Note No. 6 originated with a suggestion from Roger Poulin; it also addresses the need, expressed at a staff meeting on July 31, for specific information required for ADF and PSA. The attachment to this report (on informal financial mechanisms in Pakistan) came about at the request of David Gardner.

The specific tasks of the Trade and Marketing Advisor listed in the SOW are shown below, together with indications of how they were modified during the course of the assignment.

1. Define the factors which affect prices of major commodities in Pak-Afghan trade.

It was agreed that the project's major, operational interest was in getting at criteria and methods for determining prices, rebates, and the cost of providing financing at which inputs would flow into Afghanistan. (Re: Note No. 5.)

2. Assess the potential for establishment of an in-bond transit facility through Karachi parallel to the existing one controlled by the Kabul government.

This item was addressed in terms of the broader set of possibilities for transit trade through Pakistan, and the efficacy of involving the private sector as an alternative to public sector or quasi-diplomatic channels. (Re: Note No. 3.)

3. Review the conditions, capacity and potential of the traders in import-export trade.

It was felt that the combination of private sector traders and appropriate financial mechanisms offers the best prospect for facilitating trade under the mandate of PSA. Appropriate financing mechanisms working to this end were examined (in Note No. 4).

4. Project long-term potential for foreign exchange earnings for Afghan imports based on likely macro-economic changes under various scenarios of repatriation of refugees, growth in economic activity and trade in Afghanistan.

It was agreed that foreign exchange *per se* was not a constraint on trade; it does, however, facilitate dealings with official

agencies, for whom it is a constraint. This argument is explained in Note No. 2. In case the project is still interested in foreign exchange projections, these could be constructed in-house using the Robert Nathan-Louis Berger studies prepared under contract to O/AID/REP.

5. Recommend terms of reference for a special study to identify and analyze market structures, systems of trade and channels of distribution of cross-border trade.

Based on an understanding of immediate project priorities, suggestions are made in Note No. 7.

The thrust of the modifications and additions suggested by project management is to make the report more operationally oriented than it would otherwise have been. Only Note No. 1 deals with what might be considered strategic issues, and it can be incorporated quite readily into the new Plan of Work for the project.

Note Number 1

*FROM
CONCEPTS
AND EMPIRICS
TO
STRATEGY
AND OPERATIONS*

1. The Purpose of this Note

This note is not specifically called for under the Scope of Work of the Trade and Marketing Advisor. It provides an input in planning or rationalizing the overall strategy for ASSP. It examines the rationale for PSA interventions from a number of conceptual and empirical perspectives.

By itself, this is an incomplete note. It ends at the point from where one or two additional steps are needed to arrive logically at the Plan of Work of PSA and the specific line items in the ASSP budget. Since this note was written at the same time that the Plan of Work and budget were being prepared, incorporating the note into the operational documents should not be a problem. There might be value in completing such an exercise in-house before evaluation.

2. Macroeconomic Determinants of Trade

An international trade economist taking a macro perspective would say that trade depends on purchasing power (incomes) and differences in prices. The prices that are relevant are local prices, adjusted for real exchange rates; thus, exchange rates are also relevant to trade. Since incomes, prices and exchange rates are determined in markets beyond the control of a small number of individuals, a macro perspective would suggest that projects such as ASSP have no rationale in terms of trade enhancing interventions.

With a different sort of argument one can establish that ASSP does not really have a role in providing foreign exchange, because foreign exchange *per se* is not a constraint on trade. The thrust of this argument (laid out in greater detail in Note No. 2) is that: (i) under and over invoicing, and informal mechanisms such as *hundi* (or *hawala*) make official controls largely irrelevant (albeit at a cost to traders); and, (ii) in Pakistan, anyone can legally remit foreign exchange through the banks using the Foreign Exchange Bearers Certificates (FEBCs).

3. The Resilience of Informal Systems of Trading and Finance

A quick review of the first Nathan-Berger Cross Border Trade Study would suggest that the existing systems are generally fine, in good shape structurally, and can easily accommodate increases in trade. These findings are repeated in the Phase 2 study by Nathan-Berger.

The trading system is old and established and has shown resilience in the face of successive stresses, including war, the

virtual closure of official sources of financing trade, and the closure of the Torkham-Kabul route. The informal trading system is the source of this resilience and probably dominates official trade by a magnitude of about five or six to one.¹

The transport system is also structurally fine, and existing transport facilities (particularly trucks) are probably underutilized. Where roads have been damaged by the war, the local system has responded by building alternate routes and charging higher rates, and so trade has continued, albeit at a higher cost. Of course, repairs and reconstruction are needed, but that is presumably the mandate of other agencies and projects other than ASSP.

The financial system underlying cross border trade is largely self sustaining and depends on trust and established informal relationships. The /hundi/ system with its "bills of exchange" facilitates capital flows accompanying the movement of goods. Traders and /hundi/ merchants are largely self financed. The exchange risk created by a fast depreciating Afghani is covered by denominating prices in Pak Rs or the US dollar. Traders do not feel that capital availability is a constraint on greater trade.

Most of the problems that exist are due to war, uncertainty, macro policies and institutional factors - and AID/REP and project level interventions can have little impact on such factors. The major macro constraint on increased trade is the low purchasing power inside Afghanistan. Perhaps the only project level intervention that is implied by the Nathan-Berger Study is the repair and construction of roads.

4. What PSA Cannot or Need Not Do

Let us summarize the factors influencing trade that do not provide a rationale for intervention by PSA:

- o PSA cannot influence trade through macro economic variables such as incomes, prices and exchange rates;
- o PSA cannot do much to influence GOP and official Afghan policies on duties, taxes, interest rates, import controls and other elements of the regulatory framework;
- o PSA cannot intervene as an engineering project to rehabilitate damaged roads and related infrastructure.
- o The case for PSA focusing on foreign exchange as a constraint

¹These magnitudes relate to trade in agricultural inputs and commodities with and through Pakistan.

on increased trade is weak (this statement is pursued in Note No. 2).

5. What, Then, is the Rationale for PSA?

**Creating opportunities for arbitrage by the private sector:
The only justification for ASSP/PSA?**

The price differential that generates trade is that which exceeds transportation cost and the cost of other transactions (including the cost of capital, the return to entrepreneurship, storage, bonding, transit costs, normal profits, etc.). We can think of a unified label for all these costs, and call them "Trading Costs." Any time that prices in two locations differ by more than the trading costs, traders perceive an opportunity for arbitrage - by buying where prices are low and selling where they are high. Any entity that can reduce trading costs can create opportunities for arbitrage by the private sector. It does not have to involve itself in trading - all it needs to do is create an arbitrage opportunity, a price differential between two points that exceeds "Trading Costs." Traders in hot pursuit of the rupee will do the rest: they will move goods from one place to another in pursuit of profits.

A project can create arbitrage opportunities not by affecting prices (which it can't) but by influencing trading costs (which it can). The only limit to this kind of intervention is a practical one - the availability of human and financial resources to reduce costs through a combination of imagination and subsidy.

6. What Kind of Trading Costs are Relevant for ASSP?

Categorizing trading costs as elements for intervention by PSA: Opportunities for arbitrage.

There are many ways to categorize opportunities for intervention by PSA. One way is to empirically identify the kind of costs one sees as important, and then identify likely interventions (and corresponding budget categories) for PSA. From the point of view of a trader, a preliminary categorization of costs might be as follows:

Cost of Procedures:

- o the right to import and export legally;
- o the cost of obtaining procedural approvals;
- o the cost of having procedures changed.

Duties and Taxes:

- o official Pakistani duties and taxes;
- o unofficial, local taxes inside Pakistani Tribal Areas;
- o unofficial local taxes inside Afghanistan.

Search Costs:

- o for finding non-traditional products for which demand has been recognized by traders;
- o for finding new trading partners in order to respond to new products or new institutional arrangements.

Cost of Capital:

- o the cost of obtaining capital in imperfect/distorted markets - high interest cost in the informal sector, and high transaction costs in the formal sector.

Risk:

- o the cost of risk that cannot be pooled.

Damage to Infrastructure:

- o the cost of transport when infrastructure has been severely damaged by war.

Corresponding to each of these costs there is, in principle, an opportunity for intervention by PSA. Corresponding to any such intervention there is, in principle, an opportunity for arbitrage by the private sector.

If this line of thinking were to be continued, one would sit down with project staff, go through each of the costs identified above, and decide what kind of interventions are important and feasible. The result would be an analysis that would bridge the gap between this note and the operational (or work) plans of ASSP.

Note Number 2

FOREIGN EXCHANGE

1. The Purpose of this Note

The Scope of Work for the Trade and Marketing Advisor included the following item:

Project the long-term potential for foreign exchange earnings for Afghan imports based on likely macro-economic changes under various scenarios of repatriation of refugees, growth in economic activity and trade in Afghanistan.

In consultation with project management during the course of the assignment, this item was despatched in two ways:

i) By demonstrating that foreign exchange *per se* is not a constraint on trade between Pakistan and Afghanistan, though it may be a constraint on official trade between Afghanistan and third countries, and it may be a useful device to facilitate arrangements with official Pakistani organizations.

ii) By suggesting that ASSP could use available data to carry out in-house projections of foreign exchange availability for Afghanistan. Since the two week assignment called for several topics to be covered, it did not leave much time to devote to detailed projections of foreign exchange under various scenarios. ASSP can, however, work with two of the Nathan-Berger reports¹ prepared for O/AID/REP and construct various scenarios for foreign exchange earnings.

For the purposes of ASSP, the subject of foreign exchange availability can be understood with reference to three perspectives: (a) the macroeconomic importance or irrelevance of exchange controls; (b) the workings of the informal foreign exchange market; and, (c) the availability of official channels for foreign exchange transactions. These three aspects are discussed below.

2. A Macroeconomic Perspective on Foreign Exchange Availability

At the beginning of Note No. 1 we noted the macroeconomics perspective that trade is determined by incomes, prices and exchange rates. If that is the case, then why is foreign exchange availability a constraint? It could be a constraint if imports have to be paid for through official exchange control systems in Pakistan and Afghanistan. But if everyone in the trade knows about

¹The study on cross border trade provides estimates of both official and unofficial trade, while and the macroeconomic database for Afghanistan contains official time series on balance of payments and the external sector.

exchange controls, they also have the opportunity to figure out a way around the controls. It would not be surprising, therefore, if empirical studies found exchange controls to be irrelevant.

Indeed, a recent multi-country IMF research report prepared by two economists² found that capital flows across official controls as if there were no controls! There is almost perfect mobility of capital across international boundaries, even when there are exchange controls. The authors attributed this finding to the mechanisms of under/over invoicing and the substantial size of transactions through the informal market for foreign exchange (in Pakistan and Afghanistan, the *hundi* or *hawala* system).

3. Under/Over Invoicing of Exports/Imports

These mechanisms are standard ways for traders to accomplish two objectives: (a) put aside foreign exchange overseas for future transactions; and, (b) reduce taxable income by deflating the value of overseas sales and inflating the value of imported inputs. In this report, we are concerned with (a).

To begin with, we cite a finding from the Nathan-Berger study of cross-border trade that suggests that only about one-sixth to one-fifth of Afghan trade in agricultural commodities goes through official sources. The bulk of the trade goes through informal systems. The informal system of foreign exchange is not described in this note but is outlined in the attachment on the informal financial sector in Pakistan.

Within the official category, there appears to be substantial under invoicing of exports from Afghanistan. By one account, this could be up to the extent of 50 percent. Thus, official importers in Afghanistan are having their suppliers pay a significant part of the foreign exchange into overseas accounts. This reduces the effectiveness of exchange controls and the availability of foreign exchange in the official system, but it puts foreign exchange at the disposal of private traders over and above the amounts that can be officially sanctioned.

4. Foreign Exchange Bearer Certificates (FEBs)

Foreign exchange and other income that is put by traders beyond the reach of tax authorities is part of what is called "black money" in Pakistan. Some years back the Government of Pakistan enacted a number of measures to "whiten" black money: it

²Mohsin S. Khan and Madeem ul Haque, "Capital Flight from Developing Countries," *Finance & Development*, March 1987.

offered financial instruments (as part of the national debt) to the public that could be purchased and traded with no questions asked. One such instrument is the Foreign Exchange Bearer Certificates (FEBCs), issued for a face value denominated in rupees and freely convertible into foreign exchange. The FEBCs can also be used as collateral to obtain loans from Pakistani banks. The availability of FEBCs makes it possible to obtain foreign exchange on demand at Pakistani banks and remit it overseas through legal channels.

The FEBCs have on trading in recent months at a dollar-to-rupee value that is generally 6-7 percent above the official exchange rate. This "premium" includes transaction costs incurred by the dealer. Around the time of *Hajj*, the premium increases to about 9-10 percent in response to the demand of those buying foreign exchange before proceeding overseas.

5. Foreign Exchange: An Importer's Perspective

A trader intending to use official channels for his imports has to obtain a Letter of Credit (LC) from a bank for doing so. In Pakistan, this requires the prior permission of the Chief Controller, Imports and Exports (CCI&E) through an import license. In essence, the import license gives two kinds of permission: (a) the right to import a good; and, (b) the right to claim foreign exchange from the State Bank of Pakistan. In addition, an LC provides the trader with credit through the official system. Together, the import license and the LC take care of permission to import goods, to buy foreign exchange, and to obtain credit.

Of the three elements, only the right to import could be a legal constraint for an intending Afghan importer, and only credit is an economic constraint. Any Pakistani or non-Pakistani wishing to make an overseas remittance in foreign exchange to a supplier can do so legally through the simple, well known and tested mechanism of the FEBCs: he can get any amount of foreign exchange remitted legally through the banks. In this case, however, he will have to: (a) put down cash equal to the value of the remittance; (b) present an import license at Karachi when the goods arrive and have to be cleared through Customs. Thus, the operative constraints are credit and the right to import.

Whether one takes an economist's perspective or an importer's perspective, the case for intervening simply in order to increase foreign exchange availability (through greater exports or direct injections of foreign exchange) is weak. Foreign exchange is, however, important, for two other reasons: (a) for official trade through Kabul, which is outside the mandate of ASSP; and, (b) for facilitating arrangements with official Pakistani organizations.

The last observation applies to a variety of dealings that

ASSP has had or could have in the future, such as shipment of fertilizer by rail, import of fertilizer and other equipment, etc. In such cases, where government permission is required, an organization providing "its own foreign exchange" is put at the head of the queue for services, imports, etc., that are in short supply. For example, if ASSP or its fertilizer importer ask for railway bogeys, the Pakistan Railways would entertain its request faster than otherwise if the request were accompanied by payment in foreign exchange. If fertilizer has to be imported, the permission to import it will be given priority if the importer was providing his own foreign exchange. This means that ASSP can use its dollar funds to facilitate both direct importation and various deals made on its request by private parties in Pakistan.

The preceding discussion suggests that foreign exchange is not, in general, a constraint on trade. In particular, except for using foreign exchange to facilitate arrangements with official Pakistani organizations, there is very little that ASSP can do to facilitate trade by providing foreign exchange.

A corollary of the above findings is that increased exports out of Afghanistan need not be pursued as a means for increasing foreign exchange earnings. Exports make overseas markets accessible to Afghan farmers and traders, thereby helping increase their incomes. That, rather than increased foreign exchange earnings, is the value of exports.

Note Number 3

**TRANSIT
TRADE
THROUGH
PAKISTAN**

1. The Purpose of this Note

For the purposes of grouping opportunities for intervention PSA, the main operational distinction is probably between bilateral trade (between Afghanistan and Pakistan) and transit trade (through Pakistan, but between Afghanistan and third countries); either type of trade could be officially legal or illegal (the latter usually called "informal"). The Pak-Afghan trade and transit treaty covers both bilateral and third-party transit trade for Afghanistan; trade covered by the treaty constitutes a sub-category within legal trade.

The focus of this note is on legal trade, particularly transit trade, since that is the aspect closest to the Scope of Work for this assignment. Also, legal trade is often cheaper than informal trade because traders can get cheap capital from Afghan or Pakistani banks, and legal exemption from Pakistani import duties and local taxes.

After putting down a few facts about bilateral and transit trade under the Pak-Afghan Treaty (in Section 2), the note focuses on three mechanisms for importing inputs for Afghanistan through legal transit trade. The note ends by documenting the possibilities mentioned by a private Pakistani company for exports of agricultural commodities from Afghanistan.

2. Trade Under the Pak-Afghan Treaty

This treaty covers both bilateral and transit trade.

Bilateral official trade between Pakistan and Afghanistan is reported to have been suspended about 11-12 years ago. The cause of suspension is the seizure of assets by the Afghan and Pakistan governments against unsettled claims by Pakistani and Afghan traders and governments.

Transit trade permitted under the treaty is still carried out under the auspices of the Kabul government. This trade is restricted by treaty to transportation on Pakistan Railways. The Afghan National Bank branches in Pakistan and the Pashtuni Forwarding Agency and its agents are authorized by the Government of Pakistan to handle the requirements of transit trade under the treaty.

3. Trade with Quasi-Diplomatic Privileges

One mechanism talked about in the context of imports of agricultural inputs is that of getting quasi-diplomatic privileges for private parties on the pattern of privileges available to O/AID/REP. This would provide importers with exemptions such as

those from payment of import duties and legal taxes that have to be paid on imports into Pakistan. It could also provide the facility of bonded warehouses where goods meant for Afghanistan could be secured until they leave Pakistan. If mechanisms such as these could be extended to private parties, then the direct involvement of ASSP and O/AID/REP could be replaced gradually by private sector involvement.

The problem is that diplomatic privileges extended by GOP to O/AID/REP cannot be extended to third parties. Under the present circumstances, there are only two real alternatives:

(i) Direct involvement of ASSP or O/AID/REP under the quasi-diplomatic privileges given by GOP; or,

(ii) Private sector initiatives under the rules and mechanisms generally available to the private sector in Pakistan.

Since alternative (i) is not desirable from a long-term perspective, we have no choice but to pursue alternative (ii) in every possible way.

4. Completely Privatized Mechanisms

Two promising mechanisms were mentioned in conversations with private sector representatives. The first entails working with GOP regulations for re-export, and the second is simply letting private firms take over responsibility for transit trade under the normal regulations of the Ministry of Commerce.

The re-export mechanism has been made legally available so that imported goods to which value is added within Pakistan can be re-exported legally. But adding value is no longer the decisive criterion for the government to allow re-export. What matters is that the price at which re-export is planned should be at least 10 percent above the C&F price (say, at Karachi). This criterion can be fulfilled in either of two ways:

i) The Pakistani exporter should produce an LC from an Afghan bank showing that the Afghan importer will pay a price that is at least 10 percent above C&F Karachi.

ii) A Pakistani bank would need to certify that advance payment has been received for goods that will be exported at a price that is at least 10 percent over C&F Karachi.

Upon such certification, the Chief Controller Imports and Exports (CCI&E) will issue a license for re-export to the Pakistani trader. Import duties paid on the goods will be refunded upon verification that the goods have crossed the Pakistan border. (This means an official stamp of some sort by Pakistani authorities

posted at any of the exit points along the border - it does not necessarily mean crossing the border at a point where Kabul government representatives are present). In this way, anything imported into Pakistan can be legally exported to Afghanistan at a small cost above the C&F Karachi cost.

Goods could be shipped to Afghanistan at an even lower cost if private parties in Pakistan could obtain the facility of bonded warehouses from the Ministry of Commerce. It appears that the Ministry has put a ban on issuing permission for new bonded warehouses. But at least one private sector representative¹ was confident that the ban would not have much standing, since bonded warehouses are permitted under the law. He felt that if bonded warehouses have been approved in the past, there is no reason why they should not be approved in the future. The advantage of having transit trade go through bonded warehouses is the automatic exemption from payment of import duties. Exporters do not have to wait for refunds of import duties, since they are not levied to begin with.

5. Mechanisms for Exports from Afghanistan

Don Micklewait and I met with Sheikh Amjad Rashid of International Multi Foods (IMF) in Islamabad and took the opportunity of asking him if his company could manage exports of agricultural commodities out of Afghanistan. His response was enthusiastic and suggested that his company could provide the following services in the export of dried apricots and raisins:

- i) Training in packing (and presumably in picking);
- ii) Field boxes (crates) in which the fruit would be packed and shipped;
- iii) Training in fumigation that is essential for protecting the fruit from infestation; and,
- iv) Everything else that is associated with exporting the fruit.

Apparently, IMF is already engaged in exporting Afghan fruit to Europe, and is currently looking for 100 tons of dried apricot. It has also made an arrangement recently to supply the Whitworth chain in the United Kingdom.

Another Pakistani private sector party capable of managing exports from Afghanistan is Ishtiaq Ahmed of Al Mushtaq Traders in Peshawar, whom I met in the company of David Gardner, Dr Wakil and Roger Poulin. Al Mushtaq has long experience in dealing with

¹Sheikh Amjad Rashid of International Multi Foods.

Afghan traders and is willing to work with some of them in directions charted out by PSA. Mr Ishtiaq claimed that, as far as he knew, Al Mushtaq was the only significant exporter of Afghan fruits in Pakistan. Al Mushtaq does not, however, have the capability to provide technical training to Afghan farmers or traders.

6. Possibilities for Early Private Sector Involvement

The possibilities for greater private sector involvement in both imports into Afghanistan and exports from Afghanistan look promising. Both IMF and Al Mushtaq look like promising candidates with whom Afghan traders could be associated with the assistance of ASSP. I imagine that if we looked hard enough, we might find another one or two Pakistani traders like them.

IMF could be involved in imports in either of two capacities:

i) As an indenter, working for a commission, to arrange all the logistics for another importer (such as ASSP or Ronco). There would be no need in this case for providing financing, as IMF would not be a direct importer.

ii) As a direct importer, in which case IMF would itself place the orders for imports, arrange and pay for shipment, organize port and other clearances and transport to the border, and probably also obtain permission for bonded warehouses. The financing mechanism for this would be that IMF would open a Letter of Credit (LC) for imports in its own name, and O/AID/REP or ASSP would open an Inland LC within Pakistan to exactly match the IMF's LC. In this way, ASSP would provide the financing for the imports.

In order to make them work in directions charted out by ASSP, two essential ingredients have to be supplied by ASSP - partnerships with Afghan traders, and financing. PSA already has a tentative list of Afghan traders who could be involved in partnerships with Pakistani traders. This leaves us with the question of financing mechanisms, on which Note No. 4 provides some thoughts. A considerable amount of preparatory work would have to be done with each set of partners, the Afghan traders identified already and the Pakistani importers/exporters (such as Al Mushtaq and IMF) who might be interested in working with ASSP and Afghan traders.

Note Number 4

***FINANCING
MECHANISMS***

1. The Purpose of this Note

One of the priority activities to be undertaken by ASSP/PSA is that of enabling partnerships to be organized between Afghan traders and Pakistani firms so as to facilitate trade. A complementary activity would be the provision of financing, directly or through guarantees, to both Afghan and Pakistani traders. The purpose of this note is to record some of the useful information that became available during this assignment, and to speculate about mechanisms that are likely to prove attractive and sustainable from the point of view of ASSP and its private sector clients.

The two mechanisms on which this note focuses are Letters of Credit (LCs) and lease financing. The advantage of these mechanisms is that they are standard financing arrangements, their general requirements are well known to bankers and businessmen, and they come with complete sets of paper work that cater to various interests and concerns involved in a business deal. In addition, lease financing has a peculiar advantage in places like Afghanistan and Pakistan: it is compatible with popular notions of Islamic financing, since it does not involve explicit interest charges. In principle, any kind of loan can be converted into lease financing, and thus help address religious objections comprehensively.

Many of the details that are needed by ASSP to implement financing through LCs and lease financing are yet to be determined. At the same time, there is an urgent need to involve the private sector in a number of deals by September 1990. With this in mind, a proposal is made in Note No. 7 for a short term Pakistani consultant who would gather detailed information that could be used by ASSP (John Soden, Bob Haskell, Denny Freed and others) to rapidly finalize negotiations with traders, leasing companies and bankers. In other words, one would like to see all the background information in place and available to ASSP by the time it starts negotiating deals. Keeping in view the urgency of the situation, a fairly detailed SOW has been proposed in Note No. 7 (that can be augmented by comments from ASSP and issued promptly as a Work Order).

2. Letters of Credit

One, well established mechanism through which banks provide financing for international trade is the Letter of Credit (LC). For internal trade, banks provide an Inland Letter of Credit (ILC). LCs and ILCs are versatile instruments that can accommodate a variety of margins, repayment periods and collateral. An LC can be extended with as little as zero percent margin, and as much as

100 percent¹. The margin is negotiated with the bank, which examines each customer individually. Collateral can be offered in various forms, including lien on cash or the variety of interest-bearing certificates that are available in Pakistan (for instance, the Foreign Exchange Bearer Certificate). This means that it is not essential to have physical assets (such as property) in Pakistan in order to open an LC or ILC.

In working with an importer, ASSP can:

i) Provide a guarantee to a bank in support of an importer's LC. This will likely result in more favorable margin requirements than otherwise and might also affect the interest rate charged. Small importers, or those without a record with the bank, will need this kind of support more than larger, well established importers (such as IMF). It is not yet clear what such a guarantee might entail - a piece of paper, or cash deposits with the bank, or something else.² Negotiating a guarantee with a bank may take some time.

ii) Open an Inland LC in the name of ASSP to cover an importer's LC. This would mean that ASSP is placing the order with the importer at the same time as the importer is placing an order with an overseas supplier, and on the same terms. This arrangement would entail two direct arrangements, one between the importer and ASSP, and the other between ASSP and the bank. The bank would be involved simply to the extent of opening an Inland LC.³

The examples given above have been drawn up with fertilizer and farm machinery imports in mind. The Inland LC, however, can also be used as a financing mechanism for placing orders with local (Pakistani) manufacturers. Suppose that ASSP wants to place an order with a Pakistani manufacturer for 100 tractors. ASSP would then simply open an Inland LC for 100 tractors in favor of the manufacturer. This LC could be a sight LC or a deferred LC, or a combination of the two.

In case of partially deferred payment, an Inland LC acts as a loan. ASSP would ask the manufacturer to accept deferred payment, and the amount deferred would be a loan to tractor buyers (dealers or traders taking the tractors into Afghanistan). The loan would be routed through a bank LC to the manufacturer, and on to traders or dealers. The terms of the LC would have to be

¹With a zero percent margin, the bank extends 100 percent financing cover.

²The details are to be pursued in a short-term consultancy being proposed in Note No. 7.

³The requirements for an Inland LC will be investigated in detail in the short-term consultancy proposed in Note No. 7.

negotiated with the manufacturer, who will obviously ask for ASSP guarantees for repayment. The tractor buyers would have to be told in advance about the terms of the loan. The loan could be formalized in one of two shapes - an ordinary loan whose repayment entails a mark up (otherwise known as interest charges), or a lease financing arrangement that combines an Inland IC with lease rental (the latter being a loan secured in the way that leases are secured in Pakistan).

A partially deferred IC would entail negotiations between ASSP on the one hand, and the manufacturers, bankers and various dealers on the other. An administratively simpler mechanism is lease financing in which ASSP would deal only with a leasing company.

3. Lease Financing

Under this option, ASSP would identify a good leasing company as a one-window operation for most or all of the arrangements associated with exports from Pakistan to Afghanistan.⁴ We were told by IMF that it is going to enter the leasing business. The IMF, however, is not reputed as a leasing company. The two leasing companies that are mentioned most often in Pakistan are Orix Leasing Company, a private firm, and National Development Leasing Corporation (NDLC), a subsidiary of the state-owned DFI National Development Finance Corporation.

Orix (formerly known as Orient Leasing Company) has been supported in recent years by the Asian Development Bank through its subsidiary Asian Leasing Company. About 2-3 months ago, Orix received a loan of \$5 million from the Asian Bank group. It has also been identified by the World Bank as a conduit for loans to micro enterprises. Orix appears to be partly owned (or at least partly managed) by a Japanese company.

The leasing arrangement usually works as follows: The intending lessee (say, an Afghan trader) identifies the tractor he wants to buy/lease. He asks the machinery manufacturer to provide an invoice. The invoice is sent to the leasing company, which examines it to see whether the prices are reasonable, whether the dealer can provide maintenance, whether effective comprehensive insurance can be taken out, and whether the item requested is on the leasing company's approved list. The leasing company also examines the financial solvency, revenue projections and cash flow situation of the intending lessee.

When the leasing company expresses its willingness to provide lease financing, the intending lessee places an order with the

⁴The identification of leasing companies is part of the SOW of the proposed short-term consultant in Note No. 7.

vendor or manufacturer and makes the full payment, or opens an inland LC in favor of the manufacturer or vendor. In other words, the intending lessee initially has to fork out the cash to pay for the machinery. The manufacturer delivers the machinery to the intending lessee and obtains a delivery challan, which it sends to the leasing company.

The leasing company then requires various paper work (including a contract, promissory note, maintenance contract, guarantees, and standing payment instructions to the lessee's bank) to be completed. Once this is done, the leasing company invoices the intending lessee for the first payment against the lease rental. The lessee makes the payment - more cash out. Only after the first lease payment has been made, and subject to the completion of other paper work, will the leasing company reimburse the lessee for the cost of the machinery. At that stage, the lease becomes a loan. After three years, the lessee ends up owning the machinery. Until that time, the title is held by the leasing company, and the property is fully insured by it.

This is the standard procedure that I have personally experienced (at DRMS) in dealing with Orix. Even though Orix is supposed to be a professional, well managed leasing company, much admired by multilateral banks such as ADB and the World Bank, and even though it considers DRMS a good customer, its dealings with DRMS appeared slow and somewhat bureaucratic. After several delays that could have been avoided, the icing on the cake was that the reimbursement check given by Orix to DRMS bounced!

Still, we must persevere, and we must look for competitive offers of quick and comprehensive service to Afghan traders and Pakistani manufacturers, with the assistance and guarantees of ASSP.

4. An Example: Tractor Purchases under Lease Financing

Suppose that we found a leasing company which satisfied us that it could manage all or most of the arrangements needed by ASSP in support of Pak-Afghan trade, and suppose that we wanted to use it, in the first instance, in support of Afghan traders wishing to buy tractors for sale in Afghanistan. ASSP would probably need to go through the following steps:

i) Identify the dealers/traders who are interested in buying tractors in Pakistan, either with or without a loan from ASSP. Those who are interested in a loan will have to be explained the mechanics of leasing in all its detail, since they are the ones who will be signing the lease contracts with the leasing company. The leasing company will need to examine the situation of each prospective trader in order for it to decide what kind of guarantees it needs from ASSP. ASSP may well decide to provide

100 percent guarantee, in which case the leasing company presumably will not need to examine the credentials of each trader individually. For ASSP's money to have the maximum possible leverage, however, it is best that something less than 100 percent guarantee be provided to the leasing company - any securities that traders can provide will decrease the amount that needs to be guaranteed by ASSP.

ii) ASSP will ask the leasing company to buy a certain number of tractors from a Pakistani manufacturer. Whether the company or ASSP pay the manufacturer, and whether that is done at the time of delivery or placing the order would have to be negotiated. A likely scenario is that the leasing company will place the order with the manufacturer, make part payment⁵ at the time of placing the order, and ask ASSP to provide either an Inland LC or a loan to it. The title to the tractors will remain with the leasing company until the lease rental payments have been made in full.

iii) When the tractors are ready for delivery, the leasing company will pay the manufacturer in full, and ASSP would inform the leasing company of the particulars of the traders who will take delivery from the manufacturer. Suppose the traders are required to pay 40 percent of the cost of the tractors at the time of delivery. Then the balance 60 percent will be written into a lease rental contract between the leasing company and the trader, with guarantees provided by ASSP. This 60 percent is, in effect, a loan to tractor buyers from ASSP, through the leasing company.

Clearly, many more details need to be worked out, but it appears that the mechanism outlined here could be useful for ASSP in at least two ways: (a) it would enable credit operations to be undertaken by a leasing company rather than having it done in-house; and, (b) it can be used to provide loans to Afghan traders.

There are, in general, two ways of deciding how much loan should be given. One could sit down with a group of traders and work out their individual, collective or general requirements that would be written into one or more lease contracts. Or, one could present standardized lease contract options that could be auctioned to Afghan traders. The second method is explored in Note No. 5.

⁵Payment in foreign exchange could enable the order to jump to the head of the queue, if the manufacturer is a state enterprise.

Note Number 5

*PRICING,
REBATES
AND
AUCTIONS*

1. The Purpose of this Note

The Scope of Work for this assignment asked the consultant to "define the factors which affect prices of major commodities in Pak-Afghan trade." Since a comprehensive treatment of price levels and determinants has been undertaken in the second phase Nathan-Berger study commissioned by O/AID/REP, it was decided to concentrate, instead, on the operational interests of ASSP. These interests include criteria and methods for providing rebates and financing, for determining price differentials at which inputs will flow into Afghanistan through the private sector, and for auctions that could be used in support of such objectives.

A project such as ASSP can set prices and rebates in one or both of two ways:

i) By gathering detailed information on transport costs, the cost of capital, prices inside Afghanistan, etc., and making administrative decisions on levels of rebate, financing charges, etc.

ii) By deciding first on quantities (of fertilizer, tractors, loans, etc.) that are available from ASSP during a given time period, and auctioning the rights to these quantities among Afghan traders.

The advantage of auctions is that they quickly and cheaply provide information that would otherwise take weeks or months to obtain. Information gathering through reviews and surveys is not only costly in administrative terms, it is also often too late in comparison with the frequency with which prices need to be changed in order to reflect changing market conditions. The purpose of this note is to explore the use of auctions for transport rebates, the provision of financing for tractors, and the supply of goods ordered under the project's "forward contracting" activity. The proposal to use auctions in these ways should be considered an experiment¹: it may be difficult to implement in some or many cases, but it remains an attractive alternative to administrative price setting for all manner of scarce resources. With practical experimentation, monitoring and learning, the project would begin to approach perfection in the use of auctions.

2. Auctioning Transport Rebates

Suppose that ASSP or a private firm has imported 10,000 tons of DAP fertilizer for sale to Afghan merchants, and that ASSP has agreed to make a transport rebate available for shipment of

¹ASSP already uses auctions to sell fertilizer to Afghan traders.

fertilizer into Afghanistan. The sale price for fertilizer in Pakistan is the price at which the fertilizer is sold by Pakistani companies. Suppose that the payment of rebates for transportation will be authorized only after confirmation is received from one of the PSA bazaars that the shipment has been either off-loaded at the bazaar or carried onward to a sale point beyond the bazaar.

ASSP knows the costs of transporting the fertilizer to any of its bazaars. The highest of these costs² would be announced as the maximum permissible rebate at the opening of an auction. The auction would call for bids for rebates on each 50 (or less, or more) tons or 'X' number of truckloads of fertilizer. Each bidder would indicate the transport rebate he needs in order to ship the fertilizer to a destination where he has identified a source of demand. The bidder asking for the lowest rebate (per truckload, or per ton) will earn the right to get a rebate for the specified lot of fertilizer.

The first successful bid will be for the lowest rate of rebate, and would probably be for shipment to areas nearest to Pakistan. Gradually, as the bidding progresses, the successful bids will be for increasingly higher rates of rebates, for transportation to less accessible areas. This process will continue until the entire shipment of 10,000 tons is exhausted.

The auction could end with one of two possibilities:

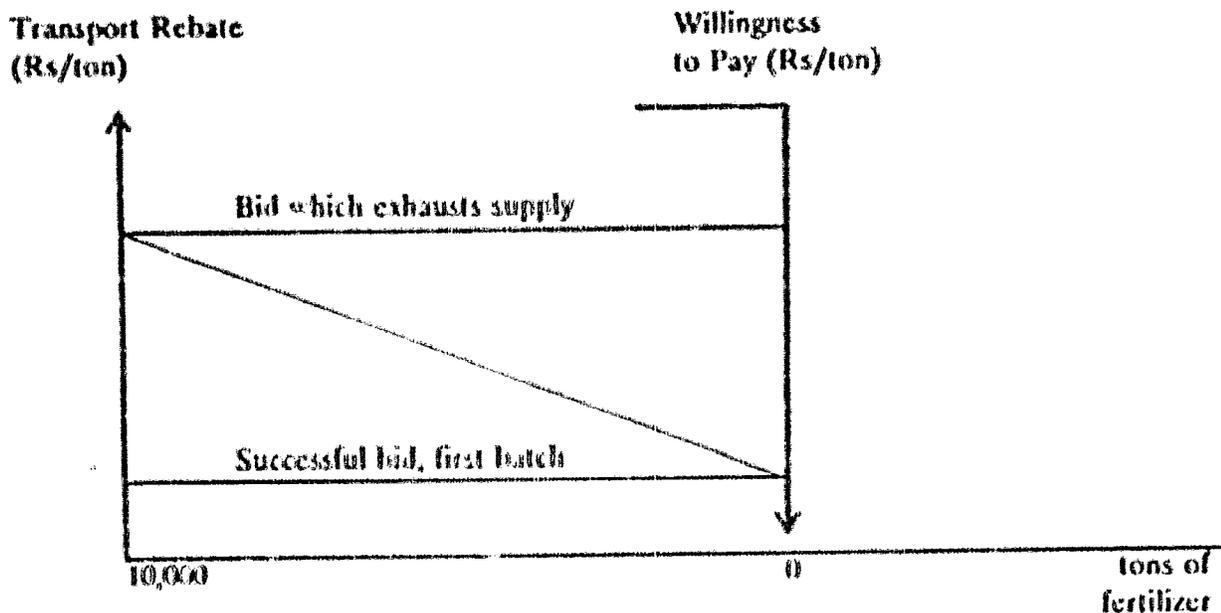
i) If nobody is willing to bid for a rebate on the remaining fertilizer, the project would have to consider raising its maximum permissible rebate. Assuming that the goal is to sell all 10,000 tons of fertilizer, the rebate will have to be increased until all the fertilizer is sold.

ii) If available fertilizer has been exhausted, but some traders are still found willing to bid for a rebate that is below the maximum permitted by the project, then the project will have to obtain additional supplies of fertilizer.

Conceptually, the process is one of finding the demand curve for fertilizer by using the auction to reveal the points (the price-quantity combinations) along the market demand curve for fertilizer. The illustration in Figure 1 (on the next page) shows the relationship between bids for transport rebate and quantity of fertilizer auctioned. Holding the graph upside down shows the expected downward-sloping demand curve (taking Willingness to Pay as the vertical axis): willingness to pay for fertilizer decreases as its quantity increases. Thus, the bids for rebate are inversely related to the market's willingness to pay fertilizer.

²or the cost up to the Northern Provinces, in case supplying them is within the mandate of ASSP.

Figure 1. Illustration of how an auction of transport rebates reveals the market demand for fertilizer.



This kind of auction has the virtue that it exhausts arbitrage opportunities by limiting the profit margin of traders to barely that which will make the trade "just possible." The project's offer of a rebate opens up an arbitrage opportunity, but its auction ensures that the opportunity is exploited only by those who are efficient at reaching known sources of demand. The auction also ensures that the project does not pay excessive rebates, that rebates are used to make trade possible in response to market demand, rather than as subsidies to the profits of traders. Because of the fact that auctioning rebates creates competition among traders and reduces their profit margins, ASSP is quite likely to face opposition from some traders to this idea. If the project perseveres, however, it will soon find efficient and enterprising traders coming forward with positive offers, since we know that there is a large, unmet demand for DAP fertilizer in Afghanistan.

3. Auctioning Market Development Costs

The auction technique could also be applied to minimize market development costs for items that do not have a known, commercial demand inside Afghanistan, but which have been tested successfully by ADT. Suppose ADT decides that it is time to sell 50 walk-behind reapers through commercial channels, knowing that these reapers will not yet be bought at full, commercial prices. Suppose that the project has ordered 50 reapers under its "forward contracting"

mechanism, and that these are to be sold at a "loss" because it is understood that ASSP is in the business of introducing new technology and developing markets for it. One way of minimizing market development costs would be to hold an auction for the 50 reapers, and give them to the highest bidders.

It is possible that, under this mechanism, the reapers would end up only in one part of the country (say, the east), whereas the project might have wanted them in some other part (for example, the Northern Provinces). The only way to get around this problem is to identify somebody the project trusts, work out a financing arrangement with him, and ask him to ensure that the reapers get to the target area. Auctions are no good for targeted selling.

4. Auctioning Lease Rentals for Tractors

Note No. 4 ended with the suggestion that standardized lease contracts for financing the sale of tractors could be auctioned off to interested Afghan traders. The principle behind this suggestion is the same as that discussed under Section 2 of this note: the project is creating an arbitrage opportunity for traders by arranging lease financing, but it would also like to ensure that its capital or guarantees are exploited most efficiently in pursuit of market demand rather than profits for a few. To anticipate what follows, the project is looking for traders who will buy (say, 100) tractors with the least amount of concessionary finance (that is provided by the project through the leasing company).³

One simple way of achieving this objective would be to draw up 12 variants of a standard lease contract under which the trader pays (suppose) 40 percent of the tractor price upon delivery and the balance within 12 months. Within the standard contract, a trader can decide to pay the balance after any number of months since delivery, thus giving 12 options for traders to bid on.⁴ Corresponding to each option is the amount that a trader will have to pay to gain legal title of the tractors (which are legally held by the leasing company until full payment is made). The total amounts and monthly installments corresponding to the repayment options would have to be worked out by the leasing company, examined and explained by ASSP, and understood by the traders, but none of these is a particularly difficult endeavour.

³This statement imputes a specific motive to ASSP - that it is interested in making its limited funds go as far as possible, in as many ways as possible, for the development of trade and agriculture, and that it is interested in phasing out project-supplied rebates, financial guarantees, etc. over time.

⁴One could, of course, have fewer options for purposes of simplicity.

Bidding might be announced for each lot of five tractors, and the trader bidding the quickest payment of the balance amount wins the bid. The maximum period for payment in full could be 12 months, and anyone bidding up to this period would be considered eligible for this scheme. Suppose that a tractor (and perhaps related equipment) costs Rs 350,000, of which 40 percent has to be paid by the buyer on delivery, and that ASSP extends deferred payment for the balance through a leasing company. Assuming that the balance of the price that has to be paid after taking delivery is Rs 210,000 per tractor, and that every month the balance increases at the rate of 2 percent, the final results of an auction might look something like this:

Table 1: Illustration of the outcome of proposed bidding on concessionary finance by tractor buyers.

Option No.	Payment to be Made per Tractor	Months to Pay the Balance	No. of Tractors Successfully Bid
1	Rs 214,200	1	0
2	Rs 218,484	2	5
3	Rs 222,854	3	10
.	.	.	.
.	.	.	.
.	.	.	.
10	Rs 256,000	10	15
11	Rs 261,109	11	10
12	Rs 266,331	12	0

An alternative to this scheme would be to fix the repayment period and create options for the percentage of cost that a trader might want to pay upon taking delivery. Discussion with traders and leasing companies is needed to construct standard options that would attract the traders and be efficient at allocating lease financing privileges.

5. Auctioning Working Capital for Afghan Exporters

The most serious constraint that businessmen face in countries like Afghanistan and Pakistan is that of working capital. Since banks, typically, do not lend for working capital, businessmen go to the informal market for short term financing. There are many ways of getting financing in the informal sector (described in the attachment to this report). One method used by local entrepreneurs is a variant of what is called the "committee system," that may be called the "auctioned committee." In this system, a group of

traders (say, ten) decide to make a fixed contribution (say, Rs 1,000 each) every so often (say, every week) to a common fund. The common fund, called the committee, is given to the person who bids the lowest amount for it. Suppose the winner bids Rs 9,000 for a committee of Rs 10,000; then each contributor has to contribute only Rs 900 instead of the designated contribution of Rs 1,000.

The principles of group liability and the committee system can form the basis for an experimental financing mechanism for Afghan traders who export agricultural commodities from Afghanistan. The project would need to identify one or more groups of, say, five traders each who know and trust each other, explain the system to them (if they don't it already), and determine their monthly or weekly requirement for working capital. Suppose that a group of five traders estimates its requirement at Rs 500,000 per month. Then the project could ask them to raise 50 percent of this amount themselves and provide the remainder as a bank overdraft (with project guarantee), or as a cash withdrawal from a designated account, or, if bank operations are impossible, provide the traders with Foreign Exchange Bearer Certificates to be used as collateral in the informal sector to raise cash. In case of bank operations, there is the advantage that the project's contribution could be drawn only with the signatures of designated people (for example, all five members of the committee).

If the scheme works the way that informal committees work, and if the capital rotates the way it is supposed to rotate, then options for long term sustainability could be examined. In principle, registering the committee as a cooperative or a trust could be possible. In the least formal case, the amount contributed by the project could be left with the traders as a one-time grant to informal sector financing of Afghan exports.

6. The Strategic Context of Auctions

All the four examples of auctions given above have one important characteristic in common: they enable the minimization of rebates, market development costs and concessionary finance: bidders asking for the lowest amount of concession win the privileges given by ASSP. If these auctions work as expected, they would contribute toward an important goal of the project, that is, to work, over time, towards reductions in the concessions being given by the project as part-compensation for the extraordinary costs of war and the disruption of trade. If conditions in Afghanistan stabilize and improve, and if the costs of war and disruption decrease over time, the auction process will pick up these changes quickly and reflect them in the bids for various privileges. Conversely, if the bids do not indicate an improvement in the situation from one year to the next, the project might want to assess the initial expectation that special privileges and concessions should be phased out within a given time frame.

Note Number 6

***THE
SEED-FERTILIZER
TECHNOLOGY:
DIFFUSION,
RECOMMENDATIONS
AND
COMMERCIALIZATION***

1. The Purpose of this Note

This note does not follow from anything in my SOW - it is the loosest connection among the loosely connected notes. It was initiated mainly in response to an observation by Roger Poulin that experiences on seed production from Pakistan could be a useful reference point for ASSP. While that aspect is touched upon in Section 5 of the note, it is also useful to present the context of seed production with reference to more general issues in technology diffusion.

Between discussion of technology diffusion and seed production, this note also indicates some of the information techniques that are useful for adaptive research, planning for extension, the monitoring of diffusion, and understanding existing production technologies. The extent and nature of diffusion could, conceivably, provide information on future marketing possibilities, although there are no examples within my personal experience in which such a linkage between diffusion information and commercial marketing has been established.

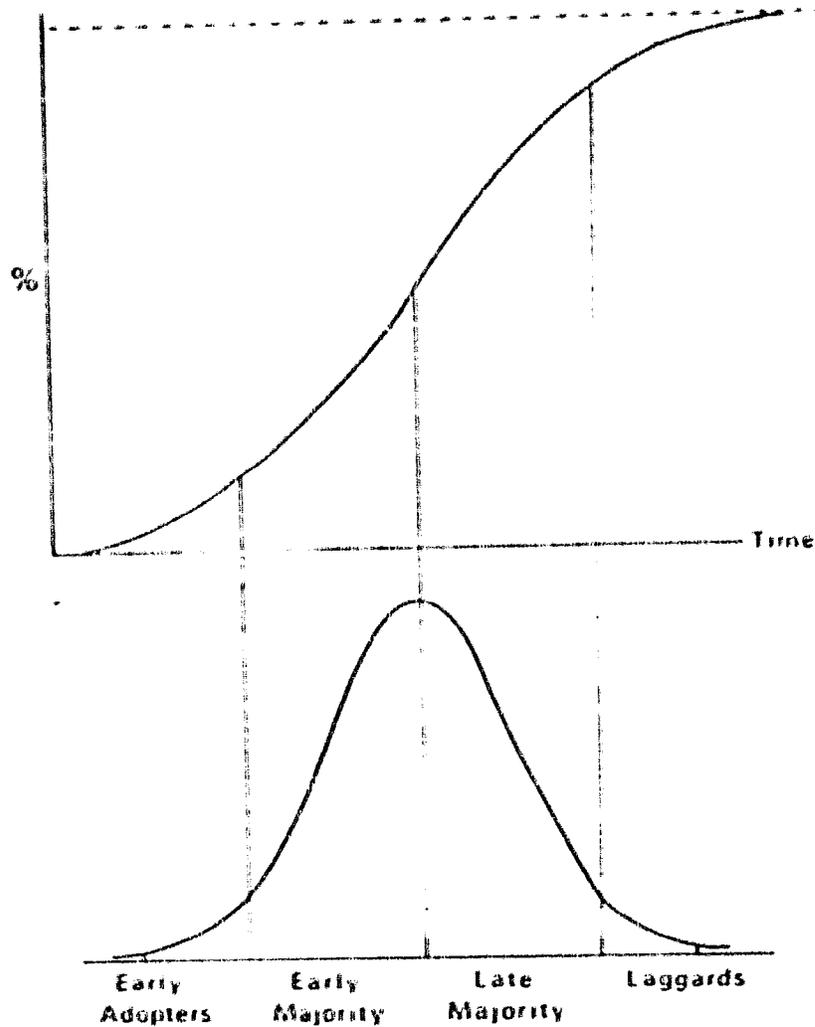
I have written this note without the benefit of any detailed conversations with ADT and PPA staff on the subjects mentioned here. So it is quite possible that much of what follows is redundant or irrelevant to ASSP.

2. Empirical Generalizations on Seed-Fertilizer Diffusion

The received theory of innovation diffusion - the spread of new technology and practices - comes from sociology, geography and the industrial and agricultural branches of economics. Considering the diversity of origins of the theory, it is surprising that there is widespread agreement on empirical generalizations about diffusion. The generalizations presented below are those that are of greatest relevance to ASSP; they have been drawn from both the general literature and from studies in Pakistan.

First: within a given population, innovations take off slowly, then pick up speed, and finally approach their potential ceiling with a reduced rate of increase. Such a process, called a diffusion process, is often shown graphically as an S-shaped logistic curve (sample on next page). Using this curve, geographers and sociologists (and, following them, extension agents) speak of early adopters, late adopters and laggards. Progressive farmers are said to belong to the class of early adopters. It turns out that progressive farmers are usually large farmers who can better take risk (because they are wealthy) and undertake experimentation (because they have the land on which to do so).

Figure 1. Graphical illustration of the pattern of innovation adoption over time.



Second: farmers adopt new technology slowly rather than immediately. There are many reasons for this, perhaps the most practical one being that it takes time to learn about a new technology, its relationship to other inputs, and its place in a farmer's system of crops, livestock, trees, land types, labor allocation, consumption patterns, cash incomes, etc. The process of learning about a new technology is lengthy and costly, and much of it is accomplished by the farmer's own experimentation. Although demonstrations by outside agencies and observations of neighboring farmers help reduce the cost and time of learning, they make an appreciable difference only when the new technology has a remarkable and demonstrable advantage in profitability over

the old technology.¹ In Pakistan, we observe that the "average" variety lasts a cycle of about 7 years, from public release to extinction. An improved seed supply situation could reduce the length of this cycle, but even so, it takes 3-4 years for the thousands of farmers within a large area to learn about a new variety and grow it the way that suits them best.

Third: farmers adopt the elements of new technology one at a time, rather than in a package. This has to do with two factors: (i) the process of learning about several new elements is much more demanding and costly than learning about one thing at a time; and, (ii) the capital and labor costs of adopting several elements at a time are daunting for most farmers.

Fourth: innovations spread rapidly within clusters, and slowly from one region to another. Clusters are identified both *ex post* and, for planning purposes, *ex ante*. For planning purposes, the notion of recommendation domains used in farming systems research is a useful operational derivative of the generalization that technology spreads rapidly within clusters. The idea of recommendation domains is introduced in Section 3 below.

Fifth: in Pakistan's rainfed and mountain areas, the use of chemical fertilizer seems to spread faster than the use of new wheat and maize varieties. Perhaps this is due to a key difference between the two inputs: fertilizer is not as sensitive as new varieties to the tremendous variation in local micro climates which characterizes mountain farming. Another reason could be the following: fertilizer without high yielding variety has a higher payoff than new variety without fertilizer²; so fertilizer comes first in the sequence of adoption. Fertilizer could have a higher payoff than new variety because, even with local varieties, it increases both grain and straw yields; an improved variety, on the other hand, could run into a problem with farmers if its straw yield is lower than that of the old variety. The new variety is typically attractive in combination with fertilizer, for then both its grain and straw yields are higher than those of traditional

¹Examples: the spread of the Mexi-Pak wheat variety in the mid-1960s and of Basmati-385 rice in the late-1980s. Also, farmers make quick change-overs to new varieties after their old varieties have suffered from disease epidemics; for example: the spread of new varieties in Pakistan's rainfed areas after a rust epidemic in the 1970s.

²That is, the internal rate of return is higher for fertilizer than for new variety - this is a hypothesis, not a generalization.

varieties.³

3. Obtaining Information for Adaptive Research and Extension

Both fertilizer and new varieties are critical for the development of Afghan agriculture as it attempts to recover from war and the recent reported disease and pest attacks (particularly on the wheat crop in the Northern Provinces). In promoting the use of appropriate seed and fertilizer technology, the effectiveness of ASSP's ADT component would be greatly enhanced if two information analysis techniques were employed. These techniques are useful both in generating recommendations and in planning effective extension efforts. Perhaps elements of these techniques are already in use at ASSP.

The first technique relates to the way in which adaptive research trials are laid out and analyzed. Many experienced scientists use visual observation and their own well developed intuition to identify factors that could help increase productivity. When physical observation is not possible, or when there are numerous trials laid out over areas that differ from one another, then basic statistical analysis can be used to complement personal experience and intuition. There are many statistical approaches available for this purpose, but one used by CIMMYT in Pakistan in recent years has the merits of simplicity and cost effectiveness.

In this technique, trials (or, for that matter, demonstration plots) are laid out in the farmer's field with three or four variations in each field. The following diagram (next page) shows a typical plot in which the farmer's current variety and practices are compared with three recommendations - new variety, and levels of nitrogen and phosphate that are different from the farmer's levels. If 15 plots were laid out in this manner, they would yield 60 observations (15 plots x 4 variations each). Together with yield data, that would give us enough information to decide whether the greatest payoff is to new variety, or increased nitrogen, or additional phosphate. That, in turn, would allow us to focus extension (and conceivably supply) efforts for the next season. In extension, the focus could be on one or, at most, two critical inputs, rather than on multiple elements. Recall the generalization that farmers adopt new practices one at a time, rather than in packages.

³These statements on variety-fertilizer interactions are based on several years of CIMMYT experimental data, some Pakistani sample surveys and conversations with farmers who had recently adopted new varieties such as Pak-81; most of the statements given above were confirmed by all the sources mentioned here.

Figure 2. Suitable field layout for agricultural trials for statistical testing of the impact of variety, nitrogen and phosphate.

	ONE FIELD, FOUR OBSERVATIONS		
Farmer Variety	Recommended Variety	Recommended Variety	Recommended Variety
+	+	+	+
Farmer Nitrogen (N)	Farmer Nitrogen	Recommended N	Recommended N
+	+	+	+
Farmer Phosphate (P)	Farmer Phosphate	Farmer Phosphate	Recommended P
+	+	+	+
Farmer Practices	Farmer Practices	Farmer Practices	Farmer Practices

This sort of information provides direction and focus to extension efforts in terms of recommendations to concentrate upon. Another simple exercise - that of defining recommendation domains - could provide focus and direction in geographical terms. A recommendation domain is simply a homogeneous region (or a set of farmers) for which a few, key generalizations can be made by an extension agent. When ASSP staff talk about the different needs of different areas of Afghanistan, they intuitively identify recommendation domains. This intuition could be the basis for a more systematic listing of recommendation domains specifically for extension purposes (based, in the first instance, on experience and the two available bazaar surveys). Factors defining a recommendation domain would include: one or two relevant agroecological variables (elevation; single or double cropping, etc.); livestock orientation (important for choice of variety); accessibility to fertilizer, and so on. It should be possible for ASSP staff, in a meeting lasting less than 2-3 hours, to divide the project area into recommendation domains that are suitable for the work of ADT (and perhaps also PSA).

For each major recommendation domain, ASSP could analyze trials and demonstrations with the kind of statistical technique outlined above. The result would be a set of extension priorities that are differentiated according to the needs of different regions,⁴ yet provide focus with confidence.

⁴This is an important point, for there can be no presumption that a standard recommendation as to variety, nitrogen or phosphate is applicable across several regions.

4. Information on Diffusion and Production Possibilities

A third technique of information gathering and analysis relates to the monitoring of diffusion of new technology, including seed and fertilizer, but also tractors and threshers. There are many ways of doing this. The most practical approach in the short term is to examine diffusion with respect to two, broad questions: (i) how many farmers in a region use (or not use) a certain technology; this requires a simple yes/no type of query; (ii) what is the extent of usage; this requires answers on the level of input use. A third question could help us construct the kind of S-curve introduced in Section 2 above: "In which year did you first use a particular new technology?" The answers to this question would be based on recall.

One confounding factor that is likely to emerge in diffusion monitoring studies in Afghanistan is the considerable variety of seed that must have found its way to the country through relief agencies and individual farmers trying to do their best to maintain production. It is quite possible that, even in a single village, outside observers may find several varieties known only by their local names, and none recognizable by their commercial name. There is a need, before commencing a diffusion monitoring survey, to list all varieties grown by farmers in a region by their local names, the literal meaning of the names and, if possible, the corresponding commercial names. In addition, the comprehensive wheat diffusion study by Dalrymple (1986), commissioned by an AID office in Washington, provides details of wheat varieties released in Afghanistan and Pakistan since the mid-1960s.

The suggestion of classifying wheat varieties by their local names can be considered part of what some scientists (including anthropologists and botanists) call "local folk taxonomy" - classification according to local systems of knowledge, rather than "scientific systems." The line of action indicated by local folk taxonomy can be pursued at a very small cost to get a good idea of the way farmers use their key inputs. This leads to a fourth suggestion on obtaining and organizing practical information.

If an input has been known to farmers for some time, they invariably have a rule of thumb about it. For example: "the urea applied should equal the seed, and the nitrophos should be half that amount," or "place one basket of farmyard manure at every four paces." Such rules of thumb are nothing but what economists call the production function - the input levels required to produce a specified level of output. By relating prevalent rules of thumb to prominent land or regional characteristics, one can construct a fairly valuable picture of production technologies in one or more recommendation domains.

In principle, all the four suggestions given here are do-able and have been known to be of practical use. References to some

recent and comprehensive studies are provided in Note Number 8. A hybrid approach suited to ASSP's requirements could be constructed quite readily, either by staff at ASSP, or by ASSP in collaboration with DRMS or some of the agricultural economists in NWFP and Islamabad who have worked with CIMMYT and PARC over the last five years on such approaches.

It is interesting that almost all the studies carried out in Pakistan on the diffusion of new varieties single out the lack of seed availability as the major constraint on faster diffusion of new varieties, and on better protection against disease epidemics. And yet, there has been virtually no progress in either the state sector or the private sector in making commercial seed available to farmers on any significant scale.

5. Why Does Commercial Seed Production Appear Impossible?

We don't know. What we do know is that in Pakistan and Afghanistan commercial seed production for wheat, maize, vegetable and potato appears, empirically, to be an almost impossible task. Let me summarize the experiences in Pakistan as best as I can, and let each of us come to his own conclusions.

Vegetable seed is imported and there is no commercial seed production in Pakistan of which I am aware. Some say that it is in the interest of importers to continue importing seed from overseas, since it allows them to sneak out foreign exchange by under-invoicing. Yet, it is also admitted that attempts within Pakistan have invariably failed on account of poor quality. There appear to be a handful of donor assisted projects (in Gilgit, run by FAO) that have tried to go into centralized seed production, but they are a long way from commercialization.

The story of potato seed production is a saga of euphoric ups and tragic downs, particularly in the mountain areas (Swat and Gilgit). Euphoric local growers, farming small plots of land, welcome projects and commercial seed companies which promise to buy "all the seed you can produce" at an attractive price. Everyone wants to grow seed potato, and hardly anyone pays attention to either the market situation or the strict rotation that is required for disease-free production. Sooner rather than later, proliferating disease vectors or gluts in the market bring tragic reversals in expectations and fortunes.

Let's talk about wheat and maize seed now. The so-called "certified seed" (largely wheat) sold by public sector agencies in Pakistan is always uncertain in quality and extremely limited in quantity. Typical complaints include: shrivelled and diseased seed, suspicion of mixture with other seed, low germination rates, lack of acclimatization to local environment, etc. Several projects have attempted to provide good quality (rather than

certified) seed to farmers through a combination of public sector and farmer-to-farmer systems. Notable attempts in NWFP include those by: the Pak-Canadian Barani Agriculture Project (BARD) for maize seed production in Heripur; the Pak-Holland PATA Groundwater Irrigation Project, for wheat and maize seed production in Malakand; and by AKRSP for wheat and maize in Chitral and Gilgit. All these have been small attempts and bear no comparison in magnitudes to what is required for ASSP. I will describe the AKRSP experience since I am personally most familiar with it.

At the end of July 1985 we completed a survey of wheat production and practices in the double cropping areas of Gilgit District (that is, areas up to about 6,000 feet altitude). This survey included crop cutting at harvest time, accompanied by a short, integrated agronomic-economic questionnaire. We found that 60 percent of the farmers were using traditional varieties, even though Mexi-Pak had arrived in the area 10 years earlier. Those who were using new varieties had thoroughly mixed stand - one could visually identify 4-5 varieties in the same field. Most farmers were relying on Mexi-Pak, which had been banned in Pakistan because of its susceptibility to rust.

We also found that the payoff was to additional application of nitrogen, so that farmers could be advised, in the first instance, to reduce their expenditure on phosphate and use the savings for getting additional nitrogen. This recommendation would be consistent with the farmer's existing allocation of funds, and so the question of running into a cash constraint would not arise. In particular, we recommended that farmers reduce their purchases of nitrophos and buy calcium ammonium nitrate (CAN) instead. CAN had the additional virtue of being a slow release nitrogen, which is particularly suitable for the sandy, leaching soils of the region.

By September 1985, we recommended a large scale programme of extension that would cater to two recommendation domains: (i) for the double cropping area, we recommended Pak-81 which had previously been tested adequately by the FAO agronomist in Gilgit; (ii) for the single cropping area, we recommended Sunine, which had been grown in some double cropping villages for several years and had shown promising results in AKRSP trials in the single cropping area.⁶

⁵These projects have sought to promote the Azam maize variety, and Pak-81 or Pirsabak-85 wheat varieties.

⁶At that stage, we recommended Sunine only for villages up to about 8,500 feet; we did not have any improved varieties for altitudes of 10,000 feet, perhaps the highest elevation at which wheat is grown in Pakistan.

Now an interesting practical question came up: How fast should we go? As with all such matters, the issue went to the Management Group (6-8 professionals, headed by the General Manager, who took decisions on strategy and day-to-day management). Our engineer, a practical man of action, wanted us to ship in tons and tons of certified seed from the public sector agencies and inundate the area with new varieties. Our agriculturist, an equally practical man of caution, wanted small quantities to be imported and then multiplied within the region. The way out - or the way between - these two different views of the world turned up in the shape of an initiative taken by my Section (Monitoring, Evaluation and Research, which was almost the exact equivalent of the PPA component of ASSP). While it was not our business to dabble in agriculture, we nevertheless went ahead and bought about 7 tons of seed from Punjab from our research funds.

We decided to use the certified seed in two ways. First: as a personal preference, I wanted a scatter-gun approach to demonstrations - by farmers, on their fields. So we packed 10 kg seed bags, with 10 kg Urea and 5 kg Nitrophos each. Each "kit" was adequate for 1 kanal (one-eighth of an acre and about 10 percent of the wheat area of an average farmer). Each village in the double cropping area got 10-30 kits, depending on the size of the village. This was also a way of saying "Thank You" to farmers who had cooperated with us in the July 1985 crop cutting survey.

Secondly, following standard ANRSP methodology, we started discussions with Village Organizations (essentially cooperatives) aimed at creating three seed villages. These villages were provided certified seed, and training and chemicals for seed treatment. At harvest time, they were expected to return the quantity of seed that had been given to them by the project.

The first reports from farmers were quite discouraging. Almost everyone complained of low germination rates, and the seed producing villages indicated that they might not be in a position to return the seed. When harvest time came around, the crop looked quite adequate and farmers reported that they were going to plant the new variety again. At this stage, we encouraged the seed producing villages to sell some of their seed at a premium; they said that that was not possible, given their traditional system. Soon, however, we observed a large number of individual farmers selling seed at a 25 percent over the grain price.

The experiment with seed cooperatives had proved so

⁷I remain averse to demonstrating a new technology on only one or two plots in a village: (a) if it succeeds, it will not convince too many farmers; (b) if it fails, there is no possibility of comparing the results with other plots in the village that might have succeeded.

discouraging that we let it wither away.⁶ In fact, no additional seed was imported into the region for multiplication. The system functioned much as before - as a farmer-to-farmer system. In 1989, four years after that one injection of about 7 tons of Pak-81 seed, a diffusion monitoring study showed that about 40 percent of the farmers were using Pak-81.

Compared with the saga of wheat seed, AKRSP's experience with maize seed was short and definitive. In 1988, the Agriculturist at AKRSP was told to ship up two truckloads of maize seed from a World Bank sponsored project in Azad Kashmir, which was reported to have perfected seed production. Against his better judgement, he did what he was told. The results, observed in 1989, were disastrous, and put paid to any future plans for shipping up maize seed in large quantities.

There are several factors involved in the varying degrees of success and failure indicated above. A proper analysis will take much more reflection and time than is available for these notes. One empirical lesson, however, is important: when it comes to introducing new technology, it is extremely important to get it right the first time. If the introduction of new technology is perceived as a failure by the farmers, the project loses credibility and the process of diffusion is set back several years. Even in 1985, some of the villages in Gilgit refused to take up any new seed because they had a disastrous experience with wheat seed that had been imported from India 10 years earlier and given to them for large scale cultivation. We found the same reaction to poultry and fruit seedlings in other villages. Seed, poultry and fruit seedlings appear to be inputs for which the conditions for introduction of innovation have to be examined and monitored very carefully. If the first attempt at innovation is perceived as a failure by the farmers, a project may not be able to make amends in the same region for a long time, and the cycle of diffusion and development would be set back by several years.

⁶We heard similar reports about the fate of the two cooperatives in Haripur that were growing maize seed under the Canadian BARD project.

Note Number 7

**SUGGESTIONS
FOR
STUDIES**

1. The Purpose of this Note

The Scope of Work for this assignment asked the Trade and Marketing Advisor to "recommend terms of reference for a special study to identify and analyze market structures, systems of trade and channels of distribution of cross-border trade." The purpose of this note is to suggest additional work that is of immediate priority for ASSP, as indicated by the preceding notes (particularly Notes No. 4, 5 and 6). No attempt is made in this note to examine the longer term needs of the project for studies on cross-border trade.

The first proposal consists of the terms of reference for "Assistance in Preparing for Negotiations for Letters of Credit and Lease Financing Arrangements." The purpose of this assistance would be to anticipate and collect all necessary background information that could be required by John Soden, Bob Haskell and Denny Freed in negotiating with banks and leasing companies, and in preparing traders for participation in private sector trading and financing initiatives.

The second proposal is really a suggestion that ASSP consider hiring a full-time economist, with background in agricultural/production economics to complement available expertise in ADT and PPA.

2. Immediate Priority: TORs for a Short Term Assignment

Background

In order to facilitate bilateral and transit trade for Afghanistan, the PSA component of ASSP is initiating a series of negotiations aimed at organizing trading partnerships between Pakistani and Afghan traders, and enabling them to access suitable sources of financing within Pakistan. The objective of this exercise is to minimize the direct involvement of ASSP and O/AID/REP in trade, while creating opportunities for the private sector to cater to demand on either side of the Pak-Afghan border. During August and September 1990, ASSP staff and short term consultants are expected to identify Pakistani and Afghan traders, banks and leasing companies interested in working on a series of mechanisms for facilitating trade. Thereafter, ASSP will negotiate with these parties for the precise terms under which ASSP support would be provided.

General TORs

The general purpose of this short term assignment is to provide ASSP with practical "Assistance in Preparing for

Negotiations for Letters of Credit and Lease Financing Arrangements." The consultant will work with Mr John Soden, Mr Robert Haskell and Mr Denny Freed for a period of one month (renewable for another month, if requested by ASSP) to compile information on Letters of Credit (LCs) and lease financing under two broad categories:

- i) Detailed information that would be needed by ASSP in negotiating collateral, guarantees, financing, and other terms with Pakistani leasing companies and banks; and,
- ii) Detailed information that is needed to explain these mechanisms to interested Afghan and Pakistani traders, some of whom may not have previously participated in such financial arrangements.

The consultant will not be expected to negotiate with or recommend specific banks and leasing companies, but he will provide sufficiently detailed information for selection and negotiation by ASSP.

Timing and Duration

The consultant is expected to spend at least one month on this assignment, starting o/a August 15, 1990. If, at the end of that month, ASSP requires additional information on the subject of this assignment (or related subjects), it may renew the assignment for another one month or part thereof.

Review of Documents

The consultant is expected to review the following documents at the time of commencing his assignment:

- i) TDY report by Denny Freed;
- ii) Consultancy report by Tariq Husain;
- iii) Strategy and Plan of Work of ASSP;
- iv) Consultancy report by Roger Poulin;
- v) Any other reports and papers recommended by the Chief of Party of ASSP or his designee.

Meetings and Visits

The consultant will meet with:

i) All project staff indicated by the COP or designee, including but not limited to Mr David Gardner, Mr Robert Haskell, Mr John Soden and (if available) Mr Denny Freed.

ii) Bankers dealing in LCs and Inland LCs at Citibank (Rawalpindi and Lahore), Habib Bank (Peshawar and Islamabad), the Muslim Commercial Bank (Peshawar), and any other banks indicated by the COP or his designee.

iii) Management at Orix Leasing Company and the National Development Leasing Corporation (both in Karachi and Islamabad), International Multi Food, and at least two other well established leasing companies that would be identified by the consultant.

Reports

It is expected that the consultant will, at a minimum, prepare two short (but comprehensive) reports, providing information on Letters of Credit and lease financing. Each report will present information under two headings - information for use by ASSP in negotiations, and information to be conveyed and explained to interested traders. The contents of the reports will include the following items:

On Letters of Credit

i) Description of the variety of LCs and Inland LCs that are available at a sample of banks.

ii) List all the steps in opening an LC, and all the steps that ASSP might have to undertake in guaranteeing LCs and Inland LCs.

iii) Considerations under which the banks decide on the margins (reportedly from zero to 100 percent) for issuing LCs.

iv) Rationale and examples explaining the collateral required for LCs and Inland LCs, and possibilities for flexibility in this regard.

i) The interest charges for LCs and Inland LCs of various types.

vi) Details and requirements of mechanisms through which ASSP could guarantee LCs for importers. For example: how would an ASSP bank guarantee work? How would an Inland LC work as a guarantee for an importer's LC?

vii) Could an Afghan importer open an LC with a Pakistani bank for importing goods into Pakistan and Afghanistan?

viii) Any other information requested by PSA.

On Lease Financing

- i) Identify three or four of the most reputable leasing companies operating in Pakistan. Explain the criteria for selecting these companies and list their strengths and weaknesses from the point of view of ASSP's requirements.
- ii) Identify each of the steps required to sign a lease contract, and all the steps that ASSP might need to take to guarantee one or more lease contracts between traders and leasing companies.
- iii) Describe (with examples and attach sample documents) the paper work that is required of a businessman intending to sign a lease contract. Assess the degree of flexibility in these requirements, particularly if ASSP were to guarantee part or all of the lease financing.
- iv) Assess the implications (including the leasing company's reactions) of the fact that traders obtaining goods (such as farm machinery) with lease financing might sell these goods inside Afghanistan and so the title will not effectively be held in Pakistan.
- v) Examine the feasibility of lease financing proposed in Section 4 of Note No. 4 "Financing Mechanisms" prepared by Tariq Husain.
- vi) Any other information requested by PSA.

3. The Need for an Agricultural/Production Economics Input

This proposal is really a suggestion that ASSP consider hiring a full-time economist, with background in agricultural/ production economics rather than a marketing orientation, to complement available expertise in ADT and PPA. This suggestion is based on three main assumptions:

(i) That PSA's needs are best fulfilled by hiring "practical, action-oriented" people who understand the business of trading and finance, thus an economist would not be very useful to the project for its PSA component;

(ii) That an agricultural/production economist can be an extremely useful complement to the experience that is available in ADT in identifying priorities within the numerous options of introducing new technology; and,

(iii) That an agricultural/production economist can "straddle" the link (or gap, if you will) between technical notions of what is useful for farmers and market possibilities for making a technology

or input commercially viable.

ADT has a variety of new technologies (present or potential) for which priorities are needed for deciding on which aspects to concentrate the scarce staff resources of the project. This issue can be broken down into four stages:

(i) Priorities for adaptive research: Is it going to be rice, maize, wheat, vegetable, fodder or fruit? For inputs: should the project focus on seed, fertilizer (nitrogen or phosphate?), threshers, fruit fly traps, reapers, or seedlings? For which region? Essentially, the question is: What is the likely payoff to farmers of ASSP concentrating on a given aspect of agricultural development?

(ii) Priorities for extension, established by asking the last question under (i).

(iii) Priorities for commercialization, once demonstrations have been held by ADT and a "need" has been established. At this stage, insight is needed to decide whether the concept of "need" is likely to find articulation as market demand if ASSP were to invest in market development.

(iv) Priorities (and methodologies and training) for information gathering and analysis, of which examples are given in Note No. 6.

Essentially, there is a need to complement the technical expertise available at ASSP (in ADT, PPA and the Information Unit) with an economics focus on agricultural and production issues.

Note Number 8

*REFERENCES
TO
PUBLICATIONS
AND
ORGANIZATIONS*

1. The Purpose of this Note

The purpose of this note is simply to introduce documentary and organizational references that could be of use to ASSP if it wished to pursue some of the suggestions given in the preceding notes. The references given below for PSA are organizational references based on personal contacts (including contacts made during this assignment). For PPA/ADT, the references are to both documents and organizations, though organizational references do not appear to be very promising.

Most of the documentary references given below for PPA/ADT have either been sent already to ASSP with an earlier draft of this report, or are enclosed with the final report (the present version).

2. References for PSA

It would be useful for ASSP to purchase published import and export regulations issued by the Government of Pakistan every year in June/July. These are extremely detailed regulations pertaining to almost every imaginable product. The publications are generally available from good book stores and would be a handy reference for project staff. Samples were shown to some project staff during this assignment.

The following organizations and individuals should be included in the next round of data collection in order to gather information that is needed for negotiations to be undertaken with banks, leasing companies and traders:

Leasing companies

- i) Orix Leasing (Pakistan) Limited
1st Floor, Kashif Center
Shahra-e-Faisal KARACHI
Tel: 520305-8
Tlx: 2885 FORTE PK
Fax: (021) 510593

Contacts: Mr Amin, General Manager
Mr Hira Lal Bharvani, Credit and Marketing Officer

- ii) National Development Leasing Corporation
Islamabad and Karachi offices.

- iii) Possibly, International Multi Foods might also be suitable for providing lease financing (address given below). The company through which they organize leasing is called International Multi Leasing Corporation Limited.

Banks

- i) Citibank, Rawalpindi, Lahore and Karachi offices.
Contacts: Mr Nadir Sheikh, Manager, Rawalpindi Branch.
Mr Atif Bajwa, Lahore Branch.
- ii) Muslim Commercial Bank, Peshawar.

Importers/Exporters

- i) International Multi Foods Limited
1106-1110, 604 Kashif Center
Shahra-e-Faisal KARACHI
Tel: 522098; 522054; 528010
Tlx: 24273 KASHF PK
Fax: (021) 523010

Contact: Sheikh Amjad Rashid, Managing Director
- ii) Al Mushtaq & Co.
Chowk Yadgar PESHAWAR CITY
Tel: 211429; 212029
Tlx: 52350 ALMCO PK
Cable: GRAPES

Contact: Mr Ishtiaq Ahmad, Managing Partner

The point of listing these particular references is that they represent, in the consultant's opinion, the best possible prospects for quick and effective private sector initiatives by ASSP. Some of them may be of value individually, while others might be effective in partnership with each other and with Afghan traders.

3. Documentary References for PPA/ADT

On international data on wheat variety development, releases, diffusion and seed imports

Extracts on Afghanistan taken from the following publication were sent to ASSP with the draft of this report:

Dalrymple, Dana G. 1986. *Development and Spread of High-Yielding Wheat Varieties in Developing Countries*. Washington, D.C.: United States Agency for International Development, Bureau for Science

On the monitoring of wheat variety diffusion in Pakistan

Most of the following papers were sent to ASSP with a draft of this report:

Azeem, M., M. Sharif, M. Shafiq, Z. Ahmed and J. Longmire. 1989. "Wheat Varietal Diffusion in Irrigated Punjab: Results from 1988-89." Agricultural Economics Research Unit (PARC), Faisalabad. Staff Paper No. 89-1.

Akhtar, M. R., Z. Ahmed and K. A. Tetlay. 1987. "Monitoring Wheat Varietal Diffusion in Irrigated Punjab: 1986-87." Agricultural Economics Research Unit (PARC), Faisalabad. Staff Paper No. 87-3.

Heisey, Paul, M. R. Akhtar, K. Tetlay, et al. 1987. "Monitoring Wheat Varieties Grown in Pakistan: Objectives, Methods and Results from Three Major Cropping Systems, 1985-86." CIMMYT, Islamabad, Staff Paper No. 87-3.

Husain, T. 1986. "Wheat in the High Mountain Valleys of Gilgit District." Aga Khan Rural Support Program, Gilgit, Rural Science Research Program, Report No. 2.

Sharif, M., Z. Ahmed, M. A. Magbool, J. Longmire. 1988. "Monitoring Wheat Varietal Diffusion in Irrigated Punjab: 1987-88." PARC/CIMMYT Collaborative Program, Agricultural Economics Research Unit, Faisalabad. Staff Paper No. 89-3.

On the synthesis of adaptive research and survey findings

Both the following papers are enclosed with the final version of this report:

Aslam, M., A. Majid, P. R. Hobbs, H. I. Hashmi and D. Byerlee. 1989. "Wheat in the Rice-Wheat Cropping System of the Punjab: A Synthesis of On-Farm Research Results, 1984-88." PARC/CIMMYT Collaborative Program. Staff Paper No. 89-3.

Hussain, S. S., M. Ahmed and J. Longmire. (1990 - expected) "Multi-enterprise systems of the Irrigated Peshawar Valley: Subsistence and Cash Cropping," in Derek Byerlee and Tariq Husain, eds., *Farming Systems of Pakistan: Diagnosing Priorities for Research*. Lahore: Vanguard Press, forthcoming.

4. Organizational References for PPA/ADT

ASSP is already in contact with agricultural scientists at the NWFP Provincial research institutes. It might be possible to obtain some assistance in economics from one or more of these institutes, although the prospects have become less favorable in recent months for institutional collaboration.

There was an Agricultural Economics Research Unit at the Agricultural Research Institute, Tarnab, near Peshawar, at least until June 1990. Since then, it might have been wound up and its staff sent to the National Agricultural Research Center in Islamabad. ASSP could talk to both ARI and NARC to ascertain whether they could provide some economists on a short-term basis to assist with studies on the monitoring of diffusion and on other agricultural surveys.

The NWFP Agricultural University in Peshawar is in the process rebuilding with USAID assistance. Perhaps the most suitable economist there would be Syed S. Sajidin, who has extensive experience working with the PARC/CIMMYT collaborative program. Mr Sajidin, however, has been signed up recently by the Pak-Holland Groundwater Irrigation Project in Malakand, and it is not certain whether he would have the time to devote to ASSP.

Other than these two sources, there is, in general, a paucity of good economics capacity for providing assistance to agricultural projects such as ASSP.

Annex

**SCOPE
OF
WORK**

POSITION: TRADE AND MARKETING ADVISOR
COMPONENT: PROGRAMMING, PLANNING AND ANALYSIS COMPONENT
CANDIDATE: TARIQ HUSAIN
DURATION: TWO WEEKS

The Private Sector Agribusiness Component of the Afghanistan Agricultural Sector Support Project defines its role in terms of trade expansion with special emphasis on the creation of mechanisms to facilitate in agricultural commodities. Direct commodity purchases for resale to Afghan traders have been utilized by the project to provide needed fertilizer, seeds and PL-480 wheat during the initial project stages in order to assist in the resettlement of the returning refugee population. Such direct intervention in the market is a temporary measure.

Achievement of PSA's goals will occur through creation of private sector initiatives which open entry for current and potential entrepreneurs. Growth in the private sector in Afghanistan is also dependent in the establishment of trade linkages with Pakistan and accommodation to its policies, procedures and laws. A better understanding of Pakistani and Afghan marketing and trade structures is a requirement of PPA in developing its market information systems and in formulating specific PSA initiatives. ASSP/PSA will utilize the services of an economist familiar with Pakistan and Afghan trade to assess the market and trade situation in conjunction with an Economics Advisor, simultaneously recruited by the project, who will focus more on the policy and design implications for the project. The two economists will complement each other's work, providing a broad base of recommendations for future work.

The specific tasks of the Trade and Marketing Advisor will include:

1. Define the factors which affect prices of major commodities in Pak-Afghan trade.
2. Assess the potential for establishment of an in-bond transit facility through Karachi parallel to the existing one controlled by the Kabul government.
3. Review the conditions, capacity and potential of the traders in import-export trade.
4. Project long-term potential for foreign exchange earnings for Afghan imports based on likely macro-economic changes under various scenarios of repatriation of refugees, growth in economic activity and trade in Afghanistan.

5. Recommend terms of reference for a special study to identify and analyze market structures, systems of trade and channels of distribution of cross-border trade.

The Trade and Marketing Advisor will hold an M.A. in Economics and will have extensive experience in the analysis of Pakistani and regional economics issues.

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Attachment

**INFORMAL
FINANCIAL
MECHANISMS
IN
PAKISTAN**

1. Overview

Historically, informal financial arrangements have been dominant in rural areas. With industrialization and rapid urbanization, particularly since Independence, large volumes and growth rates appear to have emerged in the cities. Its extent is indicated by evidence that it finances substantial parts of the informal transport, housing and trade sectors in urban areas. Today, the informal financial sector represents perhaps the largest, most fascinating and least studied sub-sectors of informal sector activity in Pakistan.¹

Provision of credit is the dominant activity in the informal sector, but savings and investments are also significant. Commodity trading was outside the scope of this review as it is primarily a formal sector activity. The main elements of informal financial activity covered in this section are credit, savings, investments and foreign exchange transactions. Under credit, the *punchi* (or *chit*) system, merchant credit operations, suppliers credit, and the money lenders were studied. The committee system was studied as an example of the link between informal savings and credit for small savers. The *hundi* system was studied for an assessment of informal foreign exchange transactions.

The dynamic factor behind informal financial markets appears to be what bankers call product development - the development of new products with characteristics² that meet the requirements of an ever changing economic environment. A study of informal credit arrangements by DFMS (1989), undertaken for the World Bank, showed a large variety of lending arrangements, collateral requirements and interest charges that had emerged in response to the needs of manufacturers and traders.

In the formal sector, the supply side comprises nationalized commercial banks and insurance companies, state-owned development financial institutions (DFIs) and specialized banks for agriculture, industry, housing, etc., and a handful of foreign banks (with restricted number of branches and limited operations). This sector is characterized by mandatory credit quotas, controls on profit margins, high transactions costs and, in the nationalized organizations, bureaucratic management, political intervention and corruption. There is general agreement in Pakistan that overall efficiency and responsiveness to clients (particularly small customers) has declined dramatically since the nationalization of

¹A brief historical perspective on informal financial activities is given in Annex 10.1.

²in terms of liquidity, security, returns, etc.

banks and insurance companies in 1973.

Most formal sector institutions are slow in responding to the needs of the marketplace. Although innovative product development does take place at the multinational banks at a very limited scale, even they are handicapped by government regulation and can profitably deal only with large clients from the formal sector. And all formal financial institutions seem to be unable to make much progress in lending for working capital, which is perhaps the major requirement of the expanding service sector.

On the demand side, there is suggestive evidence of a growth in demand for an increasingly diversified set of financial instruments in recent years. Small savers, large investors, house builders, transport operators, farmers, manufacturers, importers and exporters, traders and ordinary citizens engaged in work or leisure have doubtless been influenced by rising incomes and market demand, high taxes and duties, discretionary enforcement of regulations, inflationary expectations, and growing contact between ordinary Pakistanis and the rest of the world (particularly since the mid-1970s). The growth of the service sector (both formal and informal) has added to the demand for working capital.

Given the inability of the formal sector to respond to such forces on the demand side, people from all walks of life have been depending for their financial transactions on the informal sector (and on institutions outside Pakistan).³ Within Pakistan, only the informal sector is free to respond on a large scale with new products to meet the emerging needs of the population. It is not surprising, then, that informal credit and foreign exchange arrangements play a pivotal role in Pakistan's private sector.

2. Extent, Contribution to the Economy

2.1. Informal Credit

Informal credit is the most widespread informal financial activity in Pakistan, with major lending activity in Karachi, Faisalabad, Lahore, Peshawar and Multan. It is used mainly for personal finances, working capital, and even project financing (though businessmen generally feel that the availability of long term finance is not as serious a constraint in the formal sector

³Increasingly, Pakistani businessmen these days seek to have offshore offices in Dubai, presumably for arranging imports and exports unencumbered by Government of Pakistan regulations; it is not clear, however, whether such decisions are influenced by constraints in Pakistani financial markets.

as that of working capital).

The loan ranges from a short term small loan (as low as Rs 1,000) for personal needs to a long term loan (in tens of millions) for project financing. The rates of interest vary according to the needs of the borrower, his credit worthiness, maturity period of the loan, and the nature of security provided by the borrower, and typically range between 20 percent and 48 percent per annum. The mechanism is quite similar (with minor variations) across the three cities visited for this study (Peshawar, Faisalabad and Karachi).

The informal credit market is widely used because of its accessibility and convenience; no fixed schedules; (generally) no collateral; lower transaction costs; no appraisal, documentation, and administrative fees; minimum collection charges; and, speed of credit delivery. The profits earned from this business are reinvested in this sector to avoid detection by the taxation department.

The informal credit is virtually the backbone of the transport sector of Pakistan and provides it most of its financing. The transporters also form one of the largest money lender groups in Pakistan, and also charge interest rates as high as 10 percent per month or 120 percent annually.

Money lenders provide informal credit to relatively big businessmen. This source of credit is not very popular among micro enterprises. The major borrowers from money lenders are transporters, textile mill owners, property dealers and stockists. In some cases people get loans from money lenders for their household needs. Money lenders give loans to those people whom they trust, or those who provide a guarantor. The rate of interest varies from 2-4 percent per month. The amount of interest is paid to the money lender every month. The maturity period of the loan is decided at the time of agreement; however, the lender can take his money back from the borrower with prior notice.

In the NWFP a slightly different mechanism was witnessed. In a system called *ijara*, the lender acquires all rights to the assets and properties of the borrower, and is entitled to all the profits that accrue from such properties as long as the loan is not repaid. In case of a default, the borrower forfeits his rights over that property, and the lender acquires it. In this province, the lenders are from the Tribal Areas and a default on a loan payment has severe consequences, and a very persuasive repayment mechanism including kidnapping and torture of the defaulter.

Supplier's credit is one of the most important source of credit upon which microenterprises rely in Pakistan. This informal source of credit has got such strong roots in the business community that despite the significant difference in raw material

prices for payment in cash or credit, they still prefer this source because there is no other source.

Most of the microenterprises (MEs) purchase raw material on credit and make the payment within two to six weeks. In this arrangement the borrowers often have to pay an implicit rate of interest of 10-15 percent per month, although interest rates of 2-3 percent per month are also observed. These estimates are derived from the difference in prices paid for cash purchases as opposed to purchases on credit. For instance, in the textile industry in Faisalabad, the suppliers charge a higher price based on the number of days before payment is made. They would charge Pak Rs 0.50 to Pak Rs 0.75 more per pound if the buyer made a promise to pay the loan amount within 20-30 days. Similarly, an extra Pak Rs 0.75 to Pak Rs 1.5 per pound is charged if the buyer agrees to pay his dues within 30-45 days, and an extra Pak Rs 2 per pound for payment made after 60 days. The very low transactions cost explain why entrepreneurs prefer these loans. These are also the only loans available to them!

Buyer's advance is also a source of working capital for some of the smallest microenterprises. In this arrangement, buyers make some of the payment in advance and the enterprises use this advance to purchase raw material. This type of credit is generally free of interest and the amount of credit is deducted from the price of the final good at the time of payment.

In some of the cases observed, intermediaries (buyers) provide capital to microenterprises for working capital. They make sub-contracts with microenterprises, i.e., they buy the products of microenterprises, deduct the amount of credit advanced from the total value, and make the remaining payment. In this arrangement the buyers charge an implicit interest from microenterprises which varies from 6-8 percent per fifteen days by paying, say, Pak Rs 15 per kilogram for products which the microenterprises can sell for Pak Rs 16-16.5 per kilogram if they were not borrowing from the buyer. Thus, the rate of interest charged by the buyer who provides an advance to the producer is reflected in the form of a discounted price in this arrangement.

The *parchi* system is a very common source of credit in Faisalabad. The system operates on goodwill. The *parchi* is usually a delivery receipt, signed by the recipient of goods shipped by a manufacturer. The recipient verifies the amount billed, and indicates when payment is to be made. The manufacturer signs over the *parchi* to his suppliers in lieu of cash payment. The suppliers will often put it into a local capital market, where it will circulate freely as an IOU. *Parchis* with different payment dates will bear different discount rates. A detailed account of the *parchi* mechanism is given in Annex 10.2.

2.2. Informal Savings

In terms of its contribution to the economy, the large scale schemes described below in the business community do generate capital for business needs.

The committee system is popular with the business class as well as the households. There are minor variations in the different forms of committees, but essentially it is a pooling of money from the members and the amount collected is given to each member in rotation. The committees even go up to Pak Rs 1.0 mio, especially the ones organized by the business community. The Committee system is very popular among women of the low income and middle income level. In Faisalabad and Lahore, women have begun to participate in the committees organized by traders and businessmen. The current system of informal savings does not generate any return on the principal amount but is a convenient way of getting a reasonable lump sum amount by way of forced savings.

In the committee system, a number of people collect a fixed amount of money by pre-determined (equal) contributions, at specified dates. One person is awarded the committee after each collection; this is generally done by lottery. A variant of this system allows anyone with a desperate need to buy the collection on demand, but at a premium.

There are three types of committees in practice currently: Ordinary Committee, Auction Committee and Lucky Committee. The details of each form of committee are presented in Annex 10.2.

2.3. Informal Investments

The incidence of such investments is mainly restricted to big industrial cities. On one hand it generates capital for the business concern, and on the other it provides an extra income to the investor. In Peshawar, it was noted that most of the investor's funds are funnelled into illegal or smuggling activities, thus promising very high returns to the investors. By and large, the informal investments are made both in the legitimate and illegal businesses, and the overall effect on the economy seemingly is negative since it mainly provides capital for illegal business activities - illegal because the high rates of profit promised to the investors cannot be earned through a legitimate business activity.

These investments do not require huge investments, and people usually borrow from the informal markets to meet their working capital requirements. A typical venture would require as low as Pak Rs 50,000 to start with at a small scale. The big players in this field have no cash flow problems because of their very free

cash reserves. A transaction of up to a million rupees can usually be handled by them without prior notice. In addition, they also maintain a line of credit with the commercial banks, with typical ceilings of 4 to 5 million rupees.

The trend of informal investments gained significant proportions in the late seventies in Pakistan. In the last twelve years investment companies have grown (and vanished!) twice, robbing people of their lifetime savings. The companies promise a very high rate of return on the capital invested; pay the 'profit' as long as they are receiving new investments; and close shop and disappear when their inflows (new investments) become less than the outflows (payment of profits). This clandestine operation is taking place all over the world, and yet unsuspecting people are lured in because of the general shortage of investment opportunities and the extremely high rates on profits and the absence of good savings schemes in the formal sector.

Despite the recent setbacks in Pakistan, informal investments have not ceased to exist. People invest when they have a personal relationship with the company's management, or in case of a highly reputed company (like the Taj Company). The usual rate of return on such investment ranges from 20 percent to 36 percent per annum. In case of large sums invested for a long term, (two to three years) the rates are as high as 60 percent per annum.

Funds for informal sector lending are mobilized from a variety of large and small savers. A saver may decide to invest a given amount at a pre-arranged monthly interest rate with somebody who acts as an informal bank. Each month, the saver could, if he wishes, be paid the interest charges, and the full amount would be returned at the end of the agreed period. This system is attractive for both small and large savers. It is particularly attractive in the context of Pakistan, where the returns to saving in the formal sector have been historically below or very near the rate of inflation: the real rate of return has been generally negative. In contrast, the informal sector has been paying 2-3 percent per month as interest on savings deposited with it.

Despite the two recent setbacks of frauds by the finance companies in the last decade, people still continue to invest in such ventures. The companies merely give a receipt for the amount deposited, and mention a stipulated rate of return. However, this piece of paper does not have any legal value, and in case of default there is no legal recourse available to the investors. In some cases, the companies also mention that in case of bankruptcy or default, the investor has a lien over the company's stock lying at a specified warehouse; but the details and value of the stock is not mentioned, and nobody knows if the warehouse actually has anything in it or not.

2.4. Informal Foreign Exchange Transactions

The traditional *hundi* practice, over or under invoicing, and malpractice in the trading of foreign exchange bearer certificates (FEBCs) are some of the major activities in the informal foreign exchange markets. Increased foreign exchange remittances by Pakistanis working abroad, uncertain political environment, deteriorating dollar rupee parity, and the current trend of obtaining loan from the formal banking structure, transferring the amount abroad, and having it written off at a later stage are some of the major factors that have made it a very booming market.

While most of the informal sector activities have a close and complimentary relationship with the formal economy, the informal foreign exchange transactions, by and large, result in a drain on the foreign exchange reserves of the country. The system operates in a manner that the foreign exchange intended for home remittance remains in the foreign countries, and is used for the illegal outward remittances. Thus, from the viewpoint of outward remittances, the entire transactions result in the flight of capital from Pakistan. Similarly, the inward remittances do improve the quality of life of the migrant's family, but the economy is deprived of valuable foreign exchange reserves. The most notable advantage of this system is that it provides a convenient and fast service to the people remitting money from abroad. They do not have to go through tedious paper work or wait for long delays, and also get a better rate, which is usually up to a Rupee more than the official rate. The various informal foreign exchange dealings are summarized in Annex 10.2.

3. Relevance to de Soto's Theses

The main issues which surfaced during the study can be broadly stated in terms of: high degree of state control over the financial institutions are the main cause of illegality in this sector. Other notable factors are strict regulations and procedures leading to lower efficiency; political favors or concessions especially in terms of credit sanctions; very stringent regulations of the government; and, the prevalent corruption, tax evasion and smuggling in Pakistan.

In terms of the relevance to de Soto's main theses, it can be said that the financial informal sub-sector has some similarities with the conditions in Peru. For instance, one of de Soto's theses, "... redistribution of national wealth as more important than the production of wealth. And "redistribution," as used here, means the concession of monopolies or favored status to a small elite that depends on the state, and on which the state itself is dependent", directly aims at the issues identified in the preceding paragraph. Presently, the situation is such that even a

legitimate financial need cannot be serviced by our formal financial setup without the 'sanction' of the highest political authorities.

Similarly, the deduction of *Zakat* by the banks and other financial organizations (National Savings etc.) has a very negative impact on the overall savings in the formal sector. People do not trust the State system, and generally allege that the funds are misappropriated. As a result, they prefer to put their savings in informal schemes. In addition, the State's inability to meet the requirements of the masses is a major factor that has led to the boom in the informal financial sector. As such, in this particular sector, there is some relevance to what has been pointed out by de Soto, as a parallel (or black) economy is running in the country.

4. Requirements for Registration

All the activities in the informal financial sector fall under the jurisdiction of the State Bank of Pakistan (SBP). The operation and authority of the State Bank is based upon the State Bank of Pakistan Act, 1956, according to which the Bank is charged with regulating the monetary and credit systems of Pakistan.

Thus, setting up of a Bank, Investment Firm and related activity requires the State Bank's permission and these activities are not currently allowed in the private sector and only the existing five nationalized commercial banks are permitted to operate. Even if a nationalized bank wants to open an additional branch, prior approval of the State Bank is required. In addition, a few foreign banks, with limited operations in a few selected cities are operating in Pakistan.

Foreign exchange control in Pakistan is exercised under the Foreign Exchange Regulation Act, 1947; and the authority to control has been vested with the State Bank under the State Bank Act, 1956. As such, the bank exercises full control on the foreign exchange flow to and from the country, and ensures that all the foreign exchange receipts are surrendered to the Government. The foreign exchange dealers, which are the scheduled banks of the country, are also appointed by the State Bank.

In other words, existing Government policies stipulate that (barring the scheduled banks and financial institutions), no other individual can enter the segments of the formal financial markets included in this study.

5. Requirements for Conducting Business

The State Bank is primarily responsible for ensuring proper

operations in the financial sector. There are many restrictions that govern the formal channels of credit. These include the required equity base and SBPs reserve or liquidity requirements. Similarly, the State Bank of Pakistan has a credit ceiling fixed for the scheduled banks. This ceiling is approximately 35 percent of the deposit generated by the respective Bank, and is reviewed on an annual basis. Thus, irrespective of the volume of deposit generated by the Bank, the credit ceiling is not changed until the annual review.

The commercial banks have their own cumbersome procedures regarding the approval of credit. The banks and the financial institutions have their own financing procedures highlighting the collateral requirements, terms, and list of approved projects etc. Except for the Agriculture Development Bank of Pakistan, no other bank has developed a credit manual so far. Usually, they update the rules periodically in form of 'bank circular' and use these circulars as guidelines for credit and investment schemes. The notable features of these regulations are: strict collateral and security requirements; fixed repayment schedules; high appraisal, documentation, administrative costs; high collection charges; and, above all, a very slow and tedious process for the final delivery of credit.

6. Taxes, Duties, Audits, and Government Inspections

As mentioned earlier, the State Bank of Pakistan is the ultimate authority that governs the formal financial sector in terms of credit, investments, and foreign exchange. The entire operations of the formal institutions are subject to State Bank's periodic audits, and thus, follow the prescribed regulations. Any irregularities detected by the State Bank are considered to be serious offenses, and remedial measures have to be taken immediately. In case of serious violations, the State Bank is even empowered to revoke the banking license of the violating concern.

7. Organizations and Trade Associations

The informal financial sector also operates with the help of certain informal organizations and associations. For instance, in the Faisalabad *Sootar Mandi*, a body of traders exists which is empowered to settle all disputes in case of a default by a borrower. Similarly, in Karachi, all such matters are settled in a mosque in case of the *Memon* community, whose involvement in the informal financial activity is the most.

Such organizations are not registered, and their only purpose is to monitor the compliance of rules and ethics in the market. They also pool in resources to pay adequate remuneration to the

'recovery agents', (usually gangsters) who can harass and physically hurt defaulters.

The informal foreign exchange 'dealers' also have a representative body drawn from Karachi, Lahore, and Peshawar that decides on the foreign exchange rate (in the black market) on a daily basis, and the major determining factors are the official rate, the demand/supply situation and the current political environment or stability. In all, no similarity to the Institute of Liberty and Democracy in Peru is seen in the financial sub-sector in Pakistan.

u. Relationship to the Formal Sector

The informal and formal sectors have a complex relationship, primarily because of the tax evasion in the formal sector. The informal sector presents an alternative investment opportunity for illegal money. A growing trend in the recent past has been to obtain a loan from a nationalized bank or other financial institution, and pump it into the informal or illegal channels. This is usually done by influential people who are capable of either getting the loan written off, or repaying it after earning high returns through 'investments' in the informal channels. Similarly, all organizations, who are otherwise classified as formal (barring the tax evasion issue) pump the funds that are not accounted for in their books in various informal investments, speculative ventures, and foreign exchange dealings.

Apart from the 'black' or undeclared money, 'white' money is also being channeled towards the informal sector. For instance, the salaried class (despite the set backs of the recent frauds by investment companies) regularly deposit their savings with the informal concerns in order to earn a higher return than obtained through the government savings schemes. Although these investments are relatively small in volume, yet the investor earns a rate between 2 percent to 4 percent per month.

The formal institutions are instrumental in facilitating the informal transactions. For instance, most of the *hundi* transactions take place through the banking channels, where the dealers (through a bona fide foreign exchange account holder) remit and receive foreign exchange on a daily basis. The banks are aware of this practice, but technically and legally the procedure is within the prescribed system. Similarly, it was observed that in Peshawar, a branch of a nationalized bank honors the chits of a dealer, and make regular payments to the relatives of a worker who remits money through this agent. The *hundi* dealer writes only one check (equivalent to the total amount disbursed by the bank) at the close of the day. Although this is a violation of the State Bank Regulations, the manager obliges him because of the average balance

of Pak Rs 15 million in his account!

9. Potential for Gains from Legalization

As mentioned earlier, the main source of illegality (informality) is that the existing formal setup is not adequate to meet the growing demand for the financial instruments for credit, savings, investments and foreign exchange and the high cost of transactions with the formal sector. Entry into this sector is virtually impossible because of government policies. Legalization will result (initially) in lower cost of capital but higher transaction costs. However, with increasing competition and ease in availability of capital, the transaction costs would also go down.

The overall effect of this shall be that availability of capital shall be for all and not for a select few with political influence. This would have a positive effect towards the overall economic growth in terms of increased industrial and business activity. As far as the foreign exchange component is concerned, legalization will also be productive since the inflows and outflows shall be cancelling out, and the current trend shall also diminish once the foreign exchange regulations are relaxed. If the business community knows that they can remit earnings abroad whenever they want, they would only do so if there is a requirement, and not for contingencies as the case is now.

10. Case Studies/Photographs/Sketches

Hundi:

The foreign exchange business is primarily concentrated in Karachi and to some extent in Lahore, Rawalpindi, and Peshawar but the level of business is more modest in these cities. The 'big' Karachi *hundi* dealers can handle bulk transactions of over a million dollars per day. Several small informal dealers are also found in areas from where the local population has migrated to foreign countries.

The *hundi* system caters for a traditional and booming market of transferring the foreign exchange in and out of the country through illegal channels. There are several ways through which these take place. For instance, a migrant worker abroad would contact an agent there in case he wishes to remit money to Pakistan. He will hand over the amount (foreign currency) to the dealer, who informs his counterpart over here. The equivalent amount in Pak. Rupees is thus delivered (usually at homes) to the relatives of the worker. The system works on the basis of mutual trust and there have been no instances of default by the dealers,

since that would render them out of the business. Fast and efficient ways of communication like telefax or telephone are used for such transactions. Similarly, for outward remittances, the same procedure is followed, and the foreign exchange is transferred in the concerned beneficiary's account in the specified country.

Over/under invoicing:

The over/under invoicing practice is very common in Pakistan because of the stringent foreign exchange regulations, and almost all the exporters and importers indulge in this informal activity. Incidentally, the exporters/importers are all licensed, and as such, fall in the formal group. Generally, the importers under invoice the imported goods in order to reduce their port charges including custom duties, and other taxes etc. On the other hand, they over invoice the imported raw material/machinery etc. when these imports are financed through a loan, so that the balance amount remains in a safe haven, i.e., a foreign country. As a result, using all legal or formal channels, the foreign exchange is transferred abroad in the beneficiary's account. For instance, the foreign exchange component of a Textile Spinning Unit for the imported plant and machinery is over invoiced typically by Pak Rs 10 million. Thus, this amount is remitted abroad informally but using the official channels. This, off course, is done with the connivance of the supplier and his agents operating in Pakistan.

Similarly, the exporters under invoice the exports in order to achieve a dual objective. Firstly, this understates their income and hence lesser taxes, and secondly, they get the remaining amount in foreign currency. Some of the exporters buy FEBCs in lieu of this amount, and thus 'whiten' this money in Pakistan (on which no taxes were paid originally).

Foreign Exchange Bearer Certificates (FEBCs):

The FEBCs are being widely used to transfer money abroad and to legitimize the black money. Since the certificates have a special feature in the sense that they are bearer, an open trading of the FEBCs is taking place in the informal market. This 'facility' is used by people who want to transfer funds abroad or who want foreign exchange for their travel needs in excess of the allotted State Bank quota. Similarly, another significant feature of the FEBCs is that it helps people 'whiten' money obtained through illegal sources (bribery, tax evasion, smuggling etc.). The FEBCs are traded at the Karachi Stock Exchange, and anyone wishing to convert the black money approaches the broker who, after

⁴The machinery is obtained through the Supplier's Credit, which is repaid in foreign currency through the regular (State Bank) channels.

charging a premium (currently 7 percent) issues a certificate indicating that the person is holder of the specified number of FEBCs. In his manner, the money is brought in the books with no tax liabilities.

Historical Perspective on the Informal Financial Sector

The roots of the informal financial structure can be traced back to the pre-partition colonial period, when it was mainly rural in character because of our traditional reliance on the agricultural sector. The most dominant activity in this sector, i.e., credit, had affected almost every household in those days. Before independence, the money lenders were mostly the Hindu *bania*, *whukar* or *ahlia* (commission agent), who supplied credit mostly for production, marketing or household needs. He seldom asked questions about why the money was borrowed, and charged unbelievably high interest rates. In addition, they would also collect gold ornaments from the borrowers as a collateral, and would not press for the repayment of the principal as long as the interest was paid regularly. As a result, once a peasant got into debt, he seldom was able to repay it in his lifetime, and passed the heavy burden on to his successors. That is how the ownership of land began to pass from the agricultural classes (peasants) to the urban money lenders. Since 1947, the money lenders have been replaced by Muslims, who are as oppressive as their predecessors, but their operations are carried out in a rather discreet manner.

Similarly, a look into the history of savings and investment also reveals that the informal sector had been catering to the needs because of the formal sectors incapacity to serve the masses. Traditionally, household/business savings were kept at home (sometimes hidden underground). Banking was mainly limited to the urban areas, and the rural inhabitants did not have any other alternative. With the improvement in the postal facilities, the Post Office Savings Scheme (Pass Book System) started gaining popularity in the country. In the formal sector, the National Savings Centers are operating in all parts of the country, but with limited operations. First, the centers are not accessible to everyone; second, the offered savings schemes are not well publicized with the result that majority of the people are ignorant of what is being offered. Traditionally, the informal investments have been in hoarding and speculative activities, and this practice even continues now, but other more innovative means can be found more abundantly as described in section 10.2.

The foreign exchange informal market has developed with the increase in foreign trade, migration of Pakistani workers abroad, the constant depreciation of the Pak Rupee, and very strict State Bank of Pakistan foreign exchange regulations.

Mechanics of the Parchi System

The quantity of output received, the price per unit, the total payable amount, and the date on which payment is due are mentioned on this paper. The usual *parchis* observed in the market have three maturity periods: 20-30 days; 30-45 days; and 45-60 days.

When the microenterprises take their product to the market they ask the intermediaries before hand about the mode of payment. If the payment is to be made in cash, microenterprises sell their product relatively cheap. If the intermediaries ask them to take a *parchi*, an IOU, microenterprises charge a higher price from them according to the maturity period of the *parchi*. The *parchi* is acceptable in the market just like a check. If the bearer of the *parchi* wants to get it cashed he will have to pay a certain rate of discount which varies according to the maturity period. The *parchi* is also used by micro-enterprises to make payments to suppliers.

The interest rates implied by the various arrangements involving the *parchi* are given below.

<i>Parchi</i> Type	Maturity (days)	Implicit Interest Rate When ME is Selling Its Goods (%/month)	Implicit Rate When <i>Parchi</i> is Used to Pay Suppliers (%/month)	Discount Rate for Cashing The <i>Parchi</i> (%/month)
1.	20-30	2.0-2.5	1.7-2.3	2.5-5.0
2.	30-45	3.1-6.2	2.3-5.0	3.8-7.5
3.	45-60	4.4-7.0	6.0-7.0	5.0-10.0

There is a big risk in this arrangement for the whole sector. If the business of the borrower collapses, all the bearers of the *parchis* which he had issued would lose their money and they would have no legal way to get their money back from him. In such cases, an informal body of the *mandi* decides, based on the net worth of the borrower, the amount that should be paid to the creditors.

Various Forms of Committees

The ordinary committee is the simplest form of the committees involving compulsory saving by the members, and is very popular with housewives. One of the selected persons, acts as an accountant and collects a fixed amount from the members every month. The collection proceeds of the first month (first committee) are taken by the person who organizes it. For the remaining periods, a draw is held to determine the sequence of the members who would collect the amount. The duration of the committee depends on the number of members. This system only provides the element of forced savings by the members, and is not innovative from the financial standpoint since no return on savings is generated.

The auction committee is very popular among the business community, especially in the big cities of Pakistan. The group is organized in the same way as in the ordinary committee and the first committee is given to the organizer. After this, the committee is auctioned every month on a fixed date. The members bid for the committee according to their need for funds. The committee will be given to the member who is willing to pay the highest premium to the contributors, or in other words, gives the lowest bid.

The lucky committee became very popular in the past and later on it was banned under the regime of President Zia-ul-Haq because of several bloody incidents due to the member's suspicion of being defrauded; still, some people are practicing this committee illegally. In this committee system the organizer tries his best to make as many members as possible and announces the committee amounting to one-half to two-thirds of the total monthly collection. The number of committee members is not disclosed by him, and thus, the people are not aware of the total amount involved.