

TOBACCO VALUE CHAIN IN PAKISTAN



State Bank of Pakistan
Agricultural Credit & Microfinance Department
www.sbp.org.pk

TOBACCO VALUE CHAIN **IN PAKISTAN**



State Bank of Pakistan
Agricultural Credit & Microfinance Department
www.sbp.org.pk

Preface

The value chain financing (VCF) is evolving as an attractive model of spreading the various risks in agri/rural finance among different fund providers. Keeping this in perspective, and to sensitize lending institutions about the potential business prospects in VCF, SBP carried out a research study to identify the potential agri. value chains in Pakistan through reputable consultants. The study highlighted various layers and players within different value chains in terms of activities, potential for investments, issues & challenges in strengthening VCF.

The desired research study and its findings' report were completed in December, 2014. The report provides a detailed assessment of six main value chains in the country: i) Potato, ii) Tobacco, iii) Beef, iv) Dairy, v) Basmati Rice, and vi) Aquaculture and Inland Fishery.

This report on Tobacco value chain in Pakistan is a part of that comprehensive report. Its basic aim is to enable financial institutions to more clearly understand the specific value chain dynamics and prepare their related strategy for increasing agri. financing thereto.

Disclaimer: Whilst every effort has been made to ensure the quality and accuracy of this report; however, State Bank of Pakistan shall not be responsible for the contents of this report. This report is meant for educational purposes and for general information only. In no event will the State Bank, its affiliates or other stakeholders be liable for any mistakes.

Executive Summary

Tobacco value chain is the most enterprising SME sector and has been developing since the inception of the country. The value chain no doubt presents an enormous opportunity in its growth and development as it is driven by SME sector and from its outset being an excellent example for contract growing in the country. Methodology used here is semi structured interviews, Focus group discussion and cross validation of the work already undertaken. Being highly input intensive in nature and requiring high volume buying for local processing and consumption as well as exports it requires finances for operations, primarily in primary production and curing and related expansions.

The value chain is heavily taxed and regulated yet it has increasing margins but if some of the taxes collected are diverted to its development, it would result in far reaching impact in the overall development, as it has all the potential to grow. Commercial lending through banks has similar snags like any other agricultural value chains in the country and there exist no specific financial products available to cater to the specific needs of stakeholders at various crucial nodes, viz., primary production and curing; transportation, storage, processing, packaging, marketing, local and exports sales, despite the fact higher rate of credit from informal sources are being preferred versus what is being offered by formal sources.

The erratic policies framework of agricultural credit seems to be at the heart of expansion of formal credit expansion in the value chain besides lack of proper securities available with the landless borrowers poses yet another challenge in developing tailor made products suiting all the stakeholders in the value chain. Viable products however could be developed in the SME by using rental agreement of land and barns to finance input supply such as fertilizers, fuel wood and agro chemicals.

List of Abbreviations Used

Crop Protection Chemicals	CPCs
Value Chain	VC
National Agriculture Research Centre	NARC
Pakistan Agriculture Research Council	PARC
Agriculture Research Institute	ARI
Federal Seed Certification & Registration Department	FSCRD
United States Agency for International Development	USAID
Ministry of Food Agriculture and Livestock	MINFAL
Value Chain Analysis	VCA
Non Governmental Organizations	NGOs
United States Department of Agriculture	USDA
Agri. Business Support Fund	ASF
Gross Domestic Product	GDP
International Farm Comparison Network	IFCN
Pakistan Standards and Quality Control Authority	PSQCA
Khyber Pakhtunkhwa	KPK
Small & Medium Enterprise Development Authority	SMEDA
Zarai Taraqiati Bank Limited	ZTBL

Contents

Tobacco Value Chain Overview	1
Input Supply	6
<i>Contractual Arrangements</i>	<i>7</i>
<i>Quality control measures</i>	<i>7</i>
<i>Input Supply Contracts.....</i>	<i>7</i>
<i>Non-Financial and Financial Services Provided By Input Suppliers</i>	<i>8</i>
<i>Subcontracting Arrangements.....</i>	<i>8</i>
<i>Logistical activities for input supply</i>	<i>8</i>
Production System and Characteristics	8
<i>Financing systems</i>	<i>12</i>
<i>Production and aggregation systems-driving the types of finance used.....</i>	<i>12</i>
<i>Working capital financing.....</i>	<i>12</i>
<i>Fixed assets financing</i>	<i>12</i>
<i>Unmet opportunities for technology/quality upgrades financing requirement.....</i>	<i>12</i>
<i>Constraints to financing of producers needs.....</i>	<i>12</i>
Processing	13
<i>Working capital financing.....</i>	<i>16</i>
<i>Fixed assets financing</i>	<i>16</i>
<i>Unmet opportunities for technology/quality upgrades that require financing.....</i>	<i>16</i>
<i>Constraints and opportunities to financing processors needs.....</i>	<i>16</i>
Markets.....	17
SWOT Analysis	20
Economics of actors	21
Access to Finance	26
Enabling Environment	28
Services	31
Conclusions and Recommendations	32
Contact List of Key Stakeholders	33
Bibliography.....	34

Tobacco Value Chain Overview

Tobacco Value chain (VC) has three main products: Cigarettes, Hukkah tobacco and Naswar (Snuff or Chewing). The lion share however in the VC is that of Cigarettes. There are different types of tobacco used for making these products as given in the following Table.

Table 1: Types of tobacco and associated products (PTB Bulletin, 2010)

Types of Tobacco	Botanical Name	Popular Name	Area where grown	Usage
Flue-cured	Tabacum	Virginia	KPK/ Punjab	Cigarettes
Light Air-cured	Tabacum	Burley	Swat	Cigarettes
Light Sun-cured	Tabacum	Hokkah	Punjab/ Sindh	Hokkah
Dark Air-cured	Tabacum	Dark Air-cured	Punjab	Cigarettes, Biri.
Semi-oriental	Rustica	White Patta	KPK	Chewing, Hokkah
Dark Sun-cured	Rustica	Naswar	KPK, Punjab and Balochistan	Snuff (Naswar)/ Cigarettes

As shown above almost all of the tobacco produced is consumed by cigarette manufacturers, some however is used for hokkah, Naswar and chewing purpose.



Tobacco is by far the most established VC amongst any Agriculture based VC. Its cultivation started with the establishment of large processing companies initiating business.

The following table gives a glimpse of the small, medium and large processing companies (mainly cigarettes manufacturers), their capacities and production operations and shifts.

Tobacco processing and cigarette making started in the year 1951 right after the inception of the country. Since then, two big companies; Pakistan Tobacco Company (Fully own Subsidiary of British Tobacco Company, now British American Tobacco Company and Lakson Tobacco Company now Phillip Morris Tobacco Company).

Table 2: Processing companies, Year of establishment and operating capacities (PTB Bulletin, 2010)

Companies		Year of establishment	Operating installed capacity on 3 shifts basis per annum (million number)	Existing status
A. Khyber Pakhtunkhwa				
1.	Pakistan Tobacco Company, Akora Khattak	1951	23736	2 Shifts
2.	Khyber Tobacco Company, Mardan	1962	4422	2 Shifts
3.	Sarhad Cigarette Industries, Nawa kili	1975	1150	2 Shifts
4.	Saleem Cigarette Industries, Mardan	1979	1663	2 Shifts
5.	Shaheen Tobacco Company, Taxila, Khanpur Road, Julian.	1997	216	Not in Ops
6.	Bara Cigarette Industry, Bara	1992	800	Not in Ops
7.	International Cigarette Industry, Shewa	1991	472	1 Shifts
8.	Souvenir Tobacco Company, Mardan	1986	1950	2 Shifts
9.	Universal Tobacco Company, Mardan.	1989	600	1 Shifts
10.	Imperial Cigarette Industry, Dagai Road, Tarakai.	1989	1728	1 Shifts
B. Sindh				
11.	Philip Morris Tobacco Company, Kotri.	1971	13540	2 Shifts
C. Punjab				
12.	Pakistan Tobacco Company, Jhelum.	1971	21250	3 Shifts
13.	Philip Morris Tobacco Company, Mandra, Rawalpindi	1957	3350	3 Shifts
14.	Philip Morris Tobacco Company, Qadirabad, Sahiwal.	1981	20170	3 Shifts
15.	Burley Tobacco Company, Fatejang	1995	600	1 Shifts

Primary Production or growing of tobacco crop and the secondary production involves curing in kilns or other means. Processing involves, storing, aging, blending, casing, cutting and flavoring also known as primary processing.

Secondary processing refers to filling in paper through machines, packing, warehousing, distributing and marketing.

Contract primary production, is the hallmark of the value chain, companies big or small have contract growing or assured supply. Most of the tobacco produced and cured goes to the processing companies and some quantity is exported in the form of graded tobacco (cured) and finished product (Cigarettes).

Regulatory Environment

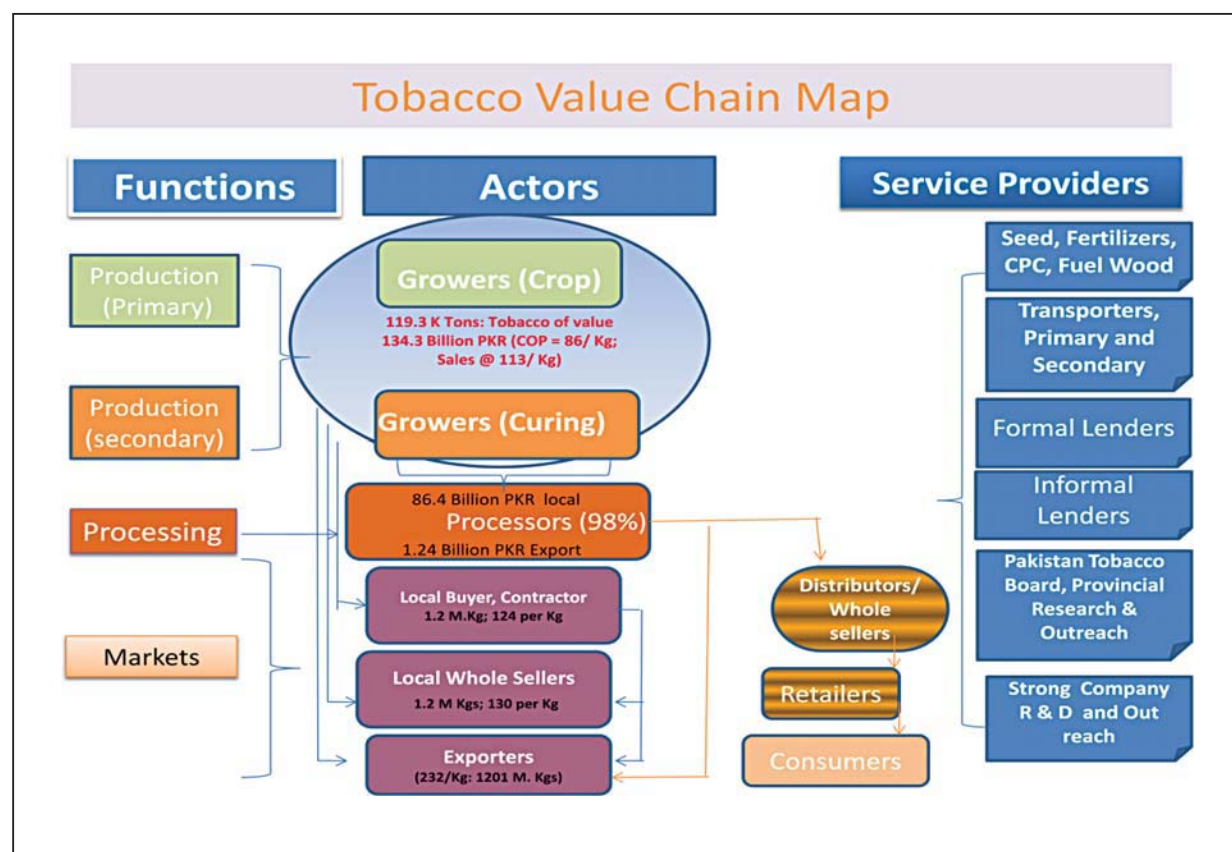
The value chain is highly regulated in terms of its production, prices and marketing under various regulatory laws and rules. Also, a separate autonomous body Pakistan Tobacco Board (PTB) implements such regulation.

The value chain is also heavily taxed and the only value chain in Agriculture where raw material is also taxed in the form of tobacco Cess collected by the Government besides Central Excise Duty (CED) and General Sales Tax (G.S.T) collected on the finished goods (Cigarettes).



Value Chain Map

Figure 1: Tobacco Value Chain Map



Tobacco Value Chain Actors and Their Roles and Relationships

b. Input Suppliers

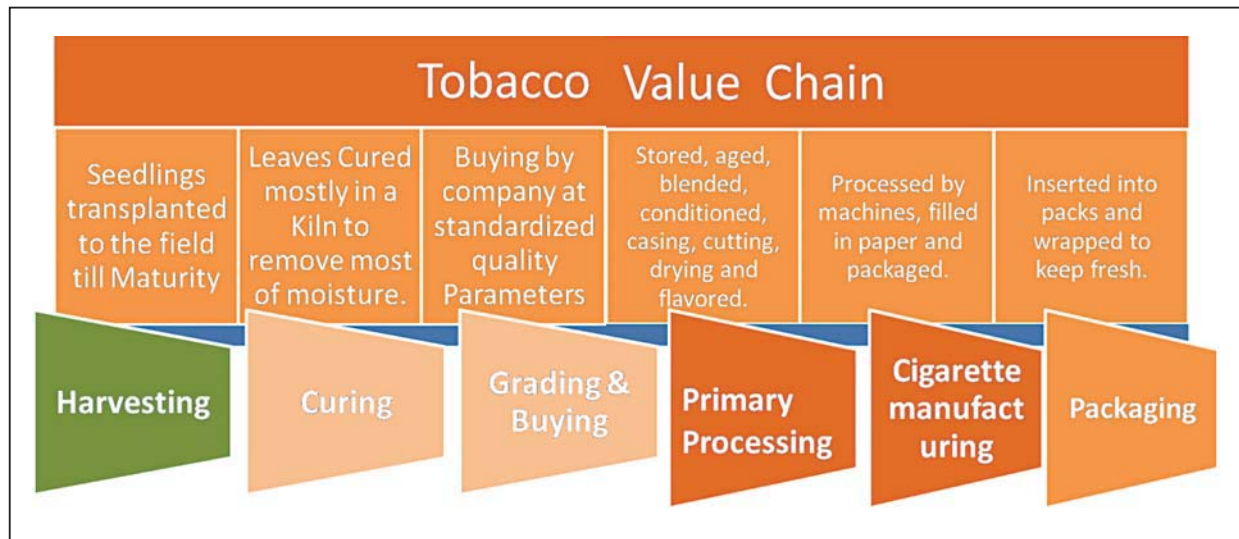
With the exception of seeds, which is supplied by the tobacco companies on loan to be adjusted in procurement, Fertilizers, Plant Protection Chemicals (PPCs), farm machinery, irrigation systems and fuel wood are the main inputs supplied by various vendors at their sales/ distribution points.

- Fauji Fertilizers (FFC), Engro Fertilizers Limited (EFL), Daud Hercules, Ali Akbar Group (AAG), Jafer Brothers Limited, FMC, Syngenta, Bayer Crop Sciences, FMCs are the main Crop input suppliers and all have a well spread dealer and distributor network all across the country and are equally stretched in the core producing areas. Besides, there are importers of fertilizers and farm chemicals whom have their network in the area and connection with the major processing companies.
- Processors, such as PTC and PM acts as an importer of seeds which is extended as a loan to growers in a contractual arrangement. Such loans are without margin and interest and ensure provision of raw material for processing.

c. Producers

The primary and secondary producers truly represent the SME sector here in the tobacco VC and each SME represents a family business which involves crop production as well as curing of the produce in Kiln. Each kiln uses produce from 2.5 acres (one hectare) for drying tobacco prior to its procurement by strategically located procurement points of various companies. Majority of growers are small holders and have 1-2 kilns translating into 5 acres of tobacco growing.

Figure 2: Tobacco Value Chain Process



d. Aggregators

Big volume buyers like PTC and PM have contractual arrangement with the growers on a price fixed by Pakistan Tobacco Board (PTB). Small processors do not have any such arrangements however, local buyers collect the produce from group growers and these local buyers either are connected to the small processors directly or sell their collection to volume buyers which ultimately sell it to small processors.

The same network of buyers, also collect the produce for exporters, at the same time, exporters do some direct buying from their own group of growers but under no contractual arrangement. Although the pricing of various grades of produce is fixed by PTB there is a lot of variation in cash versus credit buying by various players in the market.

e. Processors

Processors could be categorized broadly into three categories: Large, medium and small, based on their processing capacity as given in Table 2, which also gives a geographical spread of the these processors. Like growing processing is also located in closer proximity to the key producing areas and mostly these are concentrated in KPK as envisaged in Table 3.

Processors buy the cured and graded tobacco (Fig. 2) at their collection centres (Depots) in the growing and curing areas as per defined quality standards and regulated by PTB.

f. End markets/Buyers

End market buyers could be categorized as cured leaf buyers (local small volume buyers, large volume buyers for small to medium companies and large processors having their well entrenched buying teams and collection Depots).

g. Supporting Institutions

There are national and provincial support institutions conducting research and linking extension services to primary growers besides a well established R & D set up and support system through field support personnel by large processors such as PTC and PM.

Input Supply

Suppliers and Other Participants in the Value Chain

a) Fertilizers manufacturers and importers

Fertilizer manufacturing initiated with (EFL) Engro Fertilizers Ltd (Exxon) putting up their first plant with a capacity of 150,000 Metric Tons at Dharki close to Sindh/Punjab border during 1968, followed by Pak American Fertilizers, Fauji Fertilizers (FFC), Daud Hercules and Fatima Fertilizers, increasing the countries Urea manufacturing and meeting the rising demands.

EFL later increased their capacity to 2.0 million tons and also put up a blended NPK fertilizers plant. Similarly, FFC put up a Phosphate (DAP) plant besides acquiring another urea plant. All these manufacturers have well entrenched dealer network and field personnel coverage in all the potential producing areas (Growers). They also have import quota for importing phosphate fertilizers as per demand of the market. Urea imports are regulated by the Government, and are done on crop demand basis.

Beside these manufacturers, there are importers of various types of straight, blended and speciality fertilizers and their own distribution and dealer network.

Depending on the demand/ supply scenario of the fertilizer industry, Government also augments shortage by importing and distributing through these manufacturing companies to avoid any shortage which affects the supply of such an important crop input.

b) Seed

Seed is mostly supplied by processing companies partly due to the reason in promoting desired crop variety with specific characteristics and quality parameters. Seed is provided as an advance by the contracting companies and the amount is adjusted towards the end of procurement season.

c) Plant protection chemicals bulk importers and suppliers

There are several Plant protection companies, manufacturers and importers in the country. However, Companies such as Syngenta, Bayer Crop Science, FMC, Ali Akhber Group (AAG) have a comprehensive coverage through their personnel and dealer network.

d) Farm Machinery manufacturers and importers

Most of the farm machinery manufactures and their dealer network have their presence in the core producing areas. Some plant machinery importers are located in Lahore and they import new as well used plant machinery to meet the demand of the value chain.

Growers mostly use the basic implements and machinery and tractors occupy the central position. In Tobacco culture, availability of cheap labour (mostly household men, women and teenagers) discouraged use of advance machinery however tractors and ploughs are commonly used in growing tobacco.

e) Packaging material manufacturers and suppliers

Poly net bags are commonly used in packing of cured tobacco and most manufacturers are based in and around Lahore. Packaging material for cigarettes are provided by big packages manufacturers based at Lahore.

Key Input Providers and Their Organization

In farming area, there is a dealer network of all the critical input supplies provider in close proximity to farms besides companies warehouses and their stocks which the dealer could easily divert to growers---their customers.

Some fertilizers and CPC suppliers place their products in the processors' warehouses which is advanced by processors to growers and adjusted at source (Bank) and payment routed to suppliers. These input suppliers have technical field personnel and in collaboration with processors' field staff they provide technical services to growers in meeting their crop production and technical needs.

Fuel wood is provided by the dealer and there are different price ranges for purchases on cash versus credit. The fuel wood is used in kilns for curing and drying of tobacco leaves prior to their procurement by the companies. Mostly, growers acquire fuel wood on credit and the advances are adjusted once the produce is sold to the buyer.

Contractual Arrangements

Fertilizers and CPC dealers purchase their supplies on cash from input supply companies under a dealership agreement. They extend advances to their circle of customers at a higher rate and get payment after the sales of produce. These dealers have limited capacity to advance inputs to growers which force growers to borrow from informal lenders at a very higher rate.

Quality control measures

Tobacco value chain has well established quality control standards and control measures through the interventions of processors and PTB. These standards are set for each type of tobacco used in the blend for making cigarettes.

Input manufacturers, fertilizers, CPC, maintain GMPs (Good Manufacturing Practices) and their products on the market are checked and samples by the Provincial Agriculture Department.

Input Supply Contracts

As per tobacco marketing control rules, 1993, every tobacco company intending to purchase during a crop year shall indicate to the board its total requirements of tobacco by 21st day of October and they are also bound to undertake contractual agreements furnishing a list of such agreements to the PTB as soon as possible after the execution of such agreements.

The PTB constitute committees of growers for scrutiny of agreements executed by each tobacco company in order to verify its genuineness. Exporters and other informal buyers undertake no formal contract with the growers and there is only spot buying. Similarly, for finished goods (Cigarettes), the distributors, dealers and retailers have formal agreement of purchases and sales and a volume business commitment.

Input supply companies pay close attention while appointing a dealer and enforce their formal contract through their well developed processes and policies through a field officer assigned for that area. In case of any serious breach of the contract, the dealership is cancelled and a new dealer for that area is

searched and appointed. Some companies also appoint big volume buying growers as their dealer in the area. Such a grower mostly, represents a group of growers in that area.

Processing companies undertake contracts with growers as per law under the price fixed by PTB. This contract is binding upon all the parties to comply for sales and purchase of the produce.

Non-Financial and Financial Services Provided By Input Suppliers

Input suppliers such as Fertilizers, CPC and fuel wood dealers provide the inputs to their selected circles of growers and get paid on the crop. The highest rate is charged by the fuel wood, e.g. for PKR 400 for 40 Kg on cash the dealer charges PKR 600 on a credit of two months. Similarly, on a bag of urea: for cash PKR 1800 and on credit PKR 600 for 4-6 months. Similar rates are charged on other crop inputs.

Subcontracting Arrangements

Sub contracting exists at various nodes of the value chain. At primary production level, the land owners partially rent their land and or share crop partially. Similarly, SME processors and exporters sub contract to volume buyers for a portion or all of the volume they intend to buy for processing and or exports.

Similarly, large processors, such as PTC and PM sub contract some of their products to be processed by small to medium processors for some of their brands.

Logistical activities for input supply

Primary producers use their own vehicles, mostly tractor driven trolleys to purchase depots of companies where they have buying points. Also, there is no dearth of small, medium and large vehicles with individuals and transport companies whom take part in the logistics of input supply as well as produce hauling.

Large companies have contracts with transport companies for hauling their purchased raw material to already established warehouses or factory warehouses depending on the need and volume requirement. For finished goods contracts of transport for dedicated fleets are in place to efficiently meet the distributors, whole sellers and retailers' demands.

There are individual, small, medium and large transport companies with a variety of vehicles available to meet the need of the customers as described earlier. Inter and intra city road network pose no hindrances in hauling raw material as well as finished goods efficiently and timely as per the needs of the customers.

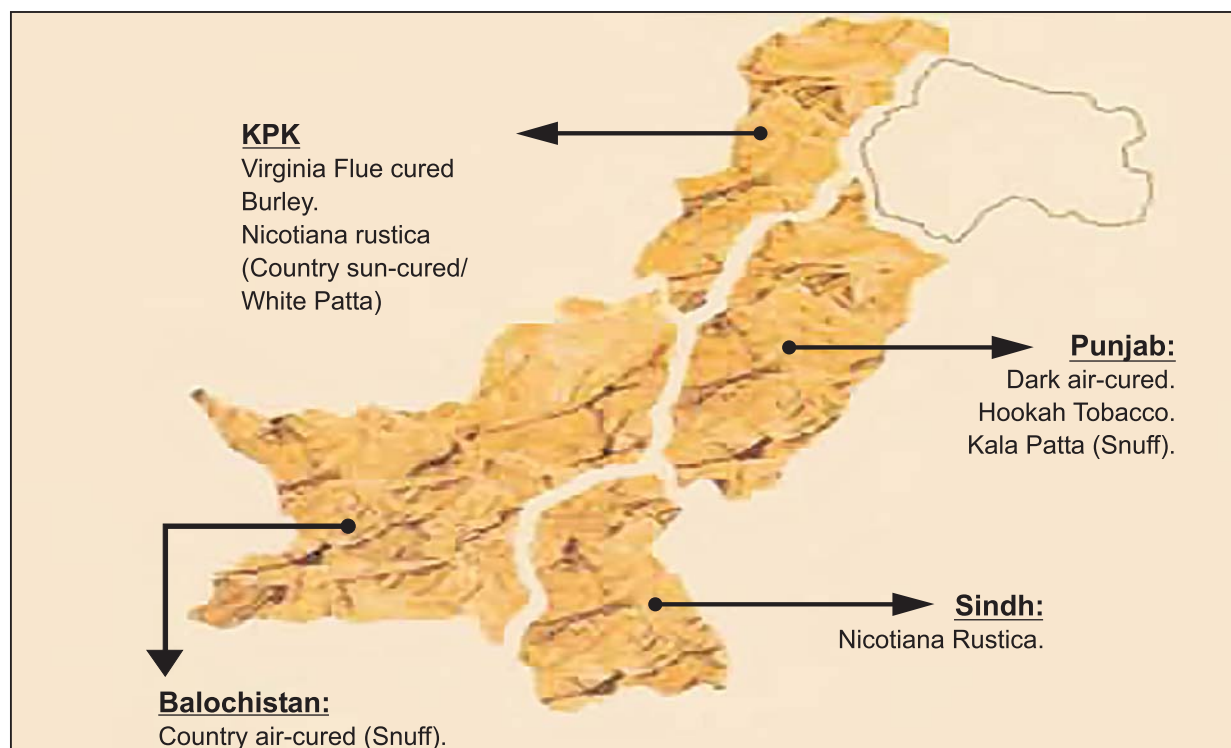
Faisal movers, PTN, Malik goods, Khan Mushtaraka Goods Company are some of the transporters having country wide network of vehicles to service all kinds of clients in the value chain.

Farm to depot lead times vary from 1-6 hours. Processing companies have strategically placed their network of buying depots and storage warehouses to efficiently move products around as per their need with minimum time.

Production System and Characteristics

Geographical Mapping of the Tobacco Value Chain

The major thrust of tobacco production is the KP province, followed by Punjab. There some production in Sindh and Balochistan also, as given in Table 2. (PTB Bulletin, 2010)

Map 1: Tobacco Geography**Table 3: Area, Production and Geography (PTB Bulletin, 2010)**

Area, Production and Yield Per Hectare (Kgs) in various Geographical locations					
Year	Punjab	Sindh	KPK	Balochistan	Pakistan
(Area in '000' Hectares)					
2005-06	17.7	0.1	36.5	2.1	56.4
2006-07	17.6	0.1	30.8	2.4	50.9
2007-08	16.6	0.3	32.7	1.8	51.4
2008-09	16.3	0.4	31.1	1.9	49.7
2009-10	17.8	0.2	36.2	1.6	55.8
(Production '000' Tons)					
2005-06	21.6	0.1	87.9	3.0	112.6
2006-07	21.5	0.2	78.2	3.4	103.3
2007-08	19.9	0.4	84.9	2.4	107.8
2008-09	20.0	0.5	81.7	2.6	104.9
2009-10	23.4	0.3	94.1	1.5	119.3
(Yield Per Hectare in Kgs)					
2005-06	1220	1000	2408	1429	1996
2006-07	1222	2000	2539	1417	2029
2007-08	1199	1333	2594	1444	2097
2008-09	1227	1250	2627	1421	2111
2009-10	1315	1500	2599	938	2138

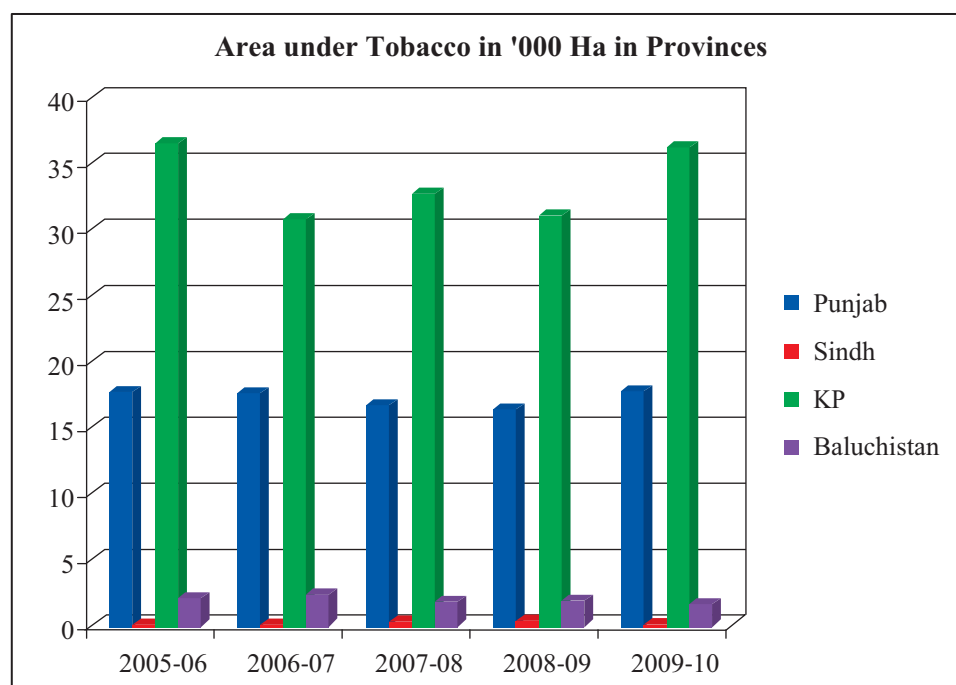


Chart 1

KP has the highest area under production of tobacco crop and all the major stakeholders are based in this area. The reason for this is the high quality and yield of the primary production.

Districts of Charsadda, Nowshera, Swabi, Mansehra, Malakand, Swat, Dir and Bunir are the production pockets in KP whereas District Swabi is the top producing area besides small and medium processors, exporters, small, medium and large contractors (Buyers) are active in the centre of this Tobacco heaven of the country.

Production Systems

Primarily the contractual production system is in place for most of the tobacco production in the country and it is heavily regulated by the government. Companies undertake a contract with the growers, whom provide the produce as per set quality standards after curing it in barns (Annex).

Contractual Arrangements in Production

Processing companies undertake cost of production (COP) exercise in various producing districts consulting growers on a form developed by PTB. This form is filled through various growers and submitted with the PTB with signature of the growers.

PTB conducts several meetings prior to reaching a consensus on the COP. Representatives of the growers, companies, and PTB finally decides the price of various grades and types of tobacco on which the purchases to be made for next season.

On the basis of this rates and volumes companies enter into written contracts binding both the parties under purchase agreement. Defaults on such agreements are a rarity as the rates given on contracts are better than the open market rate for spot buyers. However, under short supply scenario rates in the open market are higher than the contractual rate.



Technical and quality requirements – the parameters

There are well established quality parameters for various types and grades of tobacco to be procured by the companies and that is also regulated by the government through PTB (Annex A).

Aggregation

Growers entering into a contract with the big companies take their cured produce at buying points defined by the companies to whom they have undertaken a contract. Therefore, the main aggregators are the processing companies whom buy under the contract.



In the 2nd tier comes the small to medium processors and exporters whom have spot buying arrangements. Such buyers mostly have their agents in the producing areas they buy the cured produce under a similar grading system. Mostly, small growers have no contractual arrangements with the big companies and they sell to the local buyer, volume buyer for a small to medium processor or exporter either directly or through an agent.

Here at each step of buying there is a cut by the buyer till it reaches its final destination---small to medium processor and or exporter.

Key Risks in Production

There are various risks in the production and the biggest risks are the natural threats like floods and hailstorm. Historically, hailstorm have been the most damaging as it damages the bigger leaves of the crop and deteriorate the quality significantly.

Financing of Production

Financing systems

In tobacco value chain where the majority of the producers are linked with the cigarette processing companies have one way or the other financing arrangement exist for land owners. However, growers producing on leased land have difficulty in access to credit for the purchase of inputs, such as fertilizers and fuel wood. They resort to getting their needs fulfilled by informal sources at higher rates.

Production and aggregation systems-driving the types of finance used

Production system as mentioned offers formal credit to landowners having passbooks. Higher land and barn rentals has also resulted in landowners leasing their facilities to aspiring producers is on the rise which has limited formal credit opportunities for the producers of rented lands and barns. This phenomenon has given rise to enhanced demand of credit through informal sources, such as village shopkeepers, input supply dealers, fuel wood dealers, local buyers, volume buyers, and exporters.

Working capital financing

Tobacco is an input intensive crop and looking at the COP one hectare of tobacco requires 400,000 PKR. Out of a total value of the primary production market of PKR 24 billions, PKR 3.5 billion are critically required for crop input finance and a good portion of it is being financed by the informal creditors at a very high rate. A good portion of fertilizers are kept in the stores of the processors from where it is advanced to growers.

Large companies like PTC and PM have limits from banks from where reimbursement takes place for purchases made and it is based on daily purchases of a specific Depot. Similarly, the SME sector here is the local buyer, volume buyer for small to medium processors and exporters. These buyers seem to have a need for working capital for purchases made ranging from 10,000 kg to a couple of million kg.

Fixed assets financing

At farm level construction and repair of barns, purchase of farm machinery such as tractors and ploughs, rehabilitation of irrigation systems; for volume buyers, construction of warehouses and vehicle docking and weighing machines; and for small to medium processors, improvement of existing machineries, blending plants and packing machinery for existing and new aspirants in the value chain.

Unmet opportunities for technology/quality upgrades financing requirement

As mentioned in the previous section, construction of new barns, mechanized farming equipments, blending and processing machinery and packaging machineries are the required for improving quality within the value chain.

Constraints to financing of producers needs

The biggest constraint in financing the producers is the trend of landless production in which the producers use rented land and barns for tobacco production. Also, there is a lack of proper appreciation of the market players, local buyers, volume buyers and exporters relying on informal sources due to an undue apprehension of using financial products from banks.

Not less important is the lack of available Islamic financial products which in general being preferred by most of the value chain actors versus the conventional products available.

Processing

Types of processors in the value chain and subcontracting arrangements for pre-processing

Based on processing capacity, there are small, medium and large processors in cigarette manufacturing which is by far the biggest in the value chain (Table 2).

Table 4: Production of Cigarettes by various Processors (PTB Bulletin, 2010)

Company-Wise Cigarette Manufacturing from 2005-06 to 2009-10 (In Million Pieces)					
	2005-06	2006-07	2007-08	2008-09	2009-10
Tobacco Company					
Pakistan Tobacco Company	33056	36029	38537	43927	37600
Philip Morris Pak (Pvt) Ltd	30355	29200	28125	30991	27112
Souvenir Tobacco Company	472	475	0	372	273
Sarhad Tobacco Industry	100	106	0	133	0
Khyber Tobacco Company	0	0	0	168	341
Saleem Tobacco Industry	92	0	8	11	5
Universal Tobacco Company	30	0	0	0	0
Imperial Cigarette Industry	85	105	0	133	113
International Cigarette Industry	19	18	18	18	21
Total	64209	65933	66688	75753	65465

Overall capacity of the existing industry is to produce 123 billion pieces of cigarettes by small, medium and large processors.

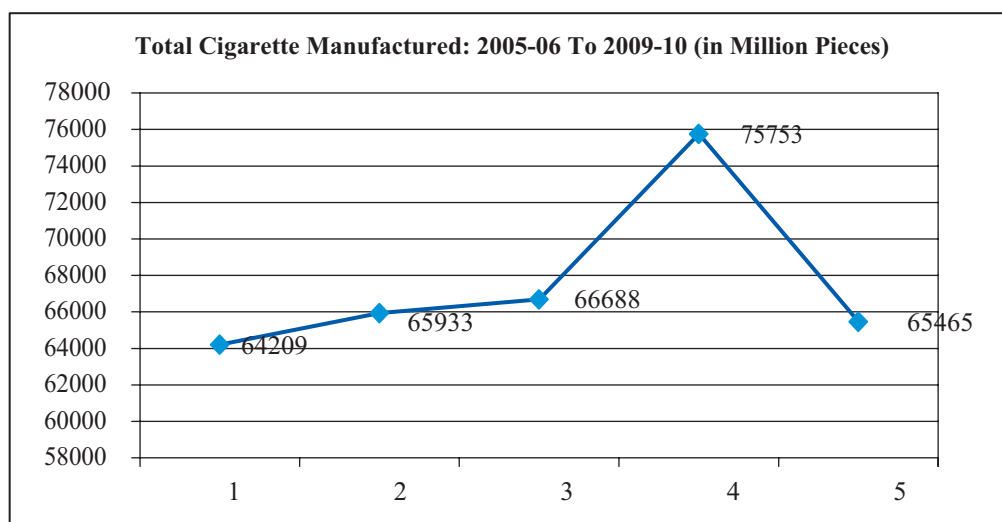


Chart 2: Cigarette Manufactured 2005-06 to 2009-10 (PTB Bulletin, 2010)

Above chart shows a gradual increase, sudden rise and steep in total production of cigarettes. It is interesting to see that the inconsistency is primarily due to fluctuating production numbers of small to medium processors whereas the big processors have somewhat consistent growth pattern as envisaged in the following chart.

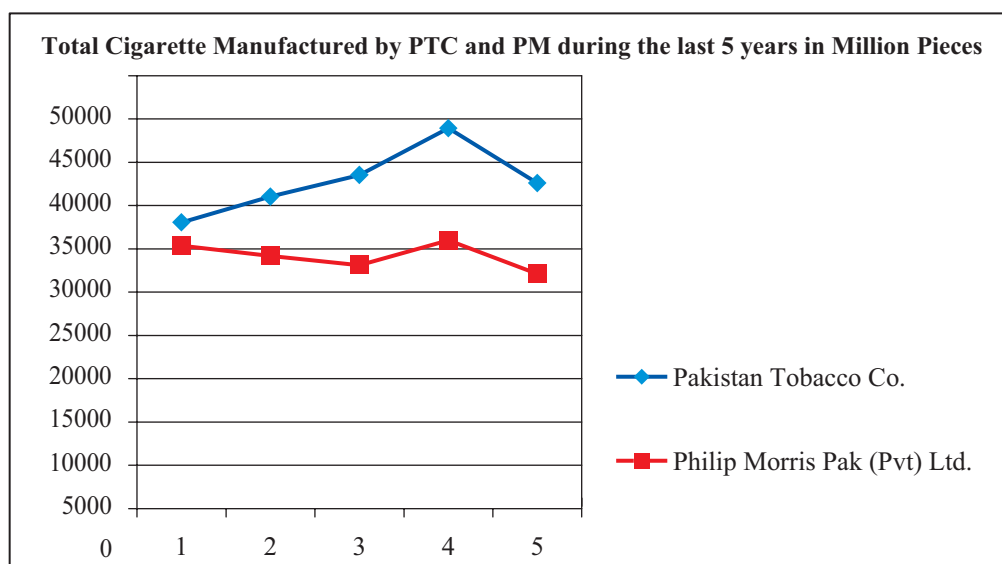


Chart 3: Total Cigarette manufactured by PTC and PM (PTB Bulletin, 2010)

Linkage between Processors and Suppliers

Large processors like PTC and PM are linked to their suppliers (Growers) through a contractual arrangement. Cost of Production and prices are worked out and fixed for each production and buying cycles as per the specific tobacco law governing such relationship (MLO-487).

Similarly, the processors enter into contractual arrangements with service providers such as transporters, warehouse space providers and they also have buying contracts for packaging material manufacturers.

Available and utilization of processing capacity in the chain for different products

Total available capacity of the processing industry is around 123 billion pieces per annum (Table 2) versus average utilization during the last five years have been around 65 billion pieces per annum. The under utilization indicates an incoherence in demand/ supply but it also indicates improvements in export part of the value chain which clearly shows an under utilization of 47% of the total capacity. Reported utilization of less than 1% of the installed capacity indicates some sort of under invoicing by the small manufacturers to evade heavy taxation of the tobacco industry. Similarly, under utilization of large companies to an average 45% is also inexplicable. Illegal tobacco trade and undocumented manufacturing may account for only half of the production capacity however the remaining half may provide an opportunity in expansion of exports of the processed goods versus raw material.

Availability and Use of Technology

Large processors like PTC and PM consistently improve their production efficiency through the intervention of technology in the form of blending and packaging plants besides marketing and distribution networks. However, it is the SME processors which require up gradation of their archaic processing systems and hold promise for investment in technology.

Processing throughput days/weeks/months

Following table depicts operational installed capacity versus actual production.

Table 5: Operating Installed capacity versus actual Production (PTB Bulletin, 2010)

Operating installed Capacity versus Actual Utilization of Processors				
S.No.	Companies	Operating installed capacity on 3 shifts basis per annum (million number)	Average Utilization of Production Capacity (Million Number)	% of Utilization of production Capacity
1	Pakistan Tobacco Co.	44986	25220	56.06
2	Philip Morris	37060	20093	54.22
3	Other Companies	13601	418	0.03
	Total	95647	45731	47.81

Based on the data given in the above table X , operating installed capacity shows a daily throughput of 400,000 kg per day, around 2000 Kg per week and around 40000 Kg per month. However, based on actual data the estimated throughput is utilized only to the tune of 48%.

Financing of Developments in Processing

Working capital financing

Based on the feedback from the various stakeholders, financing for working capital is a dire need for those stakeholders in the value chain. Primary and secondary producers require working capital for buying crop inputs and fuel wood for barn. Small, medium and large buyers and exporters require it for buying volumes of raw material for a period of 3-5 months. Similarly, small to medium processors also require for 4-6 months for buying raw materials to be used in processing besides packaging material.

Fixed assets financing

Farm machinery, new barn construction and refurbishing older barns for primary producers; warehousing space construction, docking and weighing stations; improvement in existing processing machinery and new processing and packaging machinery are some of the fix assets financing needs of the value chain.

Unmet opportunities for technology/quality upgrades that require financing

Introduction of new barn structure, up gradation of the existing barn structures, installation of the new processing, blending and packaging machinery are some of key technology upgrades might be required to bring improvement in the existing value chain.

Constraints and opportunities to financing processors needs

The biggest challenge in financing the needs of processors is the availability of appropriate products within the formal sector to cater to their specific needs. Large processors like PTC and PM are the big corporations having international presence and have no dire need of finances. It is the SME sector, which requires financing at appropriate terms from formal sectors. Their primary needs are running capital for buying tobacco for processing and exports.

Similarly, the primary producers are also primary processors as they undertake the curing. These primary processors incur 42% of their total cost of production in curing which an opportunity area for financiers. The main cost in curing is the fuel wood which is available on cash from the dealer at PKR 400 per 40Kg whereas for two month credit the producer have to pay PKR 600 per 40 Kg.

Markets

Following chart shows a rising trend in production as well as revenues from the sales of cigarettes in the local market.

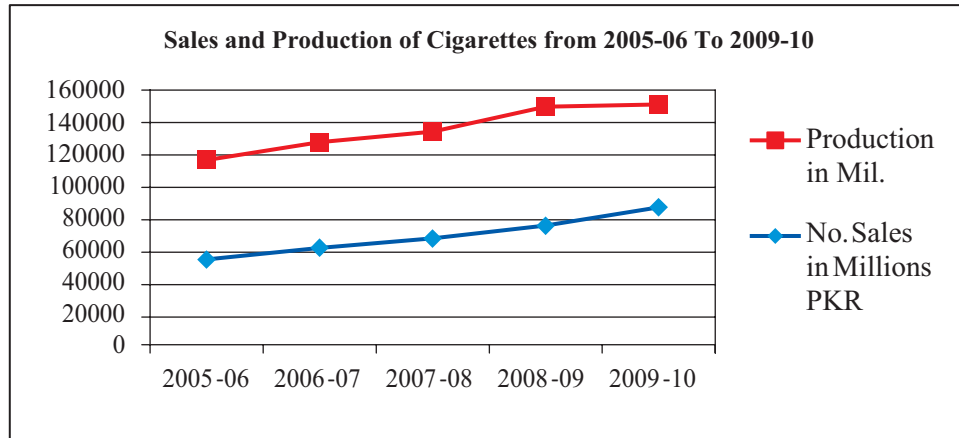


Chart 4: Sales and Production of Cigarettes

Overall revenues from sales are shown as 86 billion PKR showing an average rise on revenues to the tune of an average 13% over the last five years and the trend shows to continue in the future.

Table 6: Exports: Quantity and value (PTB Bulletin, 2010)

Exports of Tobacco and Cigarettes: 2005-06 to 2009-10							
Quantity Exported				Value Realized			
Years	Tobacco M.Kgs	Cigarettes M.No.	Cigars M.No.	Tobacco M.PKR	Cigarettes M.PKR	Cigars M.PKR	Total
2005-06	4.83	21.16	1.15	365.1	17.93	3.29	386.32
2006-07	5.77	26.12	0.76	543.85	24.64	1.69	570.18
2007-08	4.72	3.97	0.13	449.82	4.17	0.16	454.15
2008-09	4.77	10.97	0.02	963.27	14.84	0.03	978.14
2009-10	5.17	13.94	11.1	1201.08	24.22	16.41	1241.71

The table shows a consistent increase in numbers as well as revenues generated through raw tobacco (cured) as well as processed (Cigarettes and Cigars) through exports.

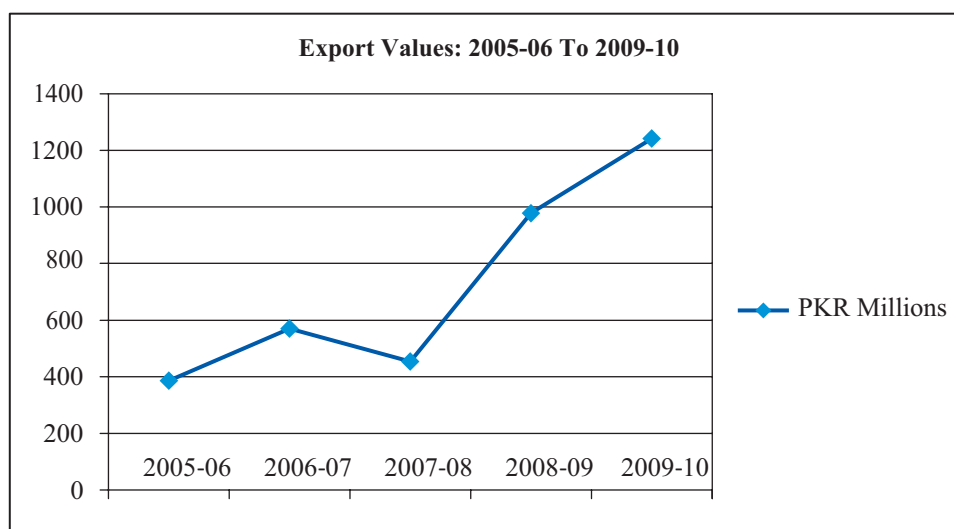


Chart 5: Export value: 2005-06 to 2009-10 (PTB Bulletin, 2010)

Increase in export revenues and local sales shows a robust growth in the industry despite heavily regulated and taxed.

Key driver behind the phenomenal rise in exports has been the competitive prices of the produce and finish goods despite heavy taxation on tobacco. However, any further rise in taxation and cost of production may lead to decline. Unused processing capacity, which currently is 45%, is yet another factor to assist in boosting the exports and full utilization of the potential.

Market Channels

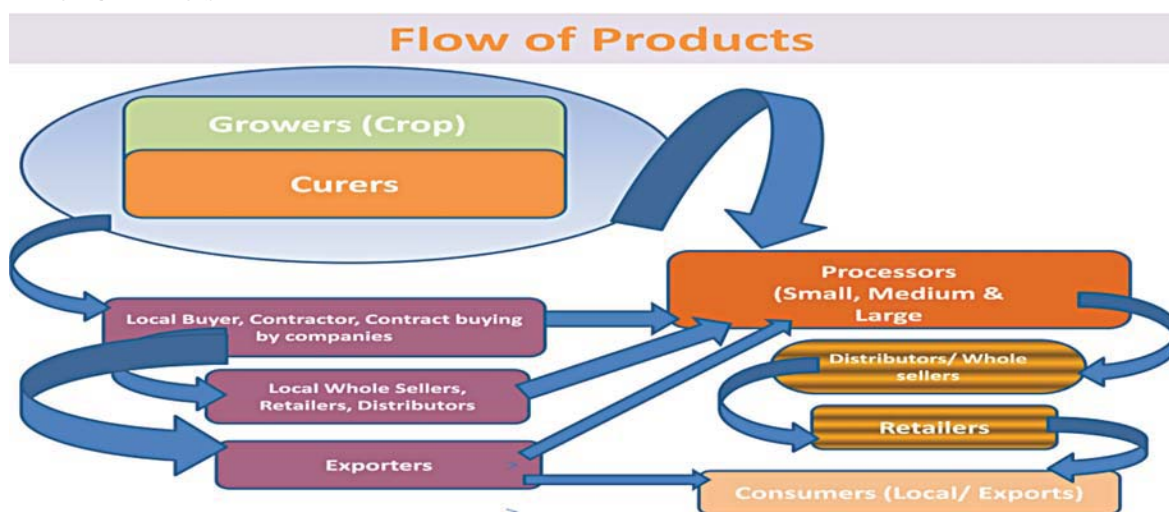


Figure 3: Flow of products in the Value Chain

Raw tobacco harvested and cured, go to processors either directly through contract growing (mostly) and or spot buying for small to medium processors. Local or volume buyers route the produce to processors or exporters either directly or through local buying agents.

Key Stakeholders that Determining Market Structure

The tobacco marketing in Pakistan is executed in direct purchase system. The production and marketing of tobacco is keeping up under Martial law Order-487. After promulgation in 1985, a number of amendments have also been introduced. MLO-487 empower that the weighted average price for the tobacco crop shall not be lowered than the previous year price. MLO-487 has played a great role to safeguard the interest of the growers. The law obligates manufacturers to stick to their conveyed targets and purchase their indicated quantity irrespective of changed circumstances, if any, at the time of tobacco purchase.

Pricing, timing, quality and terms are collaboratively executed under the regulatory authority of the PTB which has established committees comprised of all the critical actors in the value chain to decide on cost of production, purchase price, grades and quality standards besides volumes to be contracted and purchased.

Market Risks

The biggest risk to the market like any other crop is natural hazards like hailstorm which could significantly undermine the quality as well as quantity of the produce and may create a short supply scenario. Such a situation could put a lot of pressure on the processors to relax quality parameters and relax buying in order to meet the production demands. However, large companies like PTC and PM has an international pooling system of inventory and having an access to such inventories could be a safeguard to the business risk but it might increase the cost of production and COGS.

SWOT Analysis

Table 7: SWOT Analysis of Value Chain

Attributes	Strength	Weakness	Opportunity	Threat
Profitability	Contractual growing, strong technical outreach through companies, rising local and export demand.	Credit availability to SME sector reducing profitability. Produce to pay PKR 200 more on credit for fuel wood for a merely 2- month credit.	Best Practices, and lower cost of production through credit availability on comparative advantage.	Climatic: Hailstorm reducing quality and quantity.
Stability	Sustainable contractual model due to increasing demands from processors.	Lack of revolving crop based credit avails from banks to SME producers.	Novel financial products to support value chain growth.	Higher lending rates by non-institutional
Growth	Good quality land, ambient water supply and growing conditions. Sustained volumes and margins of Processors and contract growers.	Inadequate policy framework for institutional credit and reliance on informal lenders at a very high mark up.	Institutionalize credit for all players of the value chain, including contractor, input suppliers.	Lack of appropriate securities of various players for institutional credit.
Regulatory Environment	PTB, Provincial Government Agriculture Departments, Processors Quality Assurance Teams.	Heavy taxation and cess collection with no apparent application of such revenues for improvement of value chain.	Rational taxation regime, regularization of informal lenders.	Lack of will on the part of state to reform the sector with equitable distribution of taxations on various crops.
Job Generation	VC has a great potential of growth---more job creation both skilled and non skilled in area expansion, yield enhancement, technology interventions and credit extension on easy terms, processing and exports holds promise.	Lack of ingenious financial products for such a robust industry where domestic as well as exports are thriving sustainably.	Financing of rented agriculture and curing, introducing new but sustainable financial products.	Lack of appropriate credit may lead primary producers to adopt alternative crops as tobacco is extremely input intensive.
Geographic Focus	Development Sindh and Balochistan has great potential for processors in Sindh.	Primary produces lack technical and financial capacity. No credit for SME on easy terms.	Credit on easy terms at all the nodes of VC. Regularization of informal lenders, input suppliers, investors, cold store operators.	Bring margins down for the core areas.

Economics of actors

Scope of Operation

Total investment in primary production (Growing + Curing) is estimated around PKR 10.2 billion in 2009-10. Higher jump is primarily due to higher costs of inputs hence higher cost of production.

Table 7: Investment in primary production (Deduced from PTB Bulletin, 2010)

Investment in Primary Production			
Year	Production in '000 Tons	Cost of Production per ton	Investment in primary production in Million PKR
2005-06	112.6	61,660	6,943
2006-07	103.3	59,170	6,112
2007-08	107.8	64,210	6,922
2008-09	104.9	72,500	7,605
2009-10	119.3	86,000	10,260

This investment however shows an increase in revenues from cigarettes sales domestically and through exports as 86 billion PKR and 1.24 billion PKR, respectively. This does not include the other products in the value chain, such as Hukkah tobacco and Snuff (Naswar).

Sources of Inputs and Major Buyers

Sources of inputs have already been shared earlier and it is briefly mentioned that fertilizers, CPC and fuel wood is available in the production area besides packaging for processing. Major buyers as envisaged in the Table 2, 5 & 6 are small, medium and large processors. Large processors (PTC and PM) have contractual setting but most of SME processors buy at a bit higher rate than Large processors and small processors, local and volumes buyers for SME processors buy at higher rate on credit and lower rate on cash besides, all type of buyers have their cut in Kg per bundle of 10 Kg. The cut is between 10-14%.

Cycle turnover in the Tobacco Value Chain

Table 8: Cash conversion cycle

Functions	Organization
Crop Inputs (seed, Fertilizers, Crop protection Chemicals)	<ul style="list-style-type: none"> Seeds are provided for nursery raising in December and the cost is recovered by the company during procurement. Only 20% of the growers on contract use NPK kept by input supplier in the store of processors, the credit is adjust while grower cashes the purchase voucher after sale of the produce at processors' depot. Suckericide is available with the processors as well as with the input supplying dealer, here cash and credit have different terms. Payoff on service is towards the mid of the buying season.
Primary Production (Small, medium and Large Growers)	<ul style="list-style-type: none"> Small and medium growers sell most of their loads in the market at lesser margins, in order to pay back credits on inputs to non-institutional Creditors (NICs) whereas, the contractual growers get their payments as per agreed schedule set by the stakeholders monitored by PTB. Growers under contract with processors are in a better position and have better cash flows as their pay back from processors are based on weekly payments.
Transportation	<ul style="list-style-type: none"> Transporters under contract work on weekly payments whereas without
(Transporters)	contract on delivery of goods for processors only, others use either their own hauling or hired vehicle on cash mostly.
Processing	<ul style="list-style-type: none"> Processors in procurement run a 4-6 month cycle with producers whereas; the end buyers have an arrangement on invoice to invoice basis.
Markets	<ul style="list-style-type: none"> Grower-Agent and Grower-Contract cash cycle on borrowed inputs continue for 4-6 months. Agents mostly keep large portion of cash in this cycle from growers and extend cash to grower on need basis. Exports and finished goods sales purchase are on cash basis and there is little or no credit involved.

Cost of Production

Costs of primary production include growing tobacco crop and curing in barns prior to its sales to processors.

Cost Structure of SME Tobacco Producer**Table 9: Average Cost of Production Per Barn (Also Per Hectare)**

Average Cost of Production Per Hectare 2009-10			
S.No	Operations/ Inputs		% of Total
1	Nursery and related Operations	5911	2.14
2	Preparation of land	9599	3.48
3	Ridge making	2761	1.00
4	Use of Farm Yard Manure	9842	3.57
5	Sowing Operations	4177	1.51
6	Plant Protection	5610	2.03
7	Chemical fertilizers including application	18786	6.81
8	Inter-culturing	9048	3.28
9	Topping/ Suckering and Suckercide	5397	1.96
10	Irrigation	4571	1.66
11	Expenses of meals & Tea @ 85	6940	2.51
12	Markup @ 12% for 8 months	6611	2.40
13	Barn Repairing	1626	0.59
14	cost of curing per barn	14540	5.27
15	Total Cost of curing	117094	42.43
16	Expenses of meals	10906	3.95
17	Barn charges on rent for full season	10133	3.67
18	Management Charges for three months	1819	0.66
19	Electricity charges for three months	1925	0.70
20	Land lease for eight months	43217	15.66
21	Total Cost of Production	275976	100.00

22	Value of by-products	5729	-
23	Net Cost of production	270300	-
24	Yield per hectare (Kgs)	2599	-
25	Cost of production (PKR/ Kg)	80	-

(PTB Bulletin, 2010 and various stakeholders)

- 90% of all the tobacco primary producers and processors are SME and have 1-2 barns and or 2 hectares of production operations.
- 60% of the primary producers are growers using rented land and barns hence have no agricultural land to be used as collateral for credit from the formal lenders—banks. They have to resort to informal borrowing from input suppliers and other contractor and agents in the market.
- Borrowing from informal lenders increases cost of production due to higher lending rates.
- Tobacco being an input intensive crop thus requires borrowing and major costs are curing, fertilizers, land lease, CPCs and use of Suckericide. All such costs are around 53% of the total cost of production.
- Only fuel wood used in barn for curing has a mark up rate of 50% for only two months.
- Fertilizers, CPCs and Suckericide have a somewhat similar rate of credit.
- Net margins for primary producers are thus squeezed due to higher mark up of informal borrowing.

Gross Sales Revenue

Revenues streams generated from the crucial nodes in the value chain from primary production as well as processed products both in local and exports show an increasing trend. Overall revenues in 2009-10 are around over 100 billion PKR. Table 10: Total Revenues from Tobacco Industry

Total Revenues from Domestic and Exports Tobacco & its Products					
Year	Production in '000 Tons	Est. Gross Revenues from Sales of Primary Produce in Mil. PKR	Cigarette sales value in Million PKR	Est. Export revenues in Mil.	Est. Total Revenues in Mil. PKR
2007-08	107.80	8234	66770	454	75458
2008-09	104.90	10706	84227	978	95911
2009-10	119.30	13436	86398	1242	101075

(PTB Bulletin, 2010)

Net Margins

Tobacco is a heavily taxed market however most of it is on the processed products for consumers to use. Primary producers generate and have the potential to enhance profits if the production and curing is adequately financed. Although, the processors only reveal their margins as around 17% but it seems it is more in terms of volumes which despite the regulatory curbs show steady sales along with exports of both processed and unprocessed are on the rise.

Value chain has the potential to generate more as the processing capacity is only used around 60%. Besides, the potential in primary production we could create a hub of supplies across the region.

Margins of 3.3 billion PKR showing an increase over the previous period is reminiscent of higher volumes of domestic sales and increasing exports. Ensuing demand could only be supported through a robust primary production and a rational tax regime for the industry.

Primary producers are giving this margin the informal sector lender whom is getting full advantage and growth in this part of the value chain.

Table 11: Margins of Primary Production in the Value Chain (Deduced from PTB Bulletin, 2010)

Margins in Primary Production (Growing and Curing)			
	2007-08	2008-09	2009-10
Yield per hectare (Kgs)	2594	2627	2599
Cost of production (Rs/ Kg)	64	73	86
Minimum fixed price (Rs/ Kg)	67	78	94
Weighted Avg. Price (Rs/Kg)	76	102	113
Gross Margins	3	5	27
Quality Cut by Purchaser %	0.38	0.63	3.33
Net Margin per Kg	3	4	23
Net Margin %	4	6	27
Net income per Barn (Per Hectare)	6809	11493	60537
Total area under production '000 hectares	51	50	56
Total estimated Net Income from Primary Prod in Mil. PKR	350	571	3378

A rational taxation system means injecting the adequate amount of liquidity in order to reap dividends from the growth and higher margins.

Table 12: Reported realized taxes paid through Tobacco Industry (PTB Bulletin, 2010)

Revenue generation by state through Direct Taxation					
Year	Production in '000 Tons	Tobacco CESS realization by PTB in Million PKR	FED realized from companies in Million PKR	GST paid on sales of processed goods in Million PKR	Total Taxes earned by the state
2007-08	107.80	58	34378	36089	70524
2008-09	104.90	65	43813	40211	84089
2009-10	119.30	58	51719	34751	86528

Financial Sources

As already discussed in the case study brief of the SME that 90% of the producers are managing 1-2 barns (1-2 hectares) and 60% of these SMEs are producing on rented land and barns have no collateral to borrow from banks therefore limited formal credit opportunities exists.

Processing companies however are extending inputs (Fertilizers, CPCs and Suckericide) through input suppliers and advances are adjusted during procurement season. Local agents, volume buyers, small processors have no specific credit facilities for these actors and any credit need is fulfilled through informal sources or personal finances.

Debt Financing

Input supply dealers, such as fertilizers, CPCs, fuel wood suppliers, have no standard system/ terms. There are no specific collaterals are involved however there is a huge difference in buying on cash versus credit. For example, a bag of urea having current price tag of PKR 1800 is charged for PKR 2400 on a 6 month credit cycle. Similarly, PKR 400 for 40 Kg of fuel wood is charged on credit of 2 months for PKR 600 per 40 Kg.

Access to Finance

Financing of working capital

There are no specific products for financing crop inputs through banks. The finances through informal lenders are however available at higher terms.

- a) Input supply financing

- b) Processing companies, input suppliers, fuel wood dealers, and some credit from banks is available to only those customers having ample collaterals available (pass book).
- c) Existing financing products available/used

There are specific financing products available from formal lenders (banks) to cater to the specific needs of tobacco industry.

Banks do have specific products like car financing and other consumer goods financing but lack vision for developing appropriate products for specific industries such as tobacco. This lack of vision and appropriate products results in thriving of informal lenders covering a big chunk of this untapped market.

There are various products available in the market through banks but it seems there is no effective communication strategy to approach customers for such products. Ironically, such products are only available on the websites of the banks whereas the primary producers in the rural areas have no access to internet but to mass media which is Television and Radio. There are hardly any projections of such products on the mass media. Here are a few examples:

http://www.askaribank.com.pk/agriculture_banking.php#

<http://www.nbp.com.pk/KisanDost/KDBenefits.aspx>

http://www.mcb.com.pk/agriculture/default_2.asp

http://www.mcb.com.pk/agriculture/grower_finance.asp

<http://www.bankalfalah.com/zarie/index.asp>

Terms of finance

Most of these products have no effective communication and market strategy. Just like any other business, banks extend limits in RF and TF to various actors against collaterals mostly property.

Most of these products have no relevance whatsoever with the primary production as well as processing. There are also no specific products available for export finance which is yet another thriving part of the value chain and is in dire need of tailor made products.

Constraints in Using Existing Financing Products

The biggest constraint is the availability of appropriate collaterals with producers growing and curing on rented facilities.

Specific products for fuel wood, input supplies could greatly reduce the burden on primary producers whom are the main drivers within the value chain and large processors have heavily invested in their training and development in order to make raw material supplies sustainable for their processing business.

Arthi System and its Role in the Tobacco Value Chain

Almost 90% of primary production in the value chain is contractual where there is a limited role of Arthi system. Here, there are small tobacco markets where storage, weighing and sale purchase of tobacco is conducted and routed to small processors as well as exporters.

Financing of Fixed Capital

Here also there are no specific products available for construction of warehouses, weighing and docking stations, installation of machinery and up gradation of existing machinery, imports of blending and plants.

ZBTL has limited its financing to only tractors, whereas, other banks provide generalized products against collateral.

Surprisingly, there is no facility available for hypothecation of stocks which mostly stays in the warehouses for a period of 4-6 months prior to its use for processing and or exports.

Opportunities for Value Chain Development Finance

In an over 100 billion PKR revenue industry there are critical links in the value chain where incremental finance could add a great deal of value. Such as:

Crop input finance for Primary Producers for Fertilizers, CPCs, Suckericide and fuel wood for curing. Capital for volume buyers, local buyers for small to medium processors and exporters. Warehouses, weighing and docking station construction and up gradation and export finance are yet another area requiring products meeting the specific needs of the clients.

Value chain actors who can effectively support the tobacco local value chain if provided with access to financial services

Primary producers and volume buyers are the main actors if appropriately supported through financial services could support the value chain effectively as currently the growth in local expansion and overseas markets are putting enormous pressure on the primary producers.

External factors that could increase the risk of lending to any particular value chain or value chain participants

Apart from natural disasters and especially hailstorm there are no other significant risks of lending in the value chain.

Enabling Environment

There are various formal and informal actors/ institutions which play supportive role in the value chain. Provincial and National Research and Development Institutions and line Departments

All the Provinces have well established R & D institution. After passage of 18th amendment to the constitution which resulted in devolution of power to the Provinces, most of the support functions are vested in the Provincial R & D and their line departments.

The most significant of all is the Pakistan Tobacco Board (PTB). Pakistan Tobacco Board was established under an Ordinance (Ordinance No.1 of 1968, dated 8th February, 1968) for the promotion of the cultivation, manufacture and export of tobacco and tobacco Products.

Functions of PTB under Section-6, PTB Ordinance 1968

- To regulate, control and promote the export of tobacco and tobacco products, and to fix grading standards;
- To undertake and assist research connected with tobacco industry, impart training in tobacco testing and generally to take measures in the interest of tobacco industry;
- To render assistance for the development of new tobacco growing areas and establishment of model farms, to organize and assist special research connected with tobacco cultivation and generally to render assistance for improving tobacco production;
- To collect statistics on any matter relating to tobacco and tobacco industry; and
- To perform such other functions as the Federal Government may, from time to time, direct.

COMPOSITION OF BOARD AS PER PTB ORDINANCE 1968(I) OF 1968

- Members representing the Federal Government (Federal Government Officers);
- Members representing the four Provinces (Provincial Governments Officers);
- Members representing the Cigarette Manufacturers Association of Pakistan and the Federation of Pakistan Chambers of Commerce and Industry;
- Members representing the tobacco growers - three each from the Province of NWFP now KPK and the Province of Punjab; and
- Such other persons as may be appointed by the Federal Government.
- The previous Board consisted of 27 members (including the Chairman) who were appointed by the Federal Government in the following manner:-
- Members representing the Federal Government (Federal Government Officers);
- Members representing the four Provinces (Provincial Governments Officers);
- Members representing the Cigarette Manufacturers Association of Pakistan and the Federation of Pakistan Chambers of Commerce and Industry;
- Members representing the tobacco growers - three each from the Province of NWFP now KPK and the Province of Punjab; and
- Such other persons as may be appointed by the Federal Government. The members hold office for two years and are eligible for re-election and re-nomination
- (without any limit).
- Tobacco Development Committee.
- Finance Committee.
- Research Co-ordination Committee.
- Price and Grade Revision Committee.
- Export Promotion Committee.
- Departmental Promotion/Selection Committee.

EXTENSION SERVICE

- Extension Service located at pivotal points for quick transference of new technology to growers.
- Tobacco Research Station, Mardan serves as the Principal Centre to undertake major laboratory and field research in Tobacco Breeding, Agronomy, Chemistry, Entomology, Plant Pathology and Physiology.
- Tobacco Research Sub-Stations at Mansehra, Kunjah(Gujrat) and Okara serve as regional testing stations for developing the tobacco production technology according to the prevailing soil and climatic conditions

For production, comprehensive guidelines are available to primary producers in the form of booklets and pamphlets for production and best practices and such information is available at very nominal cost. There are soil and water testing laboratories at district levels and for a small fee these laboratories provide testing, analysis and guidance services.

Each Provincial Agriculture Department also have Market committees (MCs) to regulate and administrate marketing services in collaboration with District Administration. These MCs also establish the daily retail prices which the retailer has to display at their outlets. The MCs levies 1% as market fee on trading of the produce.

Federal Seed Certification and Registration Department (FSCRD) under the Ministry of Food Security regulate the local and imported seed varieties. For imports there is an approved list of varieties and any new variety has to be tested prior to its approval and inclusion in the list. The list is revised on annual basis for inclusion and exclusion of varieties. However, there is no variety protection law in place to protect the intellectual rights of any particular variety and in case of Potatoes which is propagated vegetatively it's difficult for companies to maintain their seed stock as there are chances of pilferage and loss of business.

Fertilizer Act of the Federal Government is comprehensive in its coverage to regulate manufacturing, movement, import, export, quality and testing procedures. Provincial Governments have also promulgated the Act at Provincial level. The enforcement is through Agriculture Extension Department.

Private Organizations such as, Engro Fertilizers, Fauji Fertilizers, Fatima Fertilizers, Daud Hercules, not only provide quality products but their technical field personnel provide technical services to enable produces in streamlining their production operations. Similarly, Plant protection companies, such as Syngenta, Bayer Crop Sciences, FMC, Jafer Brothers, Ali Akber Group and 4-B, also provide good quality product through their extensive dealer network as well as technical services through their field based operatives for good production practices.

Semi Government organizations such as Agribusiness Support Fund (ASF) and Pakistan Horticulture Development and Export Company (PHDEC) under their mandate facilitate producers in adopting new technology, assisting in training for certified production (Global GAP) and promotion for Exports.

Services

Service providers are covered to a greater extent in the enabling environment and other chapters, however, various services providers are covered and discussed in the following matrix:

Table 13: Services Providers

Service Providers	Services
Transporters	Input supplies as well as raw material and finish goods movement requires a robust transportation systems. Increase in overall volumes in the value chain has resulted in an increase in transport companies as well as improvement in services.
Input supply companies Providing Technical Services	As part of marketing services, various input supply companies maintain proactive outreach programs servicing the technical needs of the end users of their products, by providing free soil and water testing, conducting field trials, crop seminars and informational crop and product specific literature. The services here are targeted, updated and result oriented and has earned reput amongst all the stakeholders. Processors also provide field trainings to contract growers in production, sorting, grading, post harvest practices to reduce losses and improve quality.
Public R & D and Outreach Organizations	Pakistan Tobacco Board, Public R & D and Outreach Departments also provide similar services but they are not organized and result oriented. They lack commercial touch and producers are yet to have their confidence in their advice and guidance. Their approach is generalized and not market specific.
Semi Government Organizations: ASF, PHDEC & SMEDA	ASF under its new project supports post harvest interventions such as grading, packing export and cold chains by matching grants. Their grants range from USD 5000 to 1.5 million. PHDEC also promotes exports oriented efforts by primary produces and assist them in value addition through data, access to market info, etc. SMEDA has done comprehensive market based studies, feasibilities to assist producers, processors and other stakeholders in bringing more value to their production systems.
Informal Lenders	These Volume buyers, Whole sellers, Beoparis and other investors which though outside the main stream value chain however have significant impact on the cash flow by filling the gaps in liquidity of the actors---mainly growers. They are in the high risk high margin business and charge dearly for their loans for the crop cycle including curing (3-6 months).
Formal Lenders	Financial Institutions SME banks, commercial banks and ZTBL also extends financial support through various products but requires tailor made products for this specific value chain.

Conclusions and Recommendations

Recommendations for financial institutions regarding products most suitable to the value chains

As Tobacco value chain truly fits under the SME sector, it requires products which are specific to meet specific requirements of the various actors critical in the value chain. Also, these SME employ the whole family from crop production to curing, sorting, grading the product prior to its offering in the market.

Crop input finance to SME producers in the form of TF could be viable product for contractual grower which could be easily adjusted towards the end of the procurement in the voucher given by the company to be cashed from the banks regardless of which company it belongs to.

Similarly, SME processors/exporters and their volume buying agents would require TF for a period of 3-6 months depending on their needs. Also, project finance for such export oriented processors for up grading existing systems or installation on new technology for capacity enhancement as well as quality improvement of their products.

Recommendations for effective contract farming (out-grower) financing schemes

Contract farming in the value chain is already in place and almost 90% of growers undertake such contracts. As majority of growers produce and cure on rented land and barns, financial institutions have to develop products to finance crop inputs, barn construction and repairs, warehousing facilities establishment and export against rental land agreement and contract with the buying companies as a requirement to finance to support the value chain.

Contact List of Key Stakeholders

Sr #	Actor	Category/ Profile	Address
1	Haji Dost Muhammad & Mir Wali	Crop input supplier	Swabi Yar Hussain area. 0301-834-4749
2	Mr. Nawab Ali	Volume buyer and supplier to small processors	Swabi Yar Hussain area. 0345-9700680
3	Haji Anwer Sher Khan	Volume buyer and supplier to Khyber Tobacco company and Sarhad Cigarette Industry, Storage, weighing and docking stations.	Swabi Yar Hussain area. 0344-988-3293
4	Haji Niaz Muhammad	Volume buyer from Mansehra and Bunir producing areas	Babar Rasheed & Company, F & V market, I-11, Islamabad, Swabi Yar Hussain area.
5	Mr. Majeed Khan	Volume Buyer. Open market trader.	Swabi Yar Hussain area.
6	Mr. Sheraz Akram Bacha	Medium processor and exporter. Toll manufacturer for Large companies. Warehousing, weighing and docking stations.	Sarhad Tobacco Industry, Mardan .0300-859-7383
7	Mr. Zafarullah Khan	Area Manager, Pakistan Tobacco Company	Nowshera. 0300-811-1082
8	Mr. Zaheer Iqbal	Production Manager, Pakistan Tobacco Company, Jhelum Factory..	Jhelum. 0308-5209755
9	Mr. Shah Mansoor	Leaf Head. Pakistan Tobacco Compnay.	PTC Head Office, Islamabad. 0300-859-9924
10	Mr. Hussain Ahmed	Progressive Contract grower.	Swabi Yar Hussain area. 0345-909-6327
11	Mr. Zar Muhammad	Ex. Field officer PTC. Chakdara.	Chakdara. Malakand. 0333-9486644
12	Mian Javed ur Rehman	Research Officer, Tobacco Section.	Agriculture Research Institute, Tarnab, Peshawar. 0333-9154012
13	Anwar ul Haq	Leaf Officer	PTC, Mariamzai Depot, Yar Hussain, Distt. Swabi. 03465604529
14	Liaqat Khan, Nazim & Community Leader (Focus meeting of 22 stakeholders)	Tobacco growers leader of the area and Union Council Nazim	Mariam Zai Depot Area. Swabi Yar Hussain Area.

Bibliography

- 1 Muhammad Khalid Bashir and Muhammad Azam, “Credit and the Agriculture Sector of Pakistan”. Agriculture: Challenges, opportunities and options under free trade Regime.
- 2 Nasrullah J. Malik Potato in Pakistan. A hand book. 1995. Pakistan Swiss Potato Development Project.
- 3 Paul Wooster. Development of a national potato seed strategy.
- 4 Winfried Manig. The Importance of the Informal Financial Marketfor Rural Development Financing in Developing Countries: The Example of Pakistan.
- 5 Sarfaraz Khan Qureshi and Akhtar H. Shah. A Critical Review of Rural Credit Policy in Pakistan. 1992. The Pakistan Development Review. 31:4 Part II, PP 781-801
- 6 Saima Ayaz etal. Role of Agricultural Credit on Production Efficiency of Farming Sector in Pakistan. 2011. A Data Envelopment Analysis. Pakistan Journal of life and social sciences, 9(1):38-44
- 7 Naushad Khan etal. 2011. Review of past literature on Agriculture Credit in Rural Areas of Pakistan. Sarhad Journal of Agriculture. Vol.27, No.1.
- 8 J.U Ahmed. 2011. Services Rendered by commercial Bank: A customer Oriented Evidence From State Bank of India. Vol.1, No.-2.
- 9 Tobacco Statistical Bulletin 2010. Pakistan Tobacco Board, Ministry of Commerce, Government of Pakistan, Peshawar.