

"TENANCY AND TENANT FARMING IN SIND."

THESIS

SUBMITTED BY

PARSO MANGHARAM IDNANI.

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Written under the guidance

of

Principal D. R. Gadgil.

Director,

Gokhale Institute of Politics
and Economics, Poona 4.

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S Y N O P S I S.

Problem:- "Tenancy and Tenant Farming in Sind."

Problem stated:- There are two types of Tenants in Sind, (a) Maurasi (hereditary) tenants and (b) Tenants-at-will. The former class is practically negligible and enjoys as much security of tenure as owners and particularly now no case of eviction or harrassment can be found after passing the Jagirdari act which makes the Jagirdar entitled only to the amount equal to the land revenue prevalent in that locality.

The other class that is Tenants-at-will can be and are evicted at any time. The only provision for them is section 84 of Land Revenue Code 1879, where by they are expected to be given a notice of three months in writing by landlord before the end of one cultivating season - 31st March. But this is seldom practised. However there is a local custom where if a tenant-at-will or Hari as he is locally called is evicted in the middle of a cultivating season when his crop is standing, for any alleged misbehaviour, he gets the award by "Amins" (Arbitrators) which is much less than the actual. He never gets any thing for the preparation of the land if evicted.

Mostly Hari does not get same land for cultivation when the rotation comes so that he may not claim any occupancy rights latter.

Excepting very rare cases there are no written agreements, and in case any dispute goes to a court the award is invariably in favour of Zamindar.

Problem Study:- 70% of the land in Barrage zone and 50% in the non-Barrage zone is held by 15 and 5% of Khatedars respectively. It is being cultivated by Haris. - Tenants-at-will.

Rent is paid invariably in kind called Batai system of rent which depends upon the mode of irrigation. Over and above the batai Zamindar gets abwabs (Perquisites) which vary from place to place and with individual Zamindars. Harvesting charges are borne half to half and marketing charges proportionately but generally the crop is disposed through Zamindar to the local Bania or Dalal on the spot.

CHAPTER I.

INTRODUCTION.

Sind is situated in the extreme N.W. of Bombay Presidency. Its area is about 48.13 thousands sq: miles and has 4.5 millions of population. The density is 94. Maximum height is 7000' above sea level. Rainfall is scanty and irregular, average being 6" per year. There are three agricultural seasons - Kharif, Rabi and Adhao (Half way.)

The middle part has indo-gangetic type of soil, eastern part is sandy while the western is hilly.

Irrigation sources are - Government canals, private canals, wells and misl:. About 90% of the area depends upon Government canals. 90% of wells are in Sukker and Karachi districts, only.

Main Kharif crops are Cotton, Rice and Millets while main Rabi crops are Wheat and Pulses.

(iv)

Results:- Wide spread expansion of cotton cultivation and irrigated wheat. Area under Jowar and Bajri have declined considerably, while the rice cultivation has practically remained the same.

CHAPTER III.

METHOD OF STUDY.

Difficulties of Field Work:-

- (a) Absentee Zamindars (b) No proper records.
- (c) Illiterate Haris. (d) Kind payment of Labour.
- (e) No previous work done on the subject.

Procedure of Work:-

Representative tracts and availability of facts.

Questionnaires:-

- (A) (i) Irrigation System. (ii) Hari's share.
(iii) Abwabs. (iv) Grass share. (v) Seed supplied
by. (vi) Artizans paid by. (vii) Land Revenue.
(viii) Harvesting and Marketing charges.
- (B) For Economic position.
(i) Family. (ii) Area Cultivated. (iii) Share.
(iv) Abwabs. (v) Net Share. (vi) Rate prevalent.
(vii) Quantity disposed. (viii) Farm Expenditure.
(ix) Farm Income. (x) Subsidiary income source.
- (C) (i) Time lived with present Zamindar.
(ii) Why previous Zamindar was left.
(iii) Complaints against present Zamindars.
- (D) Live stock and Implements.

(v)

CHAPTER IV.

TENURES.

(A) All the cultivation operations are conducted and supervised by Zamindar or his agent. Zamindar is to supply Land, Water, Pay Land Revenue and local cesses. While all the labour - man as well as bullock is supplied or arranged by Hari. In case Hari comes new to the Zamindar through Kamdar or some other Hari he gets Takavi which generally does not exceed Rs. 100/-. Invariably Hari has to use the seed supplied by Zamindar but the cost is borne by Hari. For all that he gets remuneration in kind which again depends upon the mode of irrigation. For flow and flood he gets 1/2 of the produce and for lift cultivation he gets 2/3rd. More than 1/2 the grass is taken by Hari, and other is sold to him. Over and above the share of produce Zamindar gets abwabs which vary from place to place and even with individual Zamindars. It varies from 6% to about 17% of the Net Farm Income of Hari.

(B) Expenses of cultivation fall under the following kinds:-

(i) Picking or reaping - Rs. 1/4/- per mound in case of Cotton and 1/12th of Harvested produce in case of grain, borne half to half by Zamindar and Hari.

(ii) Weeding - Hari has to pay for it or do it himself.

(iii) Manure - Not used in case used then half to half.

(iv) Karia clearance - Hari's job.

(vi)

(v) Remuneration of Kamdar, Karawo, Wahi etc., and general expenses from the common heap or from Hari's share depending upon usage in the locality. Amount and quantity varies with individual Zamindar.

CHAPTER V.

ECONOMIC POSITION OF FAMILIES
UNDER SURVEY. (1943-44).

Income per acre in Nawabshah District.(Central Sind) where Cotton is the main Kharif crop is about Rs. 50/- per acre. While in upper Sind (Dadu) there is Rs. 36 per acre. In upper Sind (Larkana) (Dadu) when Rice is the main kharif crop the income is about Rs.22/- per acre. In all the cases Rabi crop being wheat. Larkana wheat and Gram.

In non-Barrage area income varies from Rs.10/- to Rs. 15/- unless a subsidiary crop is raised which is very rare. Here Haris keep sufficient Milk Cattle and from that they get the other income. In Barrage area abwabs are from 6 to 7% of the Farm income while in Non-Barrage area it is from 12 to 17% of Farm income. The increased percentage is due to less farm income.

CHAPTER VI.

TENANCY IN SIND.

After the receipt of 'Bombay Tenancy Act' in April 1940 a draft Bill was drawn up in 1942 following the lines of Bombay Act, and discussions continued by the Committee appointed by the Government upto June 1943. Majority of the Committee Members were in favour of Bill.

(vii)

Zamindars are against giving any occupancy rights

- Views - Derth of Labour - large holdings - class welfare
- Rotation of lands.

Nari representative in favour - views. Forced and free labour (Chher) at present - Eviction - Harrassment - No scope for permanent improvement.

Reforms:- Procedure suggested.

CHAPTER VII.

CROP PLANNING.

Adjustment of Crops.

Even distribution of Labour. Men and Bullock.

CHAPTER VIII.

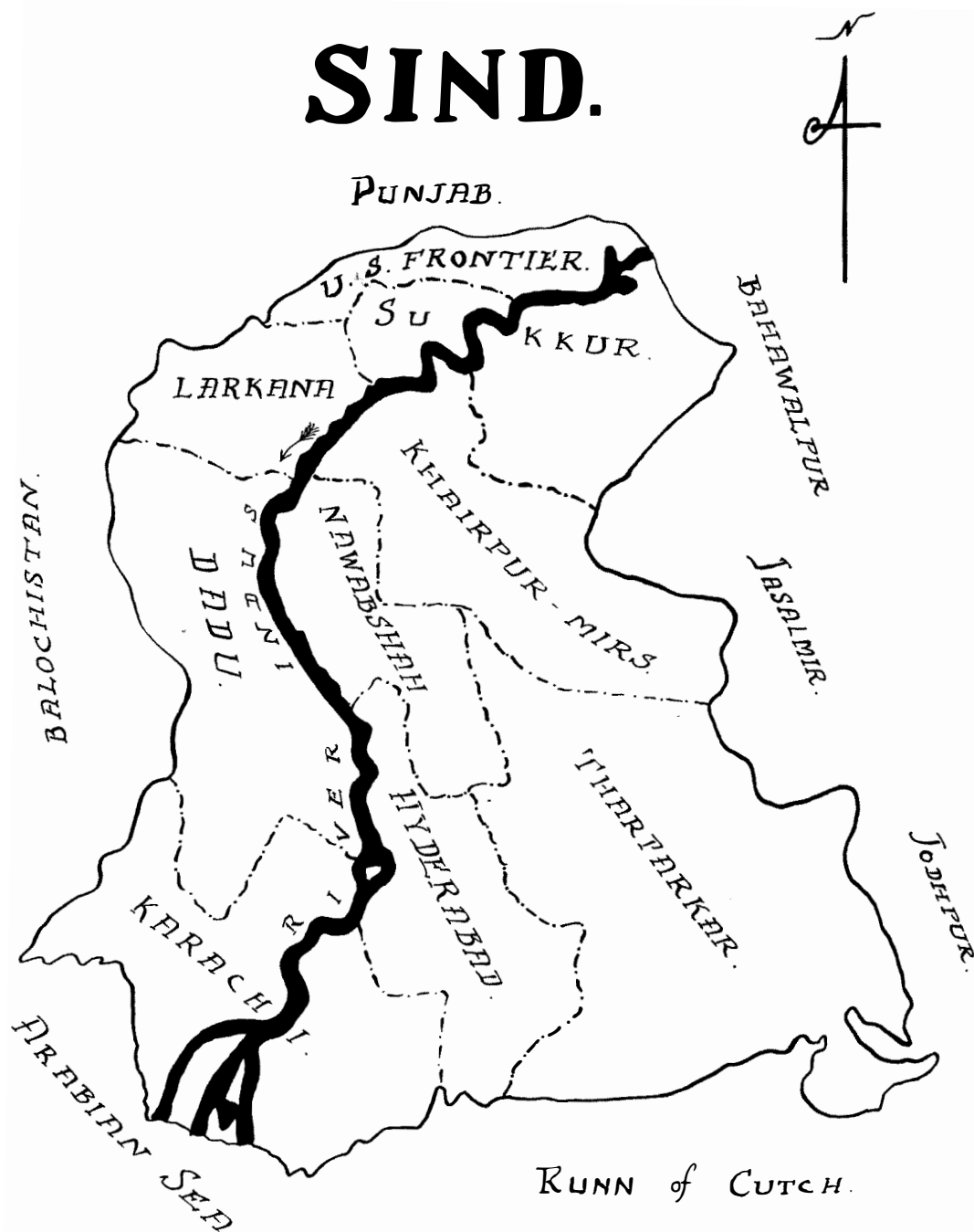
CONCLUSIONS.

Organization of Factors of production.

Necessity of Legislation and propaganda.

VII

SIND.



C H A P T E R . - I .

The Province of Sind, lying between 23° and 28° north latitude is in the extreme N.W. Position of Bombay Presidency and consists of lower valley and the delta of river Indus. Its area is about 48,138 sq. miles, having the population of 4.5 millions distributed as under in 8 districts.

Table.

Urban and Rural Population in different districts.
in Sind.* (*1941 Census.)

Districts	Area in Sq.miles.	Urban Popula- tion.	Rural Population.	Total Population	Density.
Dadu.	7,370	28,264	3,61,116	3,89,380	53
Hyderabad.	4,476	1,69,301	5,89,477	7,58,748	170
Karachi.	2,357	3,94,917	3,18,983	7,13,900	85
Larkana.	2,857	49,691	4,61,517	5,11,208	179
Nawab Shah.	3,908	46,510	5,37,668	5,84,178	149
Sukkar.	5,550	1,57,566	5,34,990	6,92,556	125
Tharparkar.	13,649	23,866	5,57,138	5,81,004	43
Upper Sind Frontier.	1,969	21,588	2,82,416	3,04,034	154

From the table above it can be seen that the ratio of urban to rural population in the year 1941 was 1:4, and average density was 94. However the conditions are not same now, as many people from the villages now have migrated to cities and town owing to insecurity and ~~un~~-employment in the towns on account of war.

The area in the Province is distributed as under.

Table showing distribution of area in various districts in Sind (1940-41)

District	Gross area cropped	Area cropped more than once	Net area cropped	Cultivated Fallows	Total cultivated area	Cultivable Waste	Forests	Not availa- ble for cultivation
	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres
Karachi	4,35,917	41,137	3,94,780	2,77,964	6,72,744	34,66,416	1,56,223	11,55,307
Dadu	4,92,746	82,675	4,10,071	6,23,668	10,33,739	7,63,352	46,194	22,87,167
Larkhana	7,37,413	2,06,101	5,31,312	2,64,378	7,95,690	3,14,207	42,268	4,38,298
Upper Sind Frontier	6,59,204	1,50,346	5,08,858	3,01,023	8,09,881	2,15,105	23,460	3,05,515
Hyderabad	8,52,667	13,296	8,34,871	7,47,986	15,82,356	7,63,853	75,705	4,18,953
Thanparkar	14,83,971	29,938	14,54,033	13,73,133	28,27,166	14,48,002	11,398	44,45,306
Nawab Shah	7,76,476	26,604	7,49,872	6,82,508	14,32,380	6,96,093	95,865	2,96,220
Sukkur	6,24,250	1,37,539	4,86,711	6,41,252	11,27,963	4,03,466	2,74,342	18,10,318
Total	6,0,62,644	6,92,636	53,70,008	49,11,911	1,02,81,919	80,30,494	7,25,455	1,11,48,084
Percent- age of Grand Total	20.08 %	2.29 %	17.79 %	16.26 %	34.05 %	26.60 %	2.39 %	36.93 %

	Cultivated area.		Cultivable waste.		Forest.
Total area. -	1,02,81,919	--	80,30,494	--	7,25,455
Not available for cultivation.					
--	1,11,48,084	--	3,01,85,952	Acres.	

The table makes clear that only about 37% of the total land is not available for cultivation. The cultivable waste is too much - 26.60 %. The area cultivated or under Plough is 34.05%. Out of this 34.05, only 17.79% is under crop each year, while the remaining 16.26% is current fallow.

Boundaries:- Looking to the map it can be seen that it is bounded on the north by the Punjab, on the east by the States of Jodhpur, Jasalmir and Bahawalpur, on the south by Runn of Cutch and Arabian sea and on the west by Balochistan.

Mountains:- The only elevation deserving the name of mountain occurs in the Khirthar range which separates Sind from Balochistan, having the maximum height of about 7000' above sea level. The most of the remaining area is even under 100' above sea level and there are no other mountains worth mentioning.

Sources of irrigation:- Irrigation sources can easily be divided into 4 clauses. (a) Government Canals. (b) Private Canals. (c) Wells and (d) other sources i.e. Rain, lakes, flooding of river Indus, Hub river etc. Table below will show area irrigated by different sources in various districts.

Table showing area in ^{acres} Areas irrigated by different sources.
in various districts in 1940-41.

District.	Government canals.	Private canals.	Wells.	Other sources.	Total.
A	2,33,610		19,308	32,854	2,85,772
Karachi.		Nil.			
B	44,766		61.45%	1,05,177	1,49,934
A	3,24,900		577	19,036	3,44,493
Dadu.		"			
B	86,905		-	61,348	1,48,253
A	6,43,706			93,707	7,37,413
Larkana.		"	-		
B	-			-	-
A	3,54,537		1,266	6,544	3,62,347
Upper Sind Frontier.		"			
B	2,67,395		-	29,462	2,96,857
A	8,36,033		56	136	8,36,225
Hyderabad.		"			
B	17,094		-	-	17,094
A	9,15,522		318	-	9,15,840
Tharparkar.		"			
B	10,122		-	-	10,122
A	7,53,487		68	-	7,53,545
Nawabshah.		"			
B	-		-	22,929	22,929
A	3,61,048	3,771	9,414	11,856	3,86,089
Sukkur.					
B	1,48,497	5,950	431	83,283	2,38,161

A - Area irrigated before and after sowing.

B - Area irrigated only after sowing.

The table above shows that Private canals are only in Sukkar district; and 61.5% of the area irrigated by wells in Karachi district and 31.33% in Sukkar district. The most of the area irrigated by other sources is also in Karachi and Sukkur districts only.

Climate:- The climate of Sind is most variable in nature. The average summer temperature is 95° F, but 114° F, is very common and 120° F, is not rare. The maximum temperature recorded uptill now is 127° F. In summer the mid-night temperature of many days continuously is more than 100° F, and in winter it is 60° F, at day time but 40° to 50° F, is also there. The mid-night temperature in winter many times fall below freezing point. Climate near sea is however equiable.

Rainfall:- The rainfall is not only scanty but irregular too. The average rainfall is about 6" per year and the rainy days never increase more than 10.

Rainfall from (1st June 1940 - 31st May 1941) in various
D I S T R I C T S.

District.	Kharif.		Rabi.		Hot weather.		Total.	Total.
	1st June		1st October		1st March			Days.
	1940-30th		1940-28th		1941-31st			
	sept. 1940.		Feb. 1941.		May 1941.			
	Rain	Days	Rain	Days	Rain	Days		
	fall.		fall		fall			
Karachi.	5.39	8	0.56	2	Nil.	Nil.	5.95	10
Dadu.	3.10	4	Nil.	Nil.	Nil.	Nil.	3.10	4
Larkana.	1.16	4	0.06	-	Nil.	Nil.	1.22	4
Upper Sind frontier.	1.96	2	0.08	-	0.11	-	2.15	2
Hyderabad.	4.52	6	Nil.	Nil.	Nil.	Nil.	4.52	6
Tharpar-kar.	4.72	7	Nil.	Nil.	Nil.	Nil.	4.72	7
Nawab-shah.	8.21	4	Nil.	Nil.	Nil.	Nil.	8.21	4
Sukkur.	1.20	3	0.05	Nil.	Nil.	Nil.	1.25	3

The table above shows very clearly that there is practically no rainfall in Rabi and Hot weather seasons and whatever little we get it is only during Kharif season. The above rainfall is registered only at the representative stations of the districts of Sind as there is fluctuation in local parts.

Irregularity can be seen from 1944 rain in Karachi. The total rainfall being 30" against 7.5" normal and out of 30" we got 11" in one day only.

Seasons:- For agricultural purpose there are three seasons in a year in this Province. They are, (a) Kharif. (b) Rabi. (c) ^{Ad}h^{ao} - beginning before the end of Kharif and the commencement of Rabi Seasons - Kharif season is from June to the beginning of October and coincides with the first three months of inundation Period.

The Rabi season ordinarily starts from October to March, but sowing is started from September to early December. In case there is a late rise in water level and limited area cultivated under kharif crops, then fodder Jowar, Bajri, Guwar, ^{Grass} ~~and~~ etc. are cultivated late in kharif season even upto the end of August. The crop raised is locally called 'Adhao Fasal' - Mid season crop - This is very common in non-barrage areas which depend upon the rise in water level in River Indus.

Liabilities to Famines:- After the advent of Sukkur Barrage the possibilities of famines have been minimised to a very great extent. Some times there is a less cultivation in kharif season in non-barrage areas due to late rise in water level in River Indus. This is due to limited sowing period. However due to this Rabi crop becomes comparatively better because of the fact that more un-irrigated crops are sown in soils which retain moisture and no kharif is raised on them.

The water supply is very secured in Barrage areas and if any thing happens it is only due to breaches.

Soils:- The middle part has got the Indo-gangetic type of soils which on the whole are very fertile; new deposits

of silt are deposited every year due to irrigation. They are of the alluvial type and never clayey. They contain sand and clay in a very ^{fine} state of pulverisation. In some parts there are incrustations of salts on the surface and these soils are locally called "kalar soils". They have originated the alluvial soils owing to climatic conditions. The rainfall being less and temperature more, the salts accumulate every year.

The eastern part is sandy and is called 'Registan' - Reg - Sand, Istan - Place -, while the western part is Hilly and is called 'Kohistan' - Koh - Hill, Istan - Place.

By the local people the soil is classified in 4 different classes. (a) Wariasi - (Sandy). It is loose sand only fit for melon cultivation, but if manured and watered well any crop can grow there. This sort of soil is mostly in Tharparkar district. (b) Kacho - It results from inundation. After the water subsides, the land left away with deposits of silt is called 'Kacho land'. (c) Chiki or Paki - This is very cohesive and heavy to work. Rice, Jambho and Gram do well in it. (d) Kalar - Kalar is of two varieties. (i) Mitho Kalar - sweet, (ii) 'That' Kalar - Having more salt - Mitho Kalar is ^{capable} a path of producing inferior quality of rice and Bajri, but 'That' Kalar is unfit for any cultivation.

It is divided in 3 classes by the Soil Classification Department e.g. A, B. and C depending upon the fertility and productivity.

Crops:- The main kharif crops are Rice, Cotton, millets (Jowar, Bajri and Maize), Kharif oilseeds and Pulses.

The main Rabi crop is wheat but rabi oilseeds and pulses form quite a substantial portion.

The table below shows acreage of main crops in various districts.

Table showing acreage of main crops in various districts.
(1940-41)

Dist- ricts.	Rice.	Wheat.	Jowar.	Bajri.	Gram.	Rape & Mustard (Oilseeds.)	Cotton.	Fodder crops.
Kara- chi.	2,40,942	5,992	29,844	14,059	1,451	19,275	35	8,385
Dadu.	1,55,369	94,953	92,521	6,985	14,229	24,739	30,990	832
Larka- na.	3,36,971	89,345	34,622	50	60,861	75,248	2,413	3,189
Upper Sind.	1,65,286	67,777	91,617	32,065	1,50,093	48,680	37,612	5,407
Hydera- bad.	2,88,490	191,223	10,159	62,515	2,342	1,018	237,875	-
Thar- parkar.	84,680	338,446	28,332	5,30,346	571	740	388,473	89,508
Nawab- shah.	868	326,882	98,285	43,895	5,996	11,153	216,010	40,547
Sukkur.	1,47,454	88,739	1,08,889	21,406	1,53,672	18,283	17,477	2,933
Total.	14,20,060	12,03,357	4,94,269	7,11,321	3,89,215	2,04,136	9,30,885	1,50,801

The table shows that the most important crops are Rice, Wheat Cotton, Jowar and Bajri. Rice is cultivated throughout the Province except Nawabshah district. Wheat is also well distributed except Karachi district where only 6000 acres and that also un-irrigated

are under cultivation. More than 70% of Bajri acreage is in Tharparkar district only, while remaining area is distributed throughout the province except Larkana district.

Gram is the major crop (Rabi) of upper Sind Frontier and Sukkur districts - more than 70% in these two districts only.

Oilseeds are cultivated throughout the province but more than 50% of the area is in Larkana and Upper Sind Frontier districts.

Cotton is the major (Kharif) crop of Hyderabad, Tharparkar and Nawabshah districts.

Area under fodder crops is comparatively very low about 2.5% of total crops only.

*Area under Fruit and Vegetable crops:- About 58,000 acres are under Fruit and Vegetable crops in the Province. Classification by trees is not available, but more than half the area of fruit crops which occupy nearly 44,000 acres are under mangoes. Citrus and dates will cover the remaining area mostly. The Vegetable areas are near town markets generally.

*Live Stock:- The figures of live-stock in the Province are as under:-

Cows.....	7,00,000
Buffalo.....	3,75,000
Breeding bulls.	17,000
Buffalo..bulls.	7,500
Work bullock.	6,00,000
Young stock...	4,00,000
Young female bullalo stock.	1,25,000
Sheep.....	6,50,000
Goat.....	13,00,000

From this table it can be seen that there are 6,00,000 bullocks to for 60,62,644 acres. It comes nearly 21.5 acres per pair as an average on the whole.

Land Revenue System:- The system of land is Rayatwari. Under this system a person whose name is registered in the book 'Record of Rights' as holding any land is liable to pay the assessment or the one to whom his land is leased legally. In the case of alienated lands the Government takes only 'Hakabo' - water charge - which is equal to $\frac{1}{2}$ the land revenue in that locality.

Basis and Standard of Assessment:- Before the Barrage the land revenue was based on three factors,

- (a) Nature of soil.
- (b) Mode of irrigation.
- (c) Nearness to the market.

In the beginning the topographical survey was carried out of the villages, and classes were assigned to them. Then according to the mode of irrigation land revenue was fixed e.g.

Table showing the Basis and standard of assessment

Barrage.

Taluka.	When introduced.	Class of village land.	Inundation wheel land.	Perennial wheel land	Saibb.	Moki.
Hala.	1871-72 for 10 years.	I	1- 4- 0	4- 0- 0	3- 0- 0	2- 4- 0
		II	1- 2- 0	3- 8- 0	2- 8- 0	2- 0- 0
		III	1- 0- 0	3- 0- 0	2- 0- 0	1-12- 0
		IV	0-14- 0	2- 8- 0	1- 8- 0	1- 8- 0
		V	0-12- 0	2- 0- 0	1- 0- 0	1- 4- 0
		VI	0-10- 0	1- 8- 0	0- 8- 0	1- 0- 0
Shohdadpur.	1869-70 for 10 years.	I	1- 2- 0	-	3- 0- 0	2- 0- 0
		II	1- 0- 0	-	2- 8- 0	1-12- 0
		III	0-14- 0	-	2- 0- 0	1- 8- 0
		IV	0-12- 0	-	1- 8- 0	1- 4- 0
		V	0-10- 0	-	1- 0- 0	1- 0- 0
Mirpur.	1870-71 for 10 years.	I	1- 0- 0	-	-	1-12- 0
		II	0-14- 0	-	-	1- 8- 0
		III	0-12- 0	-	-	1- 4- 0
		IV	0-10- 0	-	-	1- 0- 0
		V	0- 8- 0	-	-	0-12- 0

In the beginning the settlement was for 10 years only but was continued latter.

At present the assessment is based on the average yield in that locality and the market prices (sliding scale). For a particular locality the average yield will remain the same and only L.R. will vary according to market prices beyond some limit.

To this respect there is an opposition that since the settlement is for some fixed period, the Government cannot enhance the assessment, But to this effect nothing is done. The land revenue is only for the cultivated area but one has to pay the land revenue at least once in 5 years for whole cultivable area.

Jagirs and Jagirdars:- At the time of conquest of British, a vast area of land in the Province was found held by numerous persons as Jagirs - The term Jagir literally means a gift or grant. Technically under the land revenue code, a Jagir land is known as alienated land i.e. transferred so far the rights of Government are concerned, wholly or partially, to the ownership of any person, as opposed to Government lands the revenue from which occurs to the state. This class included not only the chiefs who had to maintain the body of armed retainers to render military services, but also civil affairs, courtiers, menials and holy-men, who received their allowances in land. The British Government however did not consider the retention of all such classes as Jagirdars necessary. All Jagirdars were

absolved from military services and the only conditions attached were of loyalty to the Crown and payment of hakkabo - water charges- and local cess. It was further laid down that the Jagirs would be inalienable and impartible, and regrantable only to the lineal heir male and that they would lapse to Government if the line of first grantee recognised at the conquest failed.

The Jagirdars are classified under the following heads.

(a) First class Jagirdars:- These Jagirs were held from the period anterior to the rule of Talpur dynasty. Some of the holders were descendants of the ancient rulers. All such Jagirs were made permanent in entirety.

(b) Jagirdars of Great Talpur families:- There were held by people who were connected by blood with the reigning families.

(c) Sardars Jagirdars:- This class of Jagirdars included heads of principal tribes or descendants of the Generals and Ambassadors of the Armies. Only the fraction of areas in their possessions were granted to them as Jagirs.

(d) Khariatdars:- Some land was assigned by the former rulers to syeds whose ancestors had the reputation for leaning and to 'Mujawars' - upkeepers- of important tombs, for their maintenance free of revenue.

The distinguished feature of these grants is that unlike the Jagirs of 1st three classes they are not intended mainly for the lineal heir male to preserve the family name, but are for

the benefit of whole family name, each member taking his share according to the custom and law of inheritance.

(e) New Jagirdars:- Some new Jagirdars were created in consideration of their services.

In some areas of the Jagirs the Tenant has got the occupancy rights and before the passing of Jagridari Act in the year 1942, they used to pay Jagirdars some amount in kind which on the whole used to vary from individual to individual. In the remaining area the Zamindari rights are vested in Jagirdars.

C H A P T E R - II.

"Sind and the Lloyd Barrage."

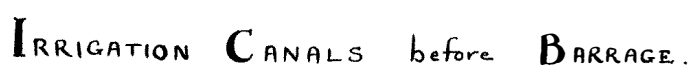
After the British occupation of Sind in the year 1843, Lt. Fife in 1855 reported on the irrigation of Sind and proposed a complete revision of the existing canal system and the construction of new canals to support almost the whole cultivation area. It was next studied by the irrigation commission of 1901-03, but no practical purpose resulted. In 1915 an Executive Engineer was appointed to revise the project and in 1916 his report was submitted.

The approval of the Secretary of State to the proposals of Government of Bombay for financing the work however was given in 1923 and the approval of the project and permission to start construction was given by Bombay Legislative Council in June 1923.

The Barrage is constructed three miles below the gorge at Sukkur with three canals on the right and four on the left bank of river Indus. Every canal has a separate head regulator. The head regulators of all the canals are immediately above the barrage which can completely control the river level and approach channel to the canal clear of silt.

The canals are divided into two systems. The right bank system comprises the North-West, Rice, and Dadu canals. The left bank comprises the Perinial Rohiⁿ canal, a perinial supply canal to feed the eastern-Nara and canals depending thereon,

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IRRIGATION CANALS before BARRAGE.

and two feed canals for irrigating land in Khairpur State.

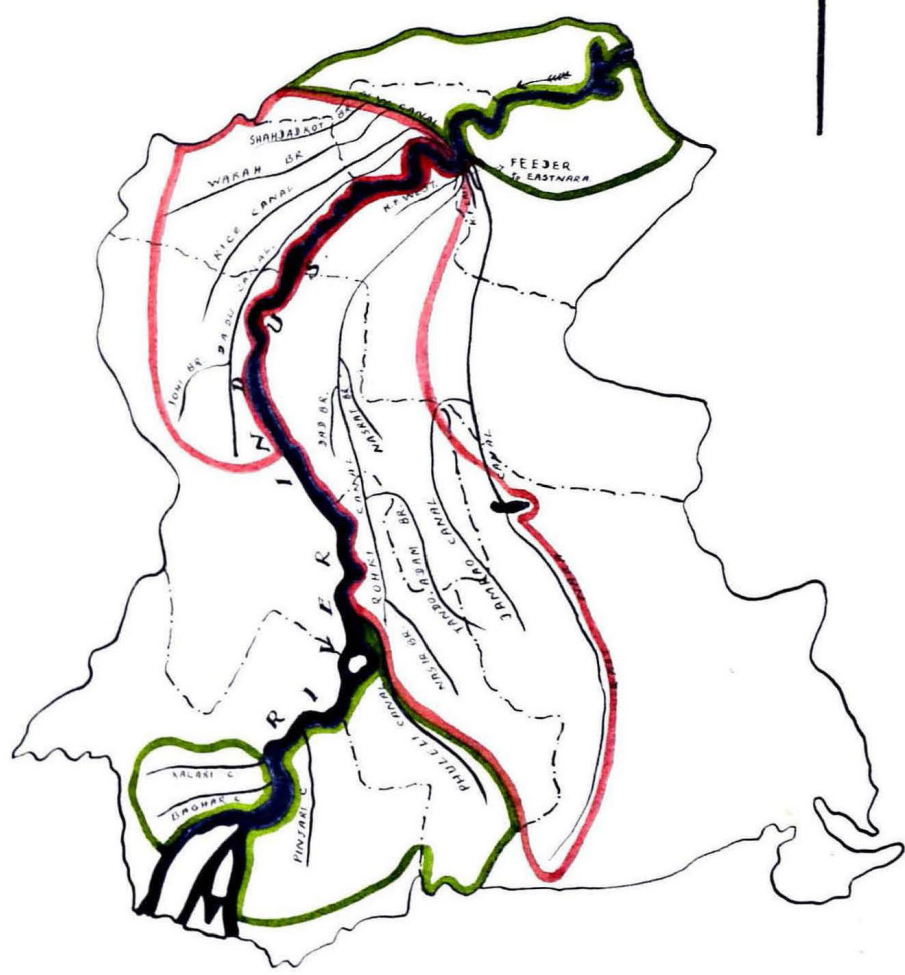
Lloyd Barrage and Canals:- The vast is designed to secure irrigation of areas comprising parts of Shikarpur canals in Sukkur district, the ³Byari canal, the Ghar canal, the western Nara division and the Nasirabad Tehsil on the right bank of river Indus, to Khairpur State, the Nasrat canals, ^HJyderabad canals, Jamrao canals, the eastern Nara canals and the small part of Fule^t canal division on the left bank of Indus. The whole are under command excluding Khairpur State and Nasirabad Tehsil ^{amounts} ~~amounts~~ to 74,06,000 acres. The table below show Barrage canals, discharge in ^{ccs} ~~ccs~~ at the head and length in miles.

Table.

Barrage canals - discharge in ^{ccs} ~~ccs~~ at head and length in miles.

Canal.	Discharge ^{ccs} ccs at head.	Length in miles.
<u>Right Bank:-</u>		
N.W. Canal.	5,152	36
Rice "	10,215	82
Dadu "	2,837	131
<u>Left Bank:-</u>		
East Nara.	13,649	525
Khairpur feeder E.	2,094	13
Rohri Canal.	10,883	208
Khairpur feeder W.	1,936	45
Total.	46,766	1,040

SIND.



IRRIGATION CANALS after BARRAGE.

- AREA IRRIGATED by NON-BARRAGE CANALS.
- " " " " BARRAGE " "

The total length of canals is 6,166 miles including, branches Escapes, distributaries and minors.

Main canals.	1,040	miles.
Branches.	720	"
Escapes.	73	"
Distributaries.	4,333	"
<hr/>		
	6,166	miles.
<hr/>		

Land policy and Revenue:- The essential difference between the resettlement of Sind and colonization of the canal areas of Punjab is that in Sind the new canals are to irrigate an already settled country, where as in the Punjab for the most part the irrigated area was at the outset a desert. The Zamindars of Sind had their established position in the country. The policy which the Government set before itself was that, (a) The legitimate claims of the present Zamindars should be satisfied, (b) Adequate provision must be made for special classes such as peasant cultivators, (c) Land must be sold in open market in order that the part of the capital cost of the project may be met by the receipts from land sales.

Out of 7.4 million acres commanded by the scheme, the greater part was not Government land, but was already in the occupation of private persons. Some 1.5 million acres, after uncultivable land and land for public purposes had been deducted, was available for the purpose of distribution, and this Vacant

land was very much fragmented. This shows that only about 20% of the land was given to peasants. Looking to the table, 'Khatedars in Barrage area' in Chapter on Tenures we can see that the peasant proprietors only have 30% of the total land, assuming that those who have less than 50 acres of land are peasant proprietors. This 30% is the total of new and old holdings, and from this it can be seen clearly that peasants proprietors were not encouraged at all. There are no figures available to show clearly as to how much land now under command of barrage irrigation was in the hands of peasant proprietors. However one can see from the table 'Khatedars in Non-Barrage area', that at present 50% of the land is held by peasant proprietors, assuming the same standard of holding land as in Barrage area. The comparisons of two tables can give an idea as regards Government's policy - encouraging big khatedars only. -

Peasant grants:- The peasants were to remain Tenants-at-will - Government's - for the first five years, during which they were to pay Rs. 3 per annum per allotted acre and were required to live actually on or near their lands and bring it under cultivation. This was framed with a view to ensure cultivation. Thereafter they were required to pay 'Malkano'-money paid to get the rights in land and become proprietor-equivalent to half the amount paid by peasants in Punjab according to the following scale. .

<u>Number of years.</u>	<u>Annual payment / Acre.</u>
15 years.	Rs. 5 / Acre.
20 "	" 4-8-0 / "
25 "	" 4 / "
30 "	" 3-8-0 / "
40 "	" 3 / "

The ordinary land revenue was to be recovered in addition to the payment of 'Malkanos'.

Basis of water supply to the crops in Barrage Zone:- The barrage canals provide a perenial and assured supply of irrigation water through out the year, except during the short periods of closure in the months of March and December. The irrigation water available for the barrage area can be divided into three categories - Kharif dry crops, Rice (kharif) and Rabi crops.

The wiers are designed in such a way to let water for the cultivation of land in non-rice areas as under.

Kharif.	27 %
Rabi.	54 %
Fallow.	19 %

or one cusu is let for a piece of 370 acres to allow 100 acres in kharif season, 200 in Rabi and 70 acres fallow.

The table below will show the method of calculation.

Season and Crop.	Duty.	No. of days, supply of water (approximate.)	Acre inches per day	Total discharge	Total delta season one cusu discharge
Kharif dry crops.	100	190 days. 1st April to 10th October.	21"	3,990	39.9
Rice (kharif.)	50	156 days. 5th May to 7th October.	21"	3,276	65.6
Rabi Crops.	200	145 days. 9th October to 31st March less 30 days closure.	22"	3,190	16.0

1 cusu¹ = 24 acre inches per day, but 3 acre inches in Kharif and 2 in Rabi season have been deducted respectively for absorption, percolation, and evaporation between the outlet and the field. This is when the water courses are kept in good condition.

The quantity of water sanctioned for the area mentioned above is due to the experiments carried on by the Department of Agriculture, and it has been found that to reach full maturity under Sind conditions -

(a) A Kharif crop e.g. cotton requires 27-36 acre inches of water,

(b) Rice crop requires 53-63 acre inches of irrigation of water, the later figure applicable to late varieties only,

(c) A Rabi crop e.g. Wheat requires 14-16 acre inches

of irrigation water.

As against these actual requirements, the irrigation water supply available under the Barrage project is considerably more which can be seen from the table, after allowances has been made for losses on account of evaporation, percolation etc.

Result:- After the advent of Barrage most of the land which was cultivated in kharif season due to the inundation of canals is cultivated in Rabi season.

<u>Pre-barrage cultivation.</u>		<u>Barrage cultivation.</u>
Mharif.	31 %	27 %
Rabi.	7 %	54 %
Fallow.	62 %	190%

The most outstanding feature of Agricultural development in Sind since the opening of Barrage in January 1932 is the rapid and wide spread expansion of cotton cultivation in the Province in kharif season and irrigated wheat crop in Rabi season. The acreage under Rice crop has remained nearly the same, while area under Jowar and Bajri has declined considerably.

The table below will show the acreage under main crops before and after the Barrage.

Table showing area in thousands of Acres.
(i.e. 000 omitted) of main crop-
before and after Barrage.

Crop	Average 1921-22 to 1931- 32 (be- fore Ba- rrage.)	1938-39	1939-40	1940-41
<hr/>				
<u>Food crops.</u>				
<u>Cereals and</u>				
<u>Pulses.</u>				
Jowar.	567	451	432	494
Bajri.	1,065	753	481	712
Rice.	1,165	1,256	1,329	1,420
Wheat.	482	1,178	1,271	1,204
Gram.	206	296	374	389
Others.	306	280	357	375
<hr/>				
Total cereal and pulses.	3,790	4,214	4,244	4,594
<hr/>				
Sugarcane.	3	7	8	9
Other food crops (cardi- nunts and spices, Fruits and vegetables.	50	55	62	64
<hr/>				
Total food crops.	3,843	4,276	4,314	4,667
<hr/>				
<u>Non-food crops.</u>				
Tobacco.	7	5	6	6
Oilseeds.	330	224	290	242
Cotton.	309	856	854	931
Other non- food crops. (Dyes, dyes etc.)	146	244	160	216
<hr/>				
Total nonfood crops.	792	1,329	1,310	1,395
<hr/>				
Total crops.	4,635	5,605	5,624	6,062

The outstanding difference is in area of Cotton and wheat. Both due to Barrage have increased 300% nearly. The increase in area under all crops averages to about 13.5 lakh acres.

C H A P T E R - III.

Method of Study.

Tenanting of agricultural land is a firmly established practice in Sind. Extensive areas of land are in possession of owners who are mostly absentee landlords and their work is being conducted by one of the reliable tenant who is called Kamdar. They go only at the time of Batai and dispose the crop to the local Bania or Dalal.

An ideal agricultural economy can be based on the full and free ownership of the farm lands by those who operate them. There is therefore a need to understand as to what extent the present tenure system is effective and what changes should come about to suit the situation also. It is the purpose of this study to present such data as are available and to portray the factual picture of its present status and the factors that contribute to this situation.

After studying the Geography, irrigation system and settlement reports in Sind some talukas from each district were stated to give the idea of the problem. From each taluka few Zamindars who were in a position to give the reliable information were consulted with the help of Agricultural Department staff and Revenue Officers. The information was varified by asking the tenants and Kamdars. In case Zamindar was not on the spot Kamdar and some Senior Haris were asked the required information.

The practical difficulty in securing the data to work out the problem was that mostly Zamindars (i) do not keep any

regular account books except one which contains what Hari owes them. There is nothing beyond that. The peculiarity of the account system is that only value against the item is mentioned and never the quantity - e.g. Jowar seed Rs. 12/-/- or wheat seed Rs. 100/-/- and never the quantity of Jowar and wheat. (ii) The other difficulty was that Zamindars are mostly absentee and in their absence Kamdars and Haris do not give any information. (iii) No previous work is done on the subject. (iv) Ignorant Haris:- They do not keep any accounts and were reluctant to reply any regular questionnaire. The best way to inquire the facts from them was to begin the topic and allow them saying even out of point and in the end collect whatever useful. (v) For the most part payments are paid in kind equal to or little more of the value for which all the commodities have been purchased or labour charges paid except in case of cotton picking. (vi) The vastness of the area.

Name of Zamindar(Taluka)	
Flow	Irrigation systems
Flood	
Lift	
Miss	
Hari's Share of crops	
Cash (amount)	Apwabs
Kind (Quantity)	
Hari's Share of Grass, Kadbi Palal and Bush	
Hari's	Seed
Zamindar's	
Paid by Hari(Quantity)	
Paid by Zamindar(")	
Hari's	Artizans imple- ments & work ani-
Zamindar's	
L.R. paid by	
Harvesting charges borne by	
Marketing charges borne by(Source	
General agreement.	

To work out the economic position of Tenants 4 districts were selected for the purpose - Larkana, Dadu, Karachi^{ch} and Nawabshah - for the following reasons.

There are two main kharif crops - Rice and Cotton - which are cultivated by tenants for their Zamindars. Other cereals are generally sown by small holders. The main Rabi crop in wheat.

As regards Rice Larkana can represent Dadu, Larkana and Upper Sind Frontier (Barrage) districts, as average yield of these per acre is about 12 maunds of Rice. Karachi can very well represent, Hyderabad Karachi and Sukkur districts (non-Barrage) as average yield per acre in these districts is about 7 maunds of Rice.

The other reason of selecting Larkana and Karachi as the representative tracts was that Larkana has more than 45% of its ~~area~~ area under food crops under Rice while Dadu has about 30 to 35% and Upper Sind Frontier about 25% . Again Karachi has about 55 to 60% of area under food crops, under Rice only while Hyderabad and Sukkur has only about 30-35% and 20-25% respectively.

Table showing average yield in Mds./ A of Rice in various Districts. (1937-38 to 1940-41)

Districts.	Yield in maunds /A (average.)
Karachi)	6.27
Hyderabad)	7.67
Sukkur)	7.29
Larkana.)	12.21
Dadu.)	12.46
Upper Sind Frontier).	12.88

(Larkana and Karachi) Rice areas.
(
(Nawabshah and Dadu.) Catton areas.

Table showing % of area of food crops under Rice
and Wheat in 1939-40, 1940-41.

District.	Crop.	% of area un- der food crops. 1939-40	% of area under food- crops 1940-41	Crop.	% of area under 1939-40.	% of area under 1940-41.
Karachi.	Rice.	64	56	Wheat.	2	1
Dadu.		34	31		21	20
Larkana.		45	47		14	13
U.S. Frontier.		23	25		14	10
Hyderabad.		33	34		22	22
Tharparkar.		7	5		27	26
Nawabshah.		-	1		42	42
Sukkur.		20	24		21	14

* Crop and Season Reports

As regards cotton areas Nawabshah district can represent, Hyderabad, Tharparkar and Nawabshah districts - Barrage irrigation. The % area of Non-food crops under cotton in each district being.

Hyderabad.	25 to 28 %)
Tharparkar.	25 to 30 %	) of Non-food
Nawabshah.	25 to 30 %	) crops.

Here cotton is repeated with wheat in Rabi.

Hyderabad.	about 22%)
Tharparkar.	" 25%	) of total food
Nawabshah.	" 42%	) crops.

It is due to the above fact that Nawabshah was selected for the purpose, in order not to have diversity of date.

District.	Crop.	% of Non-food crops 1939-40	% of Non-food crops. 1940-41.	Crop.	% of food crops. 1939-40	% of food crops. 40-41
Hyderabad.	Cotton.	27	28	Wheat.	22	28
Tharparkar.	"	31	26	"	27	26
Nawabshah.	"	26	29	"	42	42

Dadu was selected to give the idea of N.Sind areas which do not grow Rice. Here the area under cotton crop is 5 to 6% of Non-food crops, and is rotated with wheat. Rice is also rotated with wheat and area under wheat is 20 to 21 % of food crops.

As regards the individual Tenants, it all depended upon the availability of facts with the Zamindars and average sincere Hari.

-:Questionnaire Form:-

Name of Hari	
Adult Male member	Family
Adult Female member	
Children	
Kharif area and crop	Area cultivated in acres
Rabi area and crop	
Subsidiary area and crop	
Kharif	Yield in Maunds
Rabi	
Subsidiary	
Abwabs cash and kind in each case	
Kharif	Net Receipts
Rabi	
Subsidiary	
Rate at which disposed and calculated	
Quantity of each crop disposed	
Expenditure over seed	Cost of Production
Other expenditure()	
Net Farm income	
Income per cultivated acre	
Income per family	
% of Abwabs to Farm Income	
No. of pairs of bullocks.	
Live stock	
Total area cultivated/ Pair of bullocks/ year	

do
A boy above 14 is considered as an adult as he is fit to work any
agricultural operation.

A girl over 14 generally marries.

For the chapter on Tenancy same Tenants were subjected to inquiries, and Zamindars in general.

Name of Hari.	Years lived with present Zamindar.	Reasons why Previous Za- mindar was left.	Complaints against present Zamindar.
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The Zamindars were questioned if occupancy rights should be given to Haris by legislation. If not why and if yes to what class of Haris.

C H A P T E R - IV.

Land Tenures in Sind.

Outwardly land tenures in Sind are of extremely simple character throughout the province. Classing the land under two heads, "Assessed to the State revenue", and "Alienated". We find the occupation of it by following classes -

- (1) Large proprietors - A small class but holding most of the land.
- (2) Middle class - Holding states of few hundred acres.
- (3) Peasant Proprietors - Form bulk of khatedars but hold comparatively very small areas.

The only agricultural classes are,

- (a) Tenants possessing rights of occupancy. (Maurari).
- (b) Tenants-at-will.

The former class is practically negligible and enjoy as much security of Tenure as peasant proprietors and particularly now no case of eviction and harrassment can be found after passing Jagirdari Act in the year 1942 which makes the Jagirdar entitled only to the cash amount equal to the land revenue prevalent in that locality. This we say because maurari tenants are mostly present in Jagir areas. Their right of occupancy is hereditary and also transferable at the will of the tenant. The right of Zamindar is strictly limited to a quit rent and this he cannot enhance.

In case of latter class though many of them pass their lives on the same estate, yet possess no right of occupancy and are subjected to eviction and are evicted at any time. They have no security of tenure beyond their claim to harvest the crop they have sown. The contracts for the new leases of land are settled in the beginning of kharif and Rabi seasons. They may be and are ejected from their holdings by serving a short verbal notice to them even in the case of standing crop. In this case some 'Amins' (arbitrators) are appointed from the Haris by Zamindar to estimate the value of his share and expenses to be incurred upon a standing crop and then give accordingly after deducting the abwabs - Perquisits - and other dues including fines. The verdict is almost invariably in favour of Zamindar.

Hari - Agricultural Tenant or Peasant labourer:-

Actually speaking he is neither an agri:tenant nor the peasant labourer. He differs from the former in possessing no rights beyond customs and the terms of his contract for the season. He is liable to summery ejection when the term of his contract is over.

He differs from the latter in having a definite piece of land allotted to him, area depending upon his capacity and ability, in which he is solely responsible for all agri: operations, except work requiring co-operation. He is almost invariably paid in grain according to the usage of locality.

A Hari has no claim to the residual value of manure

if applied any eventhough he may have spent for the whole quantity.

He never gets anything for the trees he has grown and the hut he has constructed. He also never gets any remuneration for the cost of preparing the land which he is not able to sow due to ejectment.

Looking at the table below it can be observed that 70% land in the Barrage Zone and 50% in -barrage zone is being cultivated by Haris, those who have less than economic holding which is assumed to be 50 A. in barrage zone and 100 A. in non-barrage zone cultivate themselves with the help of their family.

The peasant proprietors who have less than economic holding are anxious to take some more land in their holding to make it an economic one, while the landlord feels the necessity to let his land as rent. The presence of these two classes is the leason for the existence of Tenants-at-will.

Table.					
Khatedars in Barrage area. *					
Acres.	Khatedars.	%	Total area	%	
			Acres.		
1-16	83,998	85	6,42,215	30	
16-50	27,549		7,32,558		
50-100	12,046	15	7,27,908	70	
100-500	6,480		13,44,901		
Over 500	567		11,91,124		

* Proceedings Sind Assembly March 29,1940.

Khatedars in Non-Barrage Area.

Acres.	Khatedars.	%	Total area	%
			Acres.	
Upto 16.	81,253	)	5,52,654)
16-50	29,913	) 95	8,85,189	) 50
50-100	10,399	)	6,05,827)
100-500	5,370	) 5	10,25,345	) 50
Over 500	715	)	10,24,300)

Types of rents:- Batai (share) system is the most prevalent system of rent in the province. Cash rent is there but it is only near the town and then also limited to vegetable and garden areas.

We are not here directly concerned with the relative advantages and disadvantages of the two types of rents, then also a word must be said about it. The cash rent system involves a great deal of risk for the tenant as well as the landlord as the prices cannot be expected to be stable and the yield of a crop is not at all constant due to climatic conditions. It cannot be enhanced or lowered as Hari and Zamindar both respectively will object to it.

Most of the people without studying the facts in the Province advocate for the cash rent system realising little that the batai system is self adjusting. Under this method a landlord receives a fixed share of a crop. It is true that the cash rent

system will create more interest in Haris, but the economic and financial position of them is such that they cannot effect any improvements and landlord will be only keen about his rent. If the cash rent is made compulsory by legislation, Zamindar will lose all the interest in land - whatever little they have at present - and shall be only rent collectors.

Terms of Batai rent:- The terms of Batai are variable due to variation in agricultural conditions. The main factors affecting them are,

(a) Nature of irrigation.

(b) Local customs.

Throughout the Province all crops in all kinds of soils are divided equally if the irrigation system is by flow, or flood and in the ratio of $1/3 : 2/3$ between Zamindar and Hari if the irrigation system is by lift. In both the cases seed being Hari's.

Whenever there is flood irrigation and soil retain the moisture un-irrigated crops are raised (Bosi) and in this case the share also being $1/2$ to $1/2$ other conditions being the same. In case of crops raised on rain water the share is also $1/2$ to $1/2$ but no abwabs - perquisites - are charged.

Table showing Number of Farms in different groups of irrigation.

Irrigation. system.	Farms.		Total of each system.	Paid usual share.	Excep- tions.
Flow irrigation.	66	flow.	66+10+23 = 99	96	3
Flood "	13	Flood.	13+10+ = 23	23	-
Lift "	8	Lift.	8+23+4 = 35	31	4
Flow & Flood "	10	Rain.	4	3	1
Flow & Lift. "	23				
Lift & Rain "	4				
Total.	124		161		8

Out of 124 farms surveyed only in 12* places the seed was provided by Zamindar and that also was in Karachi district only. This was only limited to kharif season where flood irrigation was then. It is only followed with few Haris as who are

* In Karachi district it was found that some Haris get the seed and the bullock power from a third man locally called 'Beji' i.e. one who supplies seed. Actually 'Beji' is responsible for all the items to Zamindar and in turn Hari to Beji. Beji has to give usual share of produce and other due to the Zamindar and for his seed and bullock power he again gets 1/2 of the remaining including the grass. He charges no abwabs to Hari. (This is very rare now.)

not in a position to use their own seed. The reason being that there is a possibility of seed being washed away or late rise in water level. In this case Zamindar's share is $\frac{2}{3}$ and Hari's $\frac{1}{3}$.

Exceptions:- Out of all farms surveyed only 8 exceptions were found.

Table showing Exceptions in the Batai share in the sample.

Irrigati- on sys- tem.	Usual share (Hari's)	Actual share (Hari's)	Differ- ence.	Reasons.
1 Bosi.	$\frac{1}{2}$	$\frac{4}{7}$	$+\frac{1}{14}$	Uncertainty of getting good crop and many times only little more than seed used is produced.
2 a Lift.	$\frac{2}{3}$	$\frac{9}{13}$	$+\frac{1}{39}$	Water taken long way to irrigate. (Rabi.)
b. "	$\frac{2}{3}$	$\frac{3}{4}$	$+\frac{1}{12}$	(Kharif cotton) More watering.
3 a.Lift.	$\frac{2}{3}$	$\frac{9}{14}$	$- \frac{1}{42}$	(Bajri and Jowar) They insist upon cultivation of Bajri and Jowar when cotton can be cultivated.
b. "	"	$\frac{3}{4}$	$+\frac{1}{12}$	(Kharif cotton.)More waterings.
c. "	"	$\frac{7}{12}$	$-\frac{1}{12}$	(Wheat Rabi). Demand for land.
4 Flow.	$\frac{1}{3}$	$\frac{1}{4}$	$-\frac{1}{12}$	No abwabs are charged.
5 Flood.	$\frac{1}{2}$	$\frac{3}{4}$	$+\frac{1}{4}$	Not good land. Seed used by Hari and failure does not affect Zamindar much.
6 Flow.	$\frac{1}{2}$	$\frac{3}{5}$	$+\frac{1}{10}$	Inducement to stay with Zamindar as land net very fertile and more land.
7 Lift.	$\frac{2}{3}$	$\frac{3}{5}$	$-\frac{1}{15}$	Zamindar maintains the potter to supply pots.
8 Lift.	$\frac{2}{3}$	$\frac{4}{7}$	$-\frac{2}{21}$	All grass is taken by Hari only.

Grass:- It also includes Kadba (bajri), Palal, (Rice.) and Buh (Wheat.)

The bye products of grain crops are also shared by Zamindar and Hari. Zamindar is entitled to take grass in the same ratio as the grain produce. But here no abwabs - perquisites - in cash or kind are taken. However the Zamindar does not require it for its own purpose and gives more share to Hari to allow him to maintain his milk as well as work animals as there are no separate pastures or grass lands for the purpose.

This can clearly be seen from the table below.

Table showing number of cases in sample with
Hari's share of grass

$\frac{1}{2}$ Share			$\frac{2}{3}$ Share				$\frac{3}{4}$ Share			Mist: More than $\frac{1}{2}$			Total No.
Flow	Flood	Rain	Flow	Flood	Lift	Rain	Flow	Flood	Lift	Flow	Lift	Rain	
68	12	1	19	8	24	2	9	3	9	3	2	1	
Total -- 81 -----			-----53 -----				----- 21 -----			----- 6 -----			161

In case of green leaves of cotton only in 3 cases Zamindar charged Haris at the rate of 8 As. per acre.

Out of all these cases only some Zamindars allow at times to grow whole fodder crop and that also when the sowing season of other crops passes away.

Abwabs:- (Perquisites) :- This is a thing which affects a Hari most. Over and above the usual share a Zamindar charges some extras in cash as well as in kind. There is no particular provision for this item and all this depends as they say on the usage of locality, but it varies from place to place and even with individual Zamindars.

Abwabs are charged in the following manner.

- (a) Per pair of bullocks.
- (b) " cultivated area.
- (c) " Hari.
- (d) " Maund of produce.
- (e) " Wheel (Persian) 'Nar'
- (f) " Survey number.

They vary according to the crops, the season and the mode of irrigation.

They are charged for the following items (General).

- (i) Zamindari expenses. (ii) Kamdar, (iii) Karawo.
- (iv) Zamindari servants. (v) Horse. (vi) Wahi. (vii) Pir.
- (viii) Dharwai. (ix) Cartage. (x) Dera expenses. (xi) shikari.
- (xii) Artizans. (xiii) Kagtar. (xiv) Lapo. and Rasai. (xv) Expenses over persian wheel beam.

They are of such a varied nature that is not possible to generalize the thing, so it is better to quote some typical instances from each district.

Hyderabad District:- (Abwabs.)

1. 1/13th of produce. general expenses.

1 seer / 3 maunds. Zamindari 'Bob'

20 seers / Hari. Zamindar servants.

2. Flow irrigation:-

1 seer / 3 maunds. general expenses.

1/2 seer / 3 maunds. servants.

Lift irrigation:-

1 maund / wheel general expenses.

1/2 maund / 3 maunds. servants.

Bosi:-

2 seers / 3 maunds. general expenses.

3. Flow:-

1 seer / maund 'Wahi'

1/2 seer / maund 'Kandar.'

16 seers per Hari watchman.

1 seer / 6 maunds. 'Pir.'

Lift:-

1 1/2 seer / maund. general expenses.

16 seers / wheel watchman.

8 seers / wheel 'Kandar.'

1 seer / maund. 'Wahi'.

1 seer / 6 maunds. 'Pir.'

8 seers / Hari. Servants.

4. 1/13th of produce. general expenses.

1 seer / 6 maunds. watchman.

20 seers / Hari. servants.

1 maund of milk per Hari / year for Zamindar.

Whenever cotton is grown general expenses are from
2 to 3 seers / m.

5. 3 seers / maund cotton. general expenses.

Re. 1 / Acre cotton Kamdar etc.

Re. $\frac{1}{2}$ / Acre cotton green leaves.

Karachi District:- (Abwabs.) In this district 1/13th
of the produce is taken by Zamindar for general expenses. There
is no exception to this but quantity taken for other items vary.

1. 1/13th of produce general expenses.

2 seers / maund. Bob.

1 seer / maund. ^{'otak'}
~~stall~~ expenses.

2. 1/13th general expenses.

$\frac{1}{2}$ seer / maund. shikari.

3. 1/13th general expenses.

10 seers / Hari. shikari.

Re. 1 / Acre. Bob.

4. 1/13th general expenses.

1 maund / 24 maund. Wahi.

2 seers / Acre. shikari.

Tharparkar District:- (Abwabs.)

1. 3 seers / maund cotton. general expenses.

which are wholly paid by Zamindar.

2. 3 seers / maund grain general expenses.
3 seers / maund cotton general expenses.
3 seers / maund grain general expenses.
Re. 1 / Acre. Kamdar etc.
3. 2 seers / maund cotton. general expenses.
3 seers / maund grain general expenses.
Re. 1 / Acre. stall. 'otak' ..
Re. 1 / Acre. Kamdar etc.
4. 2 seers / maund. cotton. general expenses.
5 seers / maund grain. general expenses.
Re. 1 / per Acre. Kamdar.

Nawabshah District (abwabs.):- Here in case of cotton 2 seers / maund are taken everywhere for general expenses, but other items vary.

1. 2 seers / maund. cotton general expenses.
Re. 1 / A cotton (Deshi). " "
Re. 1/4 Acres. Kamdar etc.
2 $\frac{1}{2}$ seers / Acre grain Kamdar etc.
8 As./Acre. general expenses.
2. 2 seers / maund cotton general expenses.
1 maund / Hari grain general expenses.
10 seers / Hari grain Kamdar etc.

3. 36 seers / survey number. general expenses.
2 seers / 3 maunds. cartage.
2 seers / 3 maunds. storage.
4 seers / 3 maunds. survey number Horse.
Rs. 2/ survey number. Wheel (Rate.)
Rs. 3/ survey number. Wheel (Kharif.)
Rs.14/ survey number. Dharwai.
4. 2 seers / maund. cotton. general expenses.
Re. 1/ Acre. Deshi cotton. general expenses.
(1 maund / 4 Acres grain general expenses.
Wheat (10 seers / " " Watchman.
(5 seers / " " Kamdar.
5 seers / Hari Jowar and Bajri.

Dadu District (Abwabs.):- Here also 2 seers / maund are charged for general expenses in case of cotton crop and other items vary.

1. 2 seers / maund cotton. general expenses.
Re. 1/Acre. General expenses.
As. 8/ Acre. Kamdar etc.
Same in case of grain.
2. 1 M.-20 S. / survey number Kamdar.
Re. 1 / " " Karawo.
8 As. / 24 maunds. cartage.
2/3 seers / maund Dharwai.
3. 2 seers / maunds. cotton general expenses.
1,1/3 seers / " grain Kamdar.
1 seer / 6 maunds grain Dharwai.
All ~~xxx~~ cartage charges are borne by Hari.

Sukkur District. (Abwabs.): -

1. 5 seers / maunds grain. general expenses.
4 seers / Hari grain. Dharwai.
12 seers / pair of bullocks general expenses. (Artizan.)
2. / maund / 12 maunds general expenses.
2/3 seers / maund. Dharwai.
20 seers / pair of bullocks general expenses. (artizans.)
3. 3 seers / maunds general expenses.
5 seers / Hari Kamdar.
2½ seers / Hari Wahi.
Re. 1 / Acre. ^{'Otak'} ~~stall~~ expenses.

Larkana District:- (Abwabs.)

1. 1 seer / maund. general expenses.
16 seers / Hari. Kamdar. etc.
1 maund / 24 maunds. Bob.
2. 4 seers / maund. general expenses.
16 seers / Hari Kamdar. etc.
Re. 1 / Hari. Wahi.
As. 8 / 24 maunds. cartage.
3. 1/13th of Produce (Rice.) general expenses.
2 seers / maund cotton general expenses.
5 seers / maund Jowar and Bajri general expenses.
Re. 1/Acre. Kamdar etc.

Upper Sind Frontier District:- (Abwabs.)

1. 3 seers / maund. general expenses.
Re. 1/Acre. ^{'otak'} Stall expenses.
5 seers / Hari from each crop. Bob.
cartage charges by Hari only.
2. 3 seers / maund. general expenses.
5 seers / Acre. Kamdar.
2½ seers/ Acre. Wahi.
1 seer / Acre. Karawo.
3. 3 seers / Maund. general expenses.
2 seers / Acre. Kamdar.
2 seers / Acre. Wahi.
1 seer / Acre. Karawo.
Re. 1 / Acre. ^{'otak'} Stall.

From all this it can be seen that the main part does not vary much i.e. general expenses charges, which many times include everything. However there is a considerable difference in other items. On the whole it comes 1/10th to 1/12th of the gross produce of each Hari.

Besides these abwabs a Hari is expencted to supply milk and butter by turn for Zamindar's use and if any officer ~~visit~~ visits the field then fowl, eggs and chhela (goat) is purchased at a very nominal price.

Seed:- Almost every where the seed is advanced by Zamindar irrespective of who is to pay for it, and is recouped

at the time of harvest. When the seed is advanced its value is recovered at the batai time. This system is enforced by Zamindar because at the sowing time the cost is more than at the harvest time when it is in plenty and Haris agree to it because they never like to part with their grain.

From the investigation of 72 Haris, in 24 cases Zamindar charged 6 As. per maund more than when it was supplied, in 21 cases it was 8 As. more and in 27 cases it was 12 As. more per maund. This is all in case of grain crops as seed is never recouped in case of cotton or puls crops.

Implements and work animals:- The equipment of a Sindhi cultivator does not consist beyond a plough, a pair of bullocks and accessories. In some cases he may be in possession of one coultered drill, a wooden plank for clod crushing and a leveler.

Out of 72 farmers under inquiry only 29 had one coultered drill, 21 clod crusher (wooden plank), and 7 a local made wooden leveler. Out of them all only 2 had all the three and there was no other combination. This all is confined to Barrage area only. No one of them had any iron plough.

It is expected of a Hari to furnish himself with a pair of bullocks, a plough and accessories before entering an agreement. For the above mentioned things he may get Takavi which vary from Rs. 75 to Rs. 125 at present (1944), and is to be paid in full or in instalments at the time of Batai.

Land Revenue and local cesses:- Without exception the L.R. and local cesses are paid by Zamindar and the a Hari has got nothing to do with it. In case of remission of L.R. in part or full Hari is not concerned at all.

Harvesting charges:- In case of grain the reapers get their wages in kind from the common heap and thus harvesting charges are borne in proportion to the share they receive. Generally the reapers get 1/12th to 1/15th of what they harvest, carry to the threshing yard and thresh, but in case Hari himself harvests the part of his area then he gets 1/7th to 1/8th of the harvested and threshed produce - The reapers have to thresh the produce themselves. The most common share for the reaper is 1/12th and if Hari is the reaper of his own plot then 1/8th. The difference is due to shortage of labour and to induce Haris.

In case of cotton pickers are paid in cash at the rate of As. 12 to Re. 1-4-0 per maund. All this depends upon the labour available. Out of ³⁴72 cases in 15 cases pickers were paid at the rate of Rs. 1-4-0 per maund, in 9 cases at the rate of As. 12 / maund and in 10 cases at the rate of As. 14/ maund. Then they are borne by Zamindar and a Hari in proportion of the share they receive.

Marketing Charges:- In two cases out of 124 only the marketing charges were borne by Haris completely and in four cases they were charged at the rate of about $\frac{1}{2}$ anna per maund for Zamindar's share. In rest of cases both rabi and

Kharif were disposed on the field by Zamindar to local Bania or Dalal. Cotton crop is always disposed on the spot to Dalal and Hari has to sell it through the Zamindar.

General Agreement:- All the cultivation operations are conducted and supervised by Zamindar or his agent who is his Kamdar. To all intends and purposes a crop at any stage is under the direct control of Zamindar and a Hari is given his share of produce after the division in cash or kind as Hari likes except in case of cotton where compulsorily he has to sell it either to Zamindar or he gets the money after the crop is sold to an agent. It is almost invariably observed that Hari gets Re. 1 to $1\frac{1}{2}$ less than the market rate per maund in case he sells it beforehand to Zamindar and about As. 8 less / maund than the market prices if he sells it with Zamindar to an agent. The reason given by Zamindar is that in the former case there may be fluctuations in prices and in the latter case they say that if Hari would have sold directly he would have received less price, as marketing charges will be more for quantity and they are not in a bargaining position due to financial conditions. Zamindar stamps the harvested crop after paying to the reapers to avoid theft, and under no circumstances Hari can remove his share till whole of the harvesting is over. Reapers are expected to carry harvested produce to the required 'Khara' - threshing yard and thresh, and after in Batai the Hari has to remove Zamindari share first to Zamindar's godown and then take

his share.

In case a Zamindar or ^{Amān} Aman authorized by him is not on a field the crop cannot be harvested and on the other hand Zamindar can get it done so even though Hari does not agree.

In the case of cotton crop the stalks are to be removed by a Hari or a Zamindar gets it done at Hari's expenses. With any agricultural operation if a Zamindar is not satisfied he can ask a Hari to repeat it and if he does not it is to be done at his expenses only e.g. in case of weeding and chher.

For a Kharif crop Hari has to give at least two dry and two wet ploughing compulsorily and for Rabi crop 3 to 4 depending upon the nature of soil. He has to do two weedings for the kharif crop when zamindar asks him to do. He has also to level the plot if there is too much of slope, and it is to be judged by Zamindar or his agent. The crops to be sown depends upon Zamindar and not as he likes. In case of cotton he has not to sprinkle Jowar seed in the plot and has to take care of trees in his plot. He has to repair the Banas (sides) of distributaries which lead water to his field. He has to watch the ^{khara} 'kharif' - threshing yard - at night time by turns and has to be careful about his water turn and see that no water is wasted at any time of the day.

As regards Zamindar he has to arrange for water, give a land for cultivation and for Hari's stay where he constructs his own hut, pay the land revenue and local cesses.

In Barrage zone zamindar does not allow any Hari to keep more than 2 to 3 milk cattle as he says that field work will suffer as Hari will not be very keen about it as his income from milk produced will be sufficient and certain.

In case of non-barrage areas zamindar allows Hari to keep any number cattle particularly in Karachi district as his income from crops is not sufficient and very uncertain and if there is any restriction about a number he will not stay there.

Kamdari:- He is appointed from amongst the Haris by Zamindar. Generally he is considered to be reliable and is a sort of general manager on the field. He supervises the cultivation operations and some times in absence of zamindar allots the land. Kamdars are kept only by big zamindars and each Hari has to pay for him which is taken by zamindar and kamdar gets some fixed pay or quantity of grain per year which vary with individuals. It varies from 10 to 15 maunds per kamdar depending upon the number of Haris on the farm. Out of 124 zamindars 68 had kamdars more than one, 27 had one kamdar only, 7 had 'Munshis' to keep the account and to look occasionally to the field work - munshis are kept mostly by Hindu Zamindars. The remaining had neither kamdars nor munshis - clerks.

Those who do not keep any kamdar do not charge anything separately for it, but every thing is included in general

expenses. Those who keep kamdars charge some extra over and above the general expenses.

The following examples show the rate at which each Hari pays to a Zamindar.

- (a) $\frac{1}{2}$ seer per maund.
- (b) 16 seers per Persian wheel - 'Nar'.
- (c) 10 seers per Acre.
- (d) 16 seers per Hari.
- (e) 1 seer per 3 maund.
- (f) As. 8 per Acre.

Many times these items are combined in different ratios and charged.

Wahi:- This is appointed to watch the standing crop against animals at day time only and see that there is no waste of water. He is also paid like kamdar but the share is much less. Wahi is appointed from old and disabled Haris who cannot do any field work. He is appointed by all the Zamindars.

Karawo:- This is appointed from Haris only at the time of Harvest generally. He is to remain at 'Khara' during night time and watch the produce then against theft and animals. This is appointed by all Zamindars. Separate charges for this are not made but it always goes with kamdar and wahi. In fact Kamdar, Karwo and wahi are mentioned together. Out of 124 cases it is only in 9 cases that Haris are charged separately for Karawo at the rate of 2 to 5 seers per Hari from Hari's share only.

Shikari:- They are appointed from Hari's when there is danger to crops from animals e.g. wild pigs. Each Hari gives 2 to 3 seers / Acre or 10 seers which ever is more. These figures are not very rigid but fluctuates in different fields. The zamindar at the most supplies the amunition. From the fields under survey it was only in 12 fields and that also in Karachi and Sukkur districts.

Loans:- Without exception the farm operation which require some cash advancements, are done on borrowed money. It is only in rare cases that a zamindar personally makes advances either in cash or kind to a Hari. This is generally done through the agency of village Bania who acts as a financier to the Hari on a personal security of Zamindar who recovers the amount from Hari's share of produce at a time of Batai. A Hari has two types of debts. The first is the result of past deficits and purchases and the second is a short term loan to meet the expenses of current crop. The security offered by him is usually alien against the crop or livestock.

In Barrage areas the Hari does not remain in arrears unless there are some unforeseen calamities. But in non-Barrage area, he is under perpetual debt. The interest charged by Bania is un-official i.e. even zamindar does not know about it. They deduct the interest from the money advanced and if Hari does not agree to it they give false excuses that money at that time is not available with them. However this most common rate

if interest is As. 2 per Rupee from the time it is borrowed to the First crop harvest. In case Hari does not pay in that season compound interest is charged at the same rate. Though this is all illegal due to 'Money lender Act' but it goes on.

Chher:- When the cleaning of a main Karia which leads the water to the field is required. Haris are summoned to work for which they practically get nothing - at the most noon meals. In case Hari is unable to come himself he has to give a substitute or Zamindar engages a man whose wages are borne by Hari. They are also summoned when the work of some Haris is in arrears due to unavoidable conditions, and in turn that Hari has to give them noon -meals - Bhat-which consists of Rice - ghee - Gur and berries. In non-barrage rice areas they are called at the time of bund repairs and breaches.

Beggar:- Each Hari himself or any member of his family is expected to work free of charge in turn at Zamindar's 'Otak', to milk his cattle, collect grass for them, to bring water, to bring his post and to do such other things. Many times Hari has to walk a distance of 20 miles to get zamindar's post. He is never paid for it and on the contrary his work suffers to a considerable extent.

Seri-cultivation:- It was only observed in two cases in Tharparkar district. By this it is meant that some land is cultivated by Hari together for Zamindar, the produce of which

is wholly taken by Zamindar. The area gives for work was 1/4th of an acre per Hari.

Allotment of area for cultivation:- In the beginning it depends upon the number of pairs of bullocks and the adult male members of the family of a Hari and afterwards the efficiency and the ability. The most common custom is that 8 acres in each season in Barrage area and 12 acres in non-Barrage area are allotted per pair of bullocks.

From the table below it can be seen that in Barrage area where cotton is the main kharif crop and wheat a Rabi crop average area allotted to each Hari is 8 Acres in kharif, 10 acres in Rabi and about $2\frac{1}{2}$ acres for subsidiary crops. In Barrage area where Rice is the main kharif crop the area allotted is 6 to 7 acres per tenant in kharif, about 6 acres in Rabi and $\frac{1}{2}$ acre for subsidiary crops - Jowar - Bajri. In non-Barrage area, for kharif season average area comes to about 13 A., for Rabi $2\frac{1}{2}$ acres and $2\frac{1}{4}$ acres for subsidiary crop. Haris do not get same plot for cultivation when the rotation comes and even the area may be little or more it all depends upon Zamindar who gives the land according to the area available and ability of Hari judged from previous records if any.

Average Allotment of area for cultivation per family.

Average Allotment of area for cultivation per Family.

Groups.	Kharif (acres.)	Rabi. (acres.)	Subsidiary. (acres.)
Cotton - Wheat (Barrage.)	8 - 0	9 - 20	2 - 21
Paddy - Wheat Gram etc. (Barrage.)	7 - 28	(1) 6 - 8	0 - 22
Paddy - (Non-Barrage.)	12 - 39.5	(2) 2 - 29	2 - 9

(1) It is less because there dubari-second crop is raised on the same soil land and all the area under crop in kharif season is not fit for raising the second crop in Rabi.

(2) Un-irrigated crops are raised on the area which only retain moisture. This area is very limited.

Artizans:- Mostly they are dealt directly by a Hari. He generally pays them in kind the quantity depending upon the nature of work. Some times Hari works for him in the field when a Black-smith or a carpenter also cultivates a piece of land. The most important of the artizans are, (a) Black-smith, (2) Potter. (3) Ferre men.

Out of 124 cases in 92 dealings between Artizans and Hari were direct while in 32 cases only zamindars charged the Haris for Artizans. When Zamindar charges some quantity to Hari for Artizans it does not mean that Hari has nothing to pay to Artizans; Zamindar pays some thing to artizans to induce them to remain in the village for the convenience of his Haris.

Zamindar charges his Hari as under,-

- (a) 2 seers / maund.
- (b) 1 maund / Hari.
- (c) $\frac{1}{2}$ maund / Hari (grain) main crop.
- (d) 10 seers per pair of bullocks.
- (e) 20 seers / per pair of bullocks.
- (f) 5 seers / Hari from each crop.

The most common being $\frac{1}{2}$ maund / Hari from main grain crop. Out of 72 Haris every one dealt directly with the Artizans and no amount what so ever was paid to Zamindar for this purpose.

Agreement forms:- The relationships between Zamindar and Hari are traditionally internal. Detailed agreement are not usually worked out and contracts are practically never written. However written agreements are becoming more common with big zamindars. They are of the following type.

Agreement Form:-

- (1) Not to cultivate anybody else' land.
- (2) To use their own seed and at least manure of their animals.
- (3) To cultivate whole area asked for and in case of failure to pay L.R. for the area neglected.
- (4) To give dry ploughings after the removal of Jungle and let the water for 'Rej' - soaking - after showing a zamindar or his agent.
- (5) Batai as is usage in the locality.

- (6) To sow the seed suggested by Zamindar.
- (7) Zamindar is entitled to stamp whole crop to facilitate Batai.
- (8) Hari is to deliver a produce to Zamindar's godown or a place of equal distance.
- (9) Hari is not to take any part of produce before zamindari share is paid wholly.
- (10) To pay abwabs prevalent in that locality.
- (11) To repair banas of land allotted to pay its cost.
- (12) Not to take any produce from land cultivated.
- (13) To supply labour for chher or to pay its cost.
- (14) To do two weedings in case of cotton.
- (15) To remove cotton stalks.
- (16) To pay compensation of Rs. 50 if fails to cultivate the land.
- (17) Not to keep milch cattle more than what he requires for his purpose.

C H A P T E R. V.

Economic Position of a Hari (Tenant-at-will).

To study the economic position we should work out the following items.

- (a) Gross farm receipts.
- (b) Farm expenditure - except personal and family labour.
- (c) Farm Profit.
- (d) Mode of living.

For this purpose whole area is divided into two major groups.

- (i) Barrage Zone.
- (ii) Non-Barrage Zone.

Again Barrage Zone is divided into three sub-groups,

- (i) Central Sind. (Nawabshah) - Cotton - Wheat.
- (ii) North Sind. (Dadu) - Cotton - Wheat.
- (iii) North Sind. (Larkana). - Paddy - Wheat and Gram.

The statistics gathered are so scanty that absolute reliance upon them will not be correct. However it can give some relative idea about the conditions in different zones.

(a) Gross Farm - Receipts:- The complex internal organization of farming, together with variation among individual units, present a difficult problem in measuring the earning capacity. To understand the factors in Tenants' income it is necessary to un-reveal the complexities in the farm organization,

and to find records of transactions whatever available.

For this survey in order to simplify the analysis and to have results as nearly homogeneous as possible, the records obtained are limited solely to farming operations for the crop year 1943-44. The financial result of non-farming enterprises such as 'Khati' work - digging soil and keeping on bunds -, working as reapers in some body else' plot or field, dairy products etc. are not included. In other words the financial data presented for this item - gross Farm receipts - Pertains almost wholly to current cash or kind receipts, and finally converted to cash at the then existing market rates in that locality. Although this picture does not give a picture of all items of receipts, it nevertheless includes the major items and make possible comparison between different crop zones.

Average gross receipts in different crop zones per acre in
different seasons (1943-44).

Crop Zones. (Groups.)	Kharif Crop. (Main.) Rs.	Rabi Crop. (Main.) Rs.	Subsi- diary Crop. Rs. Rs.	Average of the whole group. Total/Area. Rs.
Central Sind. (Nawabshah) (Cotton-wheat.)	65.71	58.60	19.00	58.40
<u>A</u>				
Upper Sind. (Larkana.) (Paddy-wheat and grain)	40.34	32.37	23.25	36.20
<u>B</u>				
Upper Sind. (Dadu.) (Cotton-wheat.)	44.35	53.25	40.00	47.34
<u>C.</u>				
Lower Sind. (Karachi.) (Paddy-wheat, Matar, Urid.)	16.72	32.83	78.10	30.92
<u>D.</u>				

Note:- In the table above Harvesting and picking charges are deducted and it denotes only the value for Hari's share after paying rent and reaping charges.

The table makes it very clear that the cotton crop is more paying than paddy one, wheat being the Rabi crop. Again cotton crop is more paying in Central Sind - (Nawabshah) - than at North Sind (Dadu - by about 50%.

As regards Paddy Barrage areas pay 2.5 times more than the non-barrage areas. In non-barrage yield is less and also variety sown is inferior one.

In case of Rabi crop it can be seen that there is not much difference where cotton is the kharif crop, because the Rabi crop there is irrigated one e.g. A and C groups.

In case Paddy is the kharif crop, Rabi crop is either Dubari - second crop on same area - or un-irrigated. The difference between these two is however nil - B and D. -

The difference between the irrigated (A and C) and un-irrigated (B and D) groups is considerable. The irrigated crop fetches something like 75% more than the un-irrigated one.

In case of subsidiary there is a remarkable difference. In group 'C' the income is much because of the fact that in that year less area was put under cotton crop and land meant for it which is usually rich and fertile was put under subsidiary crop which was also ^{un-}usually successful. In case of 'D' it shows exorbitant income due to the fact that soil retained considerable moisture due to floods and the yield of the crop raised - 'Urid' pulse - was high together with the price Rs. 12/maund. This happens very rarely. In spite of exceptionally good year for non-barrage group the average income / acre is the least - cotton

groups top the list.

Average area cultivated by each Hari in different groups.

Groups.	Kharif. (Main.)	Rabi. (Main.)	Subsi- diary.	Total.	Average male. (Adult). member per family.
	A - G.	A - G.	A - G.	A - G.	
A.	9 - 7	11 - 5½	1 - 30	22 - 2½	2.00
B.	7 -28	6 - 8.2	0 - 22.7	14 -18.9	1.72
C.	6 -32	7 -35	3 - 12.5	17 -39.5	1.50
D.	12 -39:5	2 -29	2 - 9	17 -37.5	1.88

Average Gross receipts of each Hari (except rent and Reaping charges) in different groups.

Groups.	Income From.			Total.
	Kharif (Main.) Crop. Rs.	Rabi. (Main.) Crop. Rs.	Subsi- diary. crop. Rs.	
A.	602.56	652.22	33.25	1288.03
B.	310.62	200.70	13.02	524.34
C.	301.58	419.08	132.40	853.06
D.	217.36	89.30	173.38	480.04

The table above shows that if there is no subsidiary crop in non-barrage group - 'D' - which is the most usual case average income per Hari comes to only about Rs. 300. Cotton

are^{are} areas, more paying while paddy areas - Barrage - The income is steady as there is security of water.

Other Receipts:- Other receipts e.g. from crop byz products, grass etc. cannot be worked out at all unless and until we become to theoritical as no accounts are kept whatsoever. In Barrage groups farmers have no other income except little from milk products which is negligible. Here the other source of income is working as reapers some where in the neighbour fields but this depends upon the time and this cannot be evaluated and also the results will not give homogeneous picture.

In non-barrage area 'Khali' - digging soil and placing it upon bunds - and repair of bunds give farmers some income but this is a voluntary work and thus it cannot give any comparative idea.

It is only possible here to give the average number of cattle each farmer (Mari) possesses in different groups.

Average live-stock per Hari in different groups.

Groups.	Cows.	Buffa- lows.	Young stock.	Goats.	Sheep.	Fowl.
A.	1.91	-	0.91	1.58	0.20	1.70
B.	2.00	-	1.36	1.18	2.27	1.36
C.	1.80	-	0.90	2.90	1.60	0.80
D.	6.37	1.92	3.11	3.00	0.91	1.00

The table above shows that barrage area Farmers keep less of cattle due to the fact that they have got less of grass and Zamindars do not allow them to keep more than for their personal use, while this is not the case in non-barrage area; the income of a Hari is very uncertain here and if Zamindar persists upon not allowing more cattle Haris will not remain there under any circumstances then. In non-barrage area due to flooding there is sufficient grass for about 6 months of the year.

(b) Farm expenditure:- For farm expenditure we should consider only two items, (a) Abwabs - Perquisits - and (b) cost of cultivation. The rent is paid in a fixed share at the threshing yard only and therefore we do not take it into account. Here nothing is mentioned about bullock power due to the fact that in receipts we have not included anything about grass and farm by-products thus neuterlizing grass with bullock energy. Also family labour is not taken into account. The harvesting charges which

are paid in kind in case of grain are not included and to make the things homogeneous picking charges in case of cotton are also not included.

Abwabs - Perquisites:- After the Zamindari share is taken by Zamindar, he charges perquisites for the services he has rendered himself or secured. It forms quite a substantial amount. It is charged in cash as well in kind but here it is equivalent in terms of rupees is recorded. The table below shows average abwabs per acre for different seasons in different crop groups.

Average abwabs per cultivated Acre.

Group.	Kharif (1) Rs.	Rabi (2) Rs.	Subsidiary (3)	Total- average of the group.
A.	4.30	2.87	1.91	3.39
B.	2.92	2.84	2.32	2.86
C.	3.27	4.96	3.99	4.13
D.	2.31	3.66	7.94	3.22

(1) Kharif.:- It can be seen that more abwabs are charged in case of cotton - A and C than B and D groups. This is due to the high cotton prices as they are charged in kind as well. There is practically no difference in case of Paddy - B and D groups. In case of A group they are about 25% more than C group both being cotton areas due to the fact that in A group

yield of cotton is comparatively more and naturally abwabs increase proportionately as they are also charged on basis of yield.

(2) Rabi:- Abwabs are paid more in C and D. groups. In case of C group they are more because there Rabi crops are both irrigated and un-irrigated and in case of irrigated crop abwabs are more and that is the case here. As regards D group the area is limited one and due to much demand more abwabs are charged.

In case of A and B groups, they are less because more are charged for kharif crop in A group, while in F group it is a dubari crop - second crop on the same land and un-irrigated.

(3) Subsidiary:- The outstanding difference is in case of D group only. This is due to the fact that it is very rarely that subsidiary crop is raised and due to limited area Zamindar charges more. The verbal agreement is made before the allotment of land.

Average abwabs paid by each Hari.

Group.	Kharif. Rs.	Rabi. Rs.	Subsidiary Rs.	Total. Rs.
A.	39.49	32.02	3.37	74.88
B.	22.50	17.66	1.04	41.57
C.	22.30	37.57	13.23	73.10
D.	30.09	10.00	17.70	57.79

All this depends upon the area cultivated.

Cost of Production:- The importance of examining the cost of production hardly needs any emphasise. Costing is indeed the soul of all economic activities. It enables us to reduce all the complex operations in a business enterprise to a common denominator and thus to arrive at a quantitative estimate of the final gains and losses. Only through accurate crop costing can we expect to form an idea about the cultivator's (Hari) income.

The task is however not so easy as it looks; the Hari with his family members does all the agricultural work which is within his scope, the money value of which is of little importance to him. He is satisfied as long as he can finish the operations in whole area allotted to him in time. Generally he has to engage the extra labour at the time of harvest as

the period is limited and he is also engaged in the sowing of other crop or doing some other agricultural work. What little manure is applied comes from his own farm yard. It is practically impossible to ascertain how much to account for the work animal for which he gets the bye products of his crop. In case of all crops except cotton the reapers are paid in kind before the Batai from the common heap and this also varies if Hari harvests himself he gets more.

So to work out the cost of production we should only enumerate the expenses for which any definite account is kept in order to obtain homogeneous results.

For this purpose the cost of production may fall under following heads.

(a) Seed.

(b) Miscellaneous item -

- (i) Occasionally hired labour.
- (ii) Picking charges in case of cotton. (not included)
- (iii) Cash payments for repair of implements.
- (iv) Repair of Banes if they do not do themselves.
- (v) Jungle clearance.
- (vi) Uprooting cotton stalks.
- (vii) Weeding.
- (viii) Wangar and Chher.

All the animal labour is his own as he has to furnish himself with implements - Plough and accessories - and work animal - a pair of bullocks - before entering an agreement with Zamindar.

The table below can give some idea about the

expenditure per acre in different seasons and crops in different areas.

Average expenditure (other than abwabs, rent and harvesting charges / acre.

Group.	Kharif. Rs.	Rabi. Rs.	Subsidiary. Rs.	Average of a group Total. Rs.
A.	6.50	8.76	2.06	7.28
B.	6.83	8.50	1.78	7.32
C.	5.52	9.10	2.00	6.41
D.	6.85	7.16	5.16	6.69

Average expenditure / Acre on seed and miscellaneous
Items.

Group.	Seed. Rs.	Miscella- neous. Rs.	Total. Rs.	% of expendi- ture on seed
A.	5.91	1.36	7.27	81.29
B.	6.23	1.09	7.32	84.64
C.	5.76	0.65	6.41	89.85
D.	4.96	1.73	6.69	74.14

The table shows that of the remaining expenditure after paying, rent, abwabs and reapers more than 80% is upon seed only. The picking charges in case of group 'A' comes about 4.5 Rupees per acre (Hari's share only), while in case of 'C'

group it is Rupees 2.8 only. Harvesting charges could not be ascertained as they are paid in kind and in different proportions but it can be said that it forms about 10% of the yield.

Average Farm Expenditure after paying Rent, Abwabs &
reaping charges per Hari.

Group.	Kharif crop. Rs.	Rabi crop. Rs.	Subsidiary crop. Rs.	Total. Rs.
A.	59.16	97.67	3.63	160.46
B.	52.60	52.75	1.13	106.48
C.	37.94	71.66	6.62	113.49
D.	89.03	19.53	11.50	120.06

This all depends upon the area cultivated.

(C) Farm Profits:- The farm profits or net income of a Hari is arrived at by deducting his expenses from his gross farm receipts. This does not contain ^{any} ~~and~~ value of grass or bye products of any crop, but this is converted into bullock energy as we have also not made any account of it due to lack of material.

Average Farm-Income per Acre.

Group.	Kharif. crop. Rs.	Rabi. crop. Rs.	Subsidiary crop. Rs.	Average total of the group. Rs.
A.	54.91	46.97	15.03	47.66
B.	30.59	21.03 *	19.15	26.02
C.	35.56	38.19	34.01	37.01
D.	7.56	22.01 *	65.00 ‡	21.01

* Un-irrigated crops.

‡ Rare case happens only once in 5 to 8 years.

It can be seen from the table that though it was an unusual year for non-barrage group yet the income is least. In normal times the income is much less due to low prices.

The income of Hari in general and of Hari in non-barrage area in particular must be raised and the durable factors of production should be organised. To secure this object the technique of production and utilization of our economic resources should be revolutionized. Economic resources must be exploited to the optimum and utilized to the maximum pitch of efficiency with the help of science.

Table showing average Farm-income in different groups.

Per Hari.

Group.	Kharif. Rs.	Rabi. Rs.	Subsidiary. Rs.	Total. Rs.
A.	504.01	523.11	26.61	1053.73
B.	235.10	131.26	11.95	378.31
C.	241.17	297.10	112.60*	650.87
D.	172.18	60.04	144.93†	377.15

* More area was put under subsidiary crop.

† Very rare case.

Mode of living:- Although the present study do not concern itself directly with the details of Hari's level of earning and living, but the mode of living is co-related with his income. It is the purpose of this to draw the facts together.

Fundamental to the understanding of the living habits of Haris', is a realization that they exercise a relatively limited choice in determining these habits, and have been supervised for so long that if they did have a freer choice they would not have the knowledge of other ways of living essential to change. The system of agriculture determines, firstly all, that they devote themselves almost exclusively to the cultivation of Jowar and Bajri where cotton and wheat will be much more profitable, to get grain for themselves and fodder for their cattle, if they are left to their free will. But

the Haris have little say in the cultivation of crops.

A peculiarity of Hari's income is the irregularity of its distribution over the year. They are only rich so to say at the time of Batai and little latter. They again depend upon barrowing for necessities of life other than grain and milk. They generally keep grain with themselves and have at least a cow for milk.

It can be seen from the table below that the food crops are mostly retained by the Hari or tenant and only some part of it is disposed to give the dues to Zamindar and Bania.

Average disposal of Wheat crop by each Hari to
Zamindar.

Group.	Rupees worth available. Rs.	Rupees worth disposed. Rs.	%
A.	652.80	198.00	30.33
B.	120.82	28.63	23.69
C.	403.59	116.20	28.79
D.	70.75	22.68	32.05

Average disposal of Jowar and Bajri crop
by each Hari to Zamindar.

Group.	Crop.	Worth available. Rs.	worth disposed Rs.	%
A.	Jowar.	24.01	-	-
B.	"	14.11	-	-
C.	"	132.45	32.50	24.53
D.	Bajri.	2.37	-	-

Average disposal of Paddy crop by each Hari
to Zamindar.

Group.	Worth available. Rs.	worth disposed. Rs.	%
B.	310.66	137.49	44.25
D.	291.29	112.83	36.73

Average disposal of all food crops
by Hari to Zamindar.

Group.	Total grain worth availa- ble Rs.	Total grain worth dis- posal Rs.	%
A.	676.81	198.00	29.26
B.	445.59	166.12	37.28
C.	536.09	148.70	27.73
D.	364.41	137.88	37.83

It can be seen from the table above that more than 70% of the grain crops in cotton areas and 60% in Paddy areas are retained by Haris respectively. Whatever they give is due to amount debted to their account due to various expenses. If some more that must be forcibly taken as Haris are very reluctant to part with their grain produce. They use in most cases grain as a medium of exchange.

Tenants can very well afford to sell some more quantity of grain but the reason why they do not do this is that while selling they get less price and again at the time of purchase they are charged more. The difference is nearly 8 Annas a maund plus marketing charges. They also use grain as a medium of exchange and can keep with themselves without any danger of theft.

The table below will show the expenditure per Hari (abwabs + cost of production.) and the quantity of food grain worth purchased by Zamindar.

Group.	Average Farm expenditure / Hari. (abwabs -- cost of production.) Rs.	Quantity worth purchased by Zamindar forcibly
A.	235.34	198.00
B.	148.05	166.12
C.	186.59	148.70
D.	177.85	137.88

It can be seen from the table above that it is only

in B group that Zamindar has taken more than the expenditure. This is due to the fact that there was not sufficient income from other crops e.g. Gram and whole was taken by Hari. (All information Zamindar's books.)

Food:- Engel believed that one of the most important observations resulting from his studies was that poorer the individual the greater the proportion of his total income that would be devoted to food.

This is obvious as food is the most important item of domestic expenses.

A food of a Sindhi cultivator generally consists of three meals a day. (a) Breakfast:- This is taken generally before going to the work in field. It consists of Chapati of floer of any grain they cultivate themselves. This is taken with butter-milk. (b) Lunch:- In summer it is taken mostly at home while in winter if there is too much work then in the field only. In summer it consists of chapati of wheat or rice floor and in winter rice if it is one of the crops, otherwise chapati of wheat or Jowar floer. This is taken with pulse or vegetable and some time with meat. It also consists of Gur, butter-milk and some chatney. (c) Dinner:- In non-rice areas, chapati, some pulse and milk is taken. In rice areas in winter chapati of rice floer with milk and pulse and in summer rice with milk only. Meat is taken very rarely say about twice a month.

The above sort of food is most common among cultivators whether poor or well-to-do. A well-to-do cultivator may apply little of ghee to his chapatis, put little in vegetable and may take meat more often, but there is not appreciably difference in it.

Clothing:- It has always been suggested that in an individual's life the role of clothing is second in importance only to food. It is another importance essential for human existence.

It may be admitted that in warm places people do not require much of clothing, but in Sind we find extreme of cold and heat and therefore the requirements of adequate clothing are important. It is a common sight to find agriculturists in winter inadequately clothed or clad in rags. The cloth or mostly clothes are usually purchased on some festival days - generally Idds - except some odd items. They are very coarse and crude and are used till heat time. They hardly have any spare clothes. A dress of well-to-do cultivator consists of a turban, long shirt, shalwar and a waist coat in winter. He has also an 'Ajrak'. Poor cultivators have a loongi and torn shirt in winter.

As regards women ^{Folk}~~flock~~ they wear a Kurta or a Guj. Shalwar and a head wear called chooni. Quality of the cloth depending upon the earnings of their husbands.

The boys go half naked while the small girls with torn clothes.

Foot wear is very rarely seen.

Housing:- Although the individual may seek shelter primarily for protection, the dwelling is at least partially indicative of his economic position. As his income or the ability to command economic goods increases, he strives for the better housing facilities that forms visible evidence of his economic position.

Wandering throughout the length and breadth of Sind villages one cannot find much difference in dwellings and dwelling conditions of agricultural class. It is common to find, that the whole family of a Hari living in a small low roofed, badly ventelated hut, consisting of at the most of two compartments each at best being 12' by 12'. A small screen or a wall serves as a partition between the kitchen and the living room. The hut will have usually one window and one door. A man cannot get into it without bending his head down his shoulders. The walls are made of mud and smlared with cow dung. Some of the huts have bamboo fabrication in the wall. The flouring is only the naked mother earth thickly coated with cow dung. The roofs leak during rains and are most unsecured in cyclones and typhons which are common.

The only furniture of a family is a cot which is used by the elders and the old. There is some elevated sitting

place for the rest.

The environments that prevail round the hut is another fact of the appalling condition of a Hari. Some 10 or 12 houses are in one fence and only in that limited area the poultry and cattle of all the members is kept. It is most common to see small pools of cow urine stagnating and giving foul smell and this together with cow dung left here and there become the source of dangerous bacterias.

All this makes clear the condition and economic position of Sind agricultural tenant or Hari.

Fuel:- The bulk of the fuel comprises of the dung cakes irrespective of the income of Hari in all crop zones. The remaining portion is taken from the field trees for which each Hari pays some fixed amount to Zamindar every year. It varies from Rs. 2 to Rs. 7 per year.

C H A P T E R - VI.

Farm Tenancy in Sind.

Tenancy is the relation of Tenant to the land he holds temporary, which belongs to others. The relation may already exist by custom or arise or brought into existence by legislation.

Tenancy Acts:- (Necessity). - Tenancy acts has always been designed to provide and modern legal back ground for the relationship between land owning and land cultivating classes. They secure for the tenant the enjoyments of rights already conferred upon him by custom. The economic goal being, greater security, greater efficiency, greater income, and greater equality. They are passed to prevent arbitrary increase in rents and eviction, and also to prohibit the customs by legislation which do injustice to agricultural tenants. The necessity of tenancy acts is also felt due to the growth of population which has extended the range of competition in determining the rent of agricultural land in cash and kind. The tenancy legislation checks the tendency towards ^craik renting the tenants directly or indirectly on the part of land-lords.

Mr. B.S.Rowntree in his book 'Land and Labour' writes:

"Although economists differ in many of their views on the land question, all are agreed that the social well-being of a country is fundamentally affected by the conditions upon which the land is held". He further adds, "This is inevitable

since the three factors in the production of all wealth - land, labour and capital - only first one is limited in amount. The extent cannot be appreciably increased by human effort and yet without it human existence is impossible. The owner of land therefore in great measure dictates his own terms to whom who own none, and in a social and economic survey it is essential to know in how many hands this power is vested."

In Sind Zamindars as the owners of vast areas of agricultural land are primarily responsible for the exploitative methods followed by their Haris. They are pursuing a short sighted policy, detrimental to their own interests, to the interests of tenants and to the interests of nation. A tenant as a temporary occupant of agricultural land is never sincere about his work and never cares to effect permanent improvements to be enjoyed by his successor or land lord. They never plant trees, nor take care of those which are already there.

"He who stays for a night at an inn does not go to the roof to stop a leak; he shifts his bed." This is exactly the case of Sindhi Hari who has not any security of tenure. Facts in Sind emphatically support Arthur Young's famous saying: "Give a man the secure possession of a bleak rock, and he will turn it into a garden; give him a nine years' lease of a garden, and he will convert it into a desert."

In Sind tenancies are of a short duration and Haris are subjected to summary ejection after every year. The only provision for them is section 84 of L.R. Code, 1879, whereby they are expected to be given a notice of three months in

writing by Zamindar before the end of one cultivating season - 31st March. But this is seldom practised. It is not rare to find Haris evicted even in the middle of season when his crop is standing.

It is true that the position of peasant proprietors is in no way better, but in that case ^{it is} ~~if~~ the ignorance and financial position of them which is the cause, however what even little is within their reach they do. Their economic position is in no way better as they do not cultivate money crops. Agriculture with them is not a profession but a mode of living. Generally they depend entirely on the produce of their fields. To them there is no market or money value of their produce as they use it for getting their requirements by means of bartering. While sowing crops they are not actuated by calculations as to what crop would give them the largest yield and profit. They like to grow Jowar and Bajri to produce what is necessary for their animals and themselves. What they aim at is to lead an independent life without serving anybody and without depending too much upon others for their requirements.

In this chapter we want to deal with the new drive for the tenancy legislation after the introduction of provincial autonomy on 1st April 1937. Practically in all provinces except Sind, Tenancy Acts were passed or amended if already any. But in Sind nothing fruitful is done uptill now. However the Government appointed a Committee to investigate the matter.

The history of granting Tenancy rights to the Sind Tenants-at-will starts with the receipt of the 'Bombay Tenancy Act' in April 1940. A draft bill was drawn up in 1942 following the lines of Bombay Act and discussion continued untill June 1943.

Details of Proposals of Committee:-

<u>Whether tenancy rights</u>) <u>should be given and to</u>) <u>which class of tenants.</u>)	The majority of the committee members were of a opinion that
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Tenancy rights should be given to a Hari who has cultivated any of his land for the same Zamindar for the period of 8 years either before April 1945, or before the coming into force, the Act; and after the act comes into force the period required shall be 10 years. As regards unprotected Hari it was suggested that one year's notice was required after every 3 years tenancy.

The names and holdings of protected tenants should be entered in the record of rights.

<u>Miscellaneous</u>) <u>items.</u>)	A Zamindar may grant protection to any Hari eventhough the qualifying period had not been served; after such grant the Hari would be equally protected as others who have served the full qualifying period.
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Haris in Jagirs should be treated in exactly the same way as Haris in rayati lands. Rights should also be given to Haris in unsurveyed land, and if this is done, the land should be surveyed as soon as possible thereafter.

Inheritance and legal status)
of protected Tenants.)

The Committee

regarded it as of ~~per~~

~~Paramount~~

~~manent~~ importance that subdivision of tenancies should not be allowed. On the death of protected tenant, his tenancy shall devolve on that one lineal adult male heirs according to the personal law of Tenant who shall be elected by heirs themselves. In default of any agreement among the heirs, arbitration shall be resorted to.

On failure of lineal male heirs, the tenancy shall devolve on the widow, if any (if more than one, then by selection) provided that she cultivates the field herself.

On failure of both, the tenancy shall devolve on the lineal adult female heirs, by selection if necessary provided she cultivates the land herself.

Failing all these the tenancy shall lapse.

(i) Tenancy shall be unalienable and unattachable.

(ii) There would be no assignment or sub-letting of tenancies; in the case when a protected tenant becomes unfit to carry out the duties attached to it, e.g. becoming mentally or physically unfit, the tenancy shall devolve as if the protected

tenant was dead.

(iii) If the tenancy shall lapse, the Zamindar shall pay compensations to the legal heirs if the tenant according to his personal law on account of improvements affected by Hari in the nature of wells and fruit trees. In case of building, the material should be allowed to be removed or Zamindar should pay the compensations.

(iv) A tenant, who on account of illness, pilgrimage, or similar reasons, does not carry out personal cultivation, should first take the leave of Zamindar and make arrangements for proper cultivation of the land during his absence, but the absence should not exceed to more than a year.

Nature of Protected)
Tenancy) A Hari shall not be evicted
by the Zamindar save for one of the following 5 reasons,

(i) Failure to cultivate personally - Personal cultivation means by Hari's own hands (and a pair of bullocks) and with the help of his immediate family (i.e. heirs who can inherit). This provision does not bar the employment of casual labour for the transplantation of rice, the weeding of cotton and the harvesting of all crops; nor it bars the use of tractors by any person on his land.

(ii) ⁽ⁱⁱⁱ⁾ Failure to cultivate efficiently and fully - Efficient cultivation means that the Zamindar's instructions on the crop to be grown shall be followed, except for the small area under vegetables for his personal use; and fully means area for which water is taken.

(iv) Failure to pay prescribed batai or cash rent.

(v) Convictions of certain offences - Cattle theft, all offences of violence except simple hurt, criminal breach of trust, criminal misappropriation, cheating and abduction.

Rent, perquisits and possession of crops.) The Committee recommended the Batai system for paying the rent and the basis of it should be irrigation system e.g. Half for flow cultivation and 1/3rd (Rent) for lift cultivation.

As regards perquisits - Dharwai (Weigher), Karawo and Wahi (Watchmen), and Kang Karo (who watches the crop against birds) - should be taken from the common heap - amount to be settled by agreement. Cartage charges should be paid to Haris for removing Zamindari share from threshing yard to Zamindar's godown.

Gup Khati (clearance of water courses):- Haris should be supplied with free food during the carrying out of work.

All other abwabs - perquisits - should be borne by Zamindar from his share after division.

Crop should be in possession of Zamindar.

The committee agreed that the Adhoc standing tribunals consisting of representatives of both sides under the chairmanship of Mukhtiarkar would be fair to both the parties; the members of the tribunal should be two representatives each of Zamindar and Hari association of the Taluka, and in case either

side failed to nominate members, they would be appointed by the Collector. Appeals should be heard by Assistant / Deputy Collectors with a revision to the Collector. Pleadings should not be allowed at any stage.

From the personal inquiry of Zamindar, all are against the idea of granting any tenancy rights to Haris and simply refuse to listen to the good it will do them. On the other hand the Haris who are tenants-at-will are so ignorant and illiterate that they do not understand the possibility of it and only know that they have to abide by the wishes of Zamindar if they have to live them^{sc}.

However some people who are interested in the rural upliftment are trying much to achieve something for Haris and they represent their case in quite formidable way.

At present the basic and the fundamental necessity is to give at least the occupancy rights to the Tenants-at-will and without this, the question of other privileges does not arise.

The Zamindari class give the following reasons as to why the occupancy rights should not be given to Haris.

(1) The unjust eviction is only possible when there is surplus of an agricultural labour or the dearth of agricultural land. In Sind there is on the contrary dearth of agricultural labour and as such Zamindar will ill-afford to loose his Hari.

The above argument is quite true but the economic position of agricultural labour class is such that they are not at all in the bargaining position. They are ignorant, illiterate and have not got any cooperation among themselves

which is the main cause of this downfall. They are the victims of the Zamindar's will and are expected to obey him under any circumstances if they want to live there for which they have got too much attachment.

(2) The area for which the occupancy rights will be given shall be at least 50 acres to enable him to cultivate 8 acres per season, and this will make him a petty Zamindar and will not be as good as otherwise due to increase in social status.

(3) It will set up a class warfare as occupancy rights cannot be given to all the classes of tenants - short and long duration. This will create a new class which will make the matter more complicated latter on.

(4) Generally Haris are helped by Zamindar in adverse years and if the occupancy rights are given, then Zamindars will lose the interest in the land to a very considerable extent, and he also knows that his Haris cannot run away.

(5) The occupancy rights which are not hereditary rights cannot be easily understood by illiterate Haris, and there will be perpetual quarrels between the new tenants if any and the descendants of old.

(6) As there is dearth of labour, the Zamindar's work will suffer considerably as Haris who works for him due to fear of eviction will certainly refuse to do so as his rights are well secured.

(7) Many Haris have their own piece of land, but that they give it on lease to Zamindar and in many cases work with the very same Zamindar as his Hari.

(8) The cultivation of land will be left to men who are too poor to do justice to it.

The other side gives the following arguments in favour of giving the occupancy rights to the new Tenants-at-will. Every year rather every season many farmers place their household goods and other belongings in bullock carts and move on to other quarters. Many times the destination is another farm at no greater distance; some times it is nearby village and rarely a distant place where the Hari expects to get the engagement.

(1) The mobility from place to place is a matter of much concern to Haris or tenants who consider stability of residence a condition necessary to successful farming. The farmer who is continuously on move cannot systematically care for his farm. If he expects to move again soon, he does not find it to his advantage to effect improvements even which do not cost him much. Because of his instability it becomes increasingly difficult to establish any healthy connections with other farms or land-lord.

(2) The fact cannot be denied that there is plenty of agricultural land in the province, but it is necessary to start ~~now~~ now when the problem is not so urgent, as afterwards

abrupt changes may never be effective and may even result in an undesirable consequences.

(3) Tenants who are almost invariably harrassed by Zamindars will be saved from it as their rights will be well secured and their economic position will also improve as Zamindar's work will be done with some remuneration which is not the case now.

(4) It is an open secret that over and above the Batai share and abwabs extra money is taken if a piece of land happens to be a fertile one; this system will automatically disappear as latter there will not be any competition for the already allotted land.

(5) The tendency of Zamindar now is to discourage Haris to own cattle which is the best possible subsidiary occupation to utilize the leisure time of his and his family's and also to get some extra income. The Zamindar is against that as he has no interest in the cattle and he thinks that his work will suffer.

(6) The advantage of the potentialities of soil and the combination of long and short durable factors of production is not affected due to the present system of land holding and policy.

(7) The abwabs which form the substantial portions of Haris income and are paid under compulsion, will not be paid latter.

(8) Last but not the least there is a constant stream of migrants from Punjab and Cutch which will certainly interfere with the legitimate rights of Sindhi Haris at latter stage.

Mobility:- It can be seen from the table below the average stay of Tenants in different crop groups.

Group.	Average	No. of Haris with years stay.					Total.
	stay of Hari. years.	0-3	4-6	7-9	10-12	above 12	
A.	4.0	7	11	4	-	2	24
B.	5.09	4	4	2	-	1	11
C.	4.70	5	2	2	1	-	10
D.	6.37	6	8	9	2	2	27

The table shows that the average stay of each Hari is less in Barrage area (A,B and C groups) than in non-barrage area. Again in Barrage area it is less in cotton areas (A and C groups), than in Paddy areas (B group).

It will not be incorrect if we say that more the income in a particular area less is the security of tenure.

The table below will show the Haris of long stay and how many of them have served with the present Zamindar only, Haris evicted by the previous Zamindar and Haris who left ~~voluntarily~~ voluntarily the previous Zamindar.

Group.	No. of Haris of long stay above 7 years.	No. of Haris who have served the present Za- mindar only.		New-commers. - Haris. Stay less than 7 years.		Total.
		Amongst long stay.	Others	Evicted by pre- vious Zamin- dar.	Left volun- tarily pre- Zamindar.	
A.	6	1*	1	13	4	24
B.	3	1	Nil.	4	4	11
C.	3	Nil.	Nil.	2	5	10
D.	13	5	3	3	8	27

*These numbers are included in the column of long stay Haris.

It is clear from the table above that in Barrage area (A,B and C groups) about 25% of the Haris have stayed with the present Zamindar for more than 7 years while new commers form 75%.

In non-barrage area Haris of long stay form about 50% and 50% are new commers. This shows that mobility amongst non-barrage Haris is not so much as in the case of barrage Haris.

It is also clear that ~~within~~ eviction in Barrage area is more - about 40% and voluntary mobility is about 30%. In non-barrage area the eviction is only about 10% and voluntary mobility is about 40%.

Out of 22 cases of eviction in a sample of 72 Haris, in 18 cases the reason - given by Haris - was disagreement between them and Zamindar on abwabs and in 3 cases the cause of eviction was alleged theft and it was only in one case that Hari failed to cultivate the area allotted to him due to illness.

Out of 21 cases of voluntary mobility in 8 cases (all non-barrage) the reason given by Haris was less of grass for their cattle - milk as well as work - 9 left due to allotment of inferior land while their land which they cultivated a year ago was given to other Haris which as they said was much better and 4 people left in sympathy with other relatives.

The reason given by Zamindars as to why they evict a Hari are mostly two.

(1) Due to theft.

(2) Due to incompetency.

However the other reasons are:

(3) Refuse to do any Chher or Beggar.

(4) Refuse to do specified field operations.

(5) Refuse to cooperate with other Haris.

(6) Maintain too many milch cattle and thus neglect the field operations.

The reasons given by Haris as to why they leave the Zamindars are

(1) Change of land - when rotation comes.

(2) Beggar and Chher - Free work - ~~if they do.~~

(3) Cut throat abwabs - Perquisits.

(4) Less of grass.

Reforms:- Let us now work out the lines on which legal protection should be provided to tenants and Zamindars' interests should be secured under the prevailing conditions, and not what should be the ideal one which at present moment will not be probable to put in operation. The broad outlines of the legal protection should be as under.

(a) Guarantee of possession of land so that Hari may make improvements.

(b) Units allotted of a size which will insure use of best possible farming practices.

(c) More binding and enforceable contracts.

(d) More interest by Zamindars in maintaining the crop producing power of the land.

(e) Insistence by Zamindars upon better farming methods.

(f) Supplying by Haris of sufficient working equipment, particularly live-stock, to insure his interest and to increase his responsibility.

The prosperity of Zamindar and Hari is interwoven and depends upon three principal factors,

(i) The productivity of a land,

(ii) The efficiency and energy of Landlord.

(iii) The ability and energy of Tenant.

These factors inter act each other. Therefore there is

a great need for improvement in order to assure the cultivating class-'Hari'- claim to the residual value of the unexhaustable improvements, and in the absence of adequate legislative protection. The Hari will be exploited by Zamindar as hitherto, and deprived of the fruits of his labour. In fact in the absence of adequate protection, the Hari would not take to the improved methods, for he is too familiar with the Zamindar's habits and therefore would rightly refuse to labour when he is sure that the fruits would be taken away by somebody else. The guarantee of an adequate and effective protection to a Hari against the exploitation of the Zamindar is an essential prerequisite of agricultural reconstruction. Therefore the following measures in addition to above mentioned should be taken.

(1) The share of Zamindar and Hari should be defined by law in different localities. For this the empirical method of determining the division of farm - produce should be followed. The procedure consists in carefully listing, (i) what the owner supplies, (ii) what the owner pays, (iii) what the Hari supplies, and (iv) what the Hari pays. Two complete lists should be made showing what each pays and supplies in details. Then taking into consideration, depreciation, interest on investment, labour charges (self and hired), out of pocket expenses etc. ratio of expenditure should be made and all the produce should be divided in that ratio.

(2) No deduction shall be made for any purpose whatsoever

from the common produce before or from Hari's share after Batai.

(3) After the crop is reaped or picked the produce shall be kept in 'Khara' (threshing yard) fixed by Zamindar for the purpose, provided it is not at a greater distance of one mile or so from the harvested field.

(4) Hari shall plough, level and clear the land to be cultivated by him with the aid of his own bullocks, and shall also remove the jungle.

(5) Hari shall provide the seed needed for the purpose and if it is supplied by Zamindar, some quantity should be recouped at the time of Batai without any interest.

(6) Cost of picking and reaping should be borne by both the parties in proportion to the share.

(7) Hari shall maintain the boundary marks, 'Banas' (sides) and remove the weeds at his own expenses.

(8) There should be no 'chher' and 'Beggar', except in case of clearing the canals when Zamindar should supply food at that time.

(9) There should not be any 'seri' cultivation.

(10) No interest on the loans should be charged if the amount is recouped at the time of Batai in the same season and only 6% simple interest if it is carried forward.

(11) The Zamindar shall be entitled at the time of Batai to receive the amount of loans advanced by him,

arrears if any and other dues, in cash or kind, at the prevailing market rates. However he shall not subject Hari's share of produce to a greater deduction than its half in case of grain crop, in payments of the amount mentioned above.

(12) If Zamindar receives any remission for any survey number or special rebate of land revenue, his Hari who has cultivated that number with due attention shall be entitled for concession proportionately.

Basis for determining area for which occupancy rights should be given, and 'Protected Tenant':- The area for which occupancy rights should be given according to the nature of land e.g. (1) Single crop in a year - Kharif only, (Mostly non-barrage) (2) Two crops in a year - Kharif and Rabi. (3) Dubari crop land - Kharif and Rabi on same area.

It is observed that in non-barrage area that a Hari with the help of his family and a pair of bullocks can cultivate about 12 acres, so in case one the occupancy rights should be given over an area which should enable Hari to cultivate 12 acres every year - mostly there is one crop only.

In case two Kharif and Rabi crops are raised on different lands in the same year. Here it has been observed that a Hari with a pair of his bullocks and family can cultivate economically about 8 acres each season. So occupancy rights should be given accordingly.

In case three Kharif and Rabi crops are raised on the same land, but the area under Rabi crop is less due to the fact that all the soil does not retain the moisture and some late varieties who are harvested late. Here the occupancy rights should be given over such an area as to enable him to cultivate 8 acres in Kharif and about 12 acres in Rabi - unirrigated crop there can cultivate more.

A 'Protected Tenant' should be determined by the number of year he has served with the present Zamindar or previous Zamindar provided the gap is not more than ⁴⁰two years. In my opinion the number of years should be restricted to 3 complete years and the beginning of 4th with the same Zamindar. If this is taken as the basis of protection that according to the data about 70% tenants will get occupancy rights out right from the present Zamindars only and some more may get from the previous Zamindars. A Zamindar can also give occupancy rights to a Hari who has not finished the qualifying period, and once it is given it cannot be taken back.

Why I have suggested 4 years, because 3 complete years under the existing conditions ^{of} ~~and~~ tenure system ~~is~~ in Sind is quite a substantial period to justify Hari's worth and also this will include major portion of the new tenants-at-will. Protection is not necessary for a Hari who has remained more than 10 years with a particular Zamindar. Firstly because there he has his already established position and secondly it will include a very minor portion of Haris - according to data collected about 10% of total number of Haris.

C H A P T E R - VII.

Conclusions.

Due to the long established position of Zamindars and the economic condition of land cultivating class, the Zamindari system cannot be abolished altogether at present. The improvement of land in any respect is beyond the resources of any cultivator and it is mostly fear of eviction which checks him from showing the results on rental lands.

The chief defence of landlordism is that, it supplies agriculturists with the capital. Zamindars should be the real leaders of rural population and bring in science in Agriculture, and enlightenment in rural life. The mere expression 'Zamindar' should not frighten the land reformers. At present Sindhi cultivators must have landlords, they are poor, unorganised, illiterate and wasteful. They require leadership, financial help and want to be led at every step. However the main question is that the functions of land-lord must be performed and not only to enjoy the privileges. Landlord is to supply the permanent capital and the tenant is to provide working capital. The only thing required by tenant at present is security of Tenure and not the ownership of land.

The general alleged causes of poverty of Agricultural class are,

- (1) Low standard of Husbandry.
- (2) Want of consolidation of holding.
- (3) Increase in the population.

(4) Scanty rainfall.

(5) Frequent mobility of cultivators.

Out of all these causes No. 2, 3 and 4 do not affect Sindhi Tenant-at-will, as the holdings are big enough and he gets at least more than 4 acres in a single block for cultivation (generally a survey number is larger than 4 acres and Hari gets at least one number). As regards number 3 cause, the province is very thinly populated, the density being 94 only, and therefore the population question does not arise. In Sind 84% of the land cultivated depends upon irrigation canals, thus the water supply is also well secured. For mobility we have said before that the Tenancy legislation is necessary.

Now the only cause remains is the low standard of Husbandry which should be raised to improve the economic condition of Tenants-at-will in Sind.

Agricultural Husbandry is a very wide term and we do not want to go in details of it except to suggest broad outlines.

(a) Better implements should be used e.g. iron ploughs instead of wooden one; for sowing drill should be used instead of broad casting the seed and in case of Rice, transplanting should be followed.

(b) Proper variety of seed should be used as suggested by the Department of Agriculture from time to time.

(c) Levelling and weeding should be done.

(d) Crop planning should be strictly followed.

The basic needs of crop planning are essentially five,

(i) There should be an adequate supply of Food for human beings and desirable animals, and of improved variety.

(ii) Raw materials for the industries should be developed and introduced to guarantee the internal supply.

(iii) Material should be produced to supply Indian markets which may be easily available.

(iv) The fertility of the soil should be maintained.

(v) To distribute the man and bullock labour as evenly as possible throughout the year.

GLOSSARY OF SINDHI WORDS.

Abwabs	-	Perquisites.
Amin	-	Arbitrator.
Batai	-	Division.
Beggar	-	Free and forced labour.
Bob	-	Handful.
Bosi	-	Land irrigated in Kharif but cultivated in Rabi.
Chher	-	Free labour.
Dera	-	Threshing yard, and crop is shared here.
Dharwai	-	One who measures grain.
Dubari	-	Second crop raised on the same land in the same year.
Hari	-	Tenant-at-will.
Kamdar	-	Zamindar's agent - mostly one of the Haris'.
Kangtar	-	One who drives birds.
Karawo	-	Watchman.
Khara	-	Threshing yard.
Khati	-	Clearance.
Lapo	-	Levy - charged by Tapedars (L.R. Collectors) from Zamindars.
Moki	-	Flow.
Otak	-	Guest house.
Palal	-	stalks of rice crop.

Pir	-	Religious Head.
Rasai	-	Entertaining Officers.
Sailab	-	Natural Inundation.
Seri	-	Land cultivated free of charge.
Shikari	-	Hunter.
Wahi	-	Watchman.
Zamindar-		Landlord.

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APPENDIX (1) GROUP A.

S.No.	Receipts			Expenditure							Farm Profit.	
	Total Area cultivated.		Receipts.	Advabs		Cost of production			Grand Total			
						Total of cash and kind	Seed	Miscl.				Total
	A.	G.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. A. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.			
1.	8 - 29	566--0--0	38--0--0	45--8--0	7-3--0	53--0--0	91--8--0	474--8--0				
2.	37 - 34	2710--1--0	124--6--0	269--0--0	103-12-0	372-12--0	497--2--0	2212-15--0				
3.	23 - 30	1519--1--0	71-15--0	168--0--0	14--0-0	182--0--0	253-15--0	1245--2--0				
4.	20 - 9	1186-12--0	77--8--0	114--0--0	23--7-0	137--7--0	214-15--0	972-13--0				
5.	11 - 0	531-10--0	30--5--0	45-12--0	21-15-0	67-11--0	93--0--0	433-10--0				
6.	25 - 4	1145--7--0	79--0--0	159--3--0	50--0-0	209--8--0	288--8--0	876-15--0				
7.	23 - 18	1532--8--0	91--0--0	144--0--0	33-14-0	177-14--0	268-14--0	1263-10--0				
8.	27 - 26	1272--1--0	83-10--0	146--0--0	37--9-0	183--9--0	267--3--0	1004-14--0				
9.	29 - 22	2297-15--0	129-11--0	192--3--0	53--4-0	245-12--0	375--7--0	1922--8--0				
10.	18 - 20	334--2--0	25--0--0	59--0--0	7--9-0	66--9--0	91--9--0	242--9--0				
11.	14-- 18	888-11--0	54-14--0	75-12--0	19--0-0	94-12--0	153-10--0	735--0--0				
12.	15-- 13	795--3--0	58--3--0	90--3--0	37--1-0	127--9--0	186--1--0	609--2--0				
13.	16 - 29	745--6--0	40-15--0	69--4--0	12--3-0	81--7--0	122--6--0	623--0--0				
14.	15 - 7	992-13--0	55--3--0	92--3--0	26--3-0	118-11--0	173-14--0	818-15--0				
15.	15 - 29	1038--3--0	70--2--0	95--0--0	35--1-0	130--1--0	200--3--0	833--0--0				
16.	13 - 24	599-10--0	35--6--0	90--3--0	13--4-0	103-12--0	139--2--0	460--8--0				
17.	14-- 21	593--3--0	41--2--0	78--0--0	11-15-0	89-15--0	131--1--0	362--1--0				
18.	15 - 16	1236--9--0	60--6--0	99--8--0	2--0-0	101--8--0	161-14--0	1074-11--0				
19.	33 - 12	2284-14--0	112--6--0	204--3--0	26-11-0	231--3--0	343--9--0	1941--5--0				
20.	29 - 17	2293--8--0	111-14--0	186--3--0	17--9-0	204--1--0	315-15--0	1977--9--0				
21.	24 - 5	924--4--0	66-14--0	131-10--0	41--0-0	172-10--0	249--3--0	684-12--0				
22.	26 - 8	1285-12--0	76--7--0	135--0--0	1--6-0	136--6--0	212-13--0	1072-15--0				
23.	13 - 29	1223-12--0	65-15--0	131--0--0	16-12-0	147-12--0	213-11--0	1010--2--0				
24.	46 - 23	2578-10--0	161-14--0	308--0--0	87--2-0	395--2--0	557--0--0	2021-10--0				

APPENDIX (2) GROUP B

S.No.	Receipts		Expenditure.					Farm Profit .
	Total Area cultivated	Receipts.	Abwabs	Cost of Production			Grand Total	
			Total of Cash and Kind	Seed	Miscl.	Total		
	A. G.	Rs. As.P	Rs. As.P.	Rs. As.P.	Rs. As.P	Rs. As.P	Rs. As.P.	Rs. As.P
1.	14-24	658--12-0	55--8--0	35--0--0	22--4--0	107--4-0	162-12--0	496--0-0
2.	14-11	512-- 6-0	43--2--0	99--8--0	27-14--0	127--6-0	170--8--0	341-14-0
3.	19--6	630-- 8-0	46--9--0	78-14--0	26-15--0	105-13-0	152--6--0	478--2-0
4.	17-39	729--10-0	57--0--0	133--0--0	N i l	133--0-0	190--0--0	539-10-0
5.	16--7	492-- 9-0	32--4--0	35--0--0	13--8--0	98--3-0	130-12--0	361-13-C
6.	10-29	352-- 2-0	27-11--0	54-14--0	19-13--0	74-11-0	102--6--0	249-12-0
7.	10-29	279-- 1-0	30-11--0	48--6--0	5--7--0	53-13-0	84--3--0	194--9-0
8.	15--3	606--11-0	50--6--0	120--8--0	7-12--0	128--4-0	178-10--0	428--1-0
9.	16-22	582-- 4-0	49--7--0	118--0--0	12--6--0	130--6-0	149-13--0	432--7-0
10.	13-29	398--11-0	43--9--0	83--0--0	9-13--0	92-13-0	136--6--0	262--5-0
11.	16-27	412-- 7-0	31--1--0	90--0--0	29--9--0	119--9-0	150-10--0	261-13-0

APPENDIX (3) - GROUP C.

S.No.	Receipts		Expenditure					Farm Profit
	Total Area cultivated	Receipts	Abwabs	Cost of Production			Grand Total	
			Total of cash and kind	Seed	Miscl.	Total		
	A. G.	Rs. As.P.	Rs. As.P	Rs. As.P	Rs. As.P.	Rs. As.P.	Rs. As.P	
1.	27--0	1389--8--0	118-14-0	132--8--0	19--11-0	152--3-0	271--1-0	1118--2-0
2.	20-30	1079-15--0	87--7-0	112-14--0	3-- 0-0	115-14-0	203--5-0	876-10-0
3.	21-12	932--1--0	94-11-0	131--0--0	10-- 8-0	141--8-0	236--3-0	755-14-0
4.	15-20	619--1--0	58--5-0	93-10--0	3-- 6-0	97--0-0	155--5-0	463-12-0
5.	20-19	796--7--0	74-13-0	143-11--0	18--13-0	162--8-0	237--5-0	559--2-0
6.	17-15	753--9--0	69-15-0	99-10--0	14-- 7-0	114--1-0	184--0-0	569--9-0
7.	17-13	790--4--0	74--3-0	92--0--0	9-- 6-0	101--6-0	175--9-0	614-11-0
8.	15-29	652-11--0	62--4-0	69--0--0	5-- 0-0	74--0-0	136--4-0	516--7-0
9.	10-28	464--2--0	39--7-0	81--8--0	12-- 9-0	94--1-0	133--8-0	330-10-0
10.	10-29	839--6--0	52--4-0	63--0--0	19-- 5-0	82--5-0	134--9-0	704-13-0

APPENDIX (4) GROUP D

S.No.	Receipts		Expenditure					Farm Profit.
	Total Area Cultivated	Receipts	Abwabs	Cost of Production			Grand Total	
	A. G.	Rs. As.P.	Total of Cash and Kind Rs. As.P.	Seed Rs. As.P.	Miscl. Rs. As.P.	Total Rs. As.P.	Rs. As.P.	Rs. As.P.
1.	63-20	1537--0-0	179--2-0	138--0-0	91-15-0	279-15-0	459--1-0	1127-15-0
2.	10-20	243--1-0	30--0-0	34--0-0	12-12-0	46-12-0	76-12-0	171--5-0
3.	16-29	729--9-0	73--0-0	77--0-0	22--0-0	99--0-0	172--0-0	557--9-0
4.	11-13	330--9-0	37--1-0	48--0-0	27--0-0	75--0-0	112--1-0	218--3-0
5.	27-00	1241-11-0	123--7-0	103-10-0	62--3-0	166--2-0	289--9-0	952--2-0
6.	37-37	1233-13-0	134--3-0	241-12-0	56--2-0	297-14-0	432--6-0	851--7-0
7.	50-33	2159--5-0	215-13-0	262-12-0	24--1-0	286-13-0	502-10-0	1656-11-0
8.	14-13	367--7-0	42--3-0	55--5-0	33--8-0	88-14-0	131--6-0	236--1-0
9.	27-13	944-11-0	101--5-0	149--3-0	81--5-0	230-13-0	332--3-0	612--8-0
10.	37-31	891--5-0	133-15-0	170--4-0	104-13-0	275--1-0	409--0-0	482--5-0
11.	16-14	521--4-0	47--3-0	83--3-0	34--0-0	102--8-0	150--0-0	371--4-0
12.	32-15	412--7-0	39--3-0	154--0-0	36--2-0	110--2-0	229--5-0	183--2-0
13.	12-00	264--4-0	26--6-0	65--3-0	24-13-0	90--5-0	116-11-0	148--9-0
14.	8-10	197--6-0	20--1-0	44--3-0	19--3-0	63-11-0	6--12-0	113-10-0
15.	4-29	64-11-0	8--3-0	21--0-0	4-12-0	25-12-0	23-15-0	30-12-0
16.	17- 7	255-14-0	25-10-0	69--3-0	23-14-0	93--6-0	119--0-0	136-14-0
17.	12-20	221-10-0	22--2-0	61--3-0	27--0-0	88--3-0	110-10-0	111--0-0
18.	3-00	146--0-0	15--3-0	39--0-0	8--4-0	47--4-0	62--7-0	83--9-0
19.	11- 2	136--0-0	15--0-0	53--0-0	N 1 1	53--0-0	68--0-0	68--0-0
20.	7- 7	210--0-0	20--0-0	34--3-0	5-14-0	40--3-0	60--6-0	149-10-0
21.	3-26	178--7-0	17-12-0	35--0-0	10--4-0	45--4-0	63--0-0	115--7-0
22.	31-29	1007-14-0	93--9-0	149--0-0	48--3-0	197--3-0	291--1-0	716-13-0
23.	6- 6	205--5-0	19-13-0	29-12-0	2-10-0	32--6-0	52--3-0	153--2-0
24.	13-00	254--9-0	23--8-0	55--0-0	13--7-0	68--7-0	91-15-0	162--1-0
25.	16- 7	396--0-0	34--3-0	78--0-0	29-12-0	107-12-0	142--4-0	253-12-0
26.	6- 7	385--9-0	13--4-0	29--0-0	9-13-0	38-13-0	57--1-0	328--3-0
27.	13-13	331-10-0	33--5-0	37--0-0	24--3-0	111--3-0	145-13-0	236-13-0