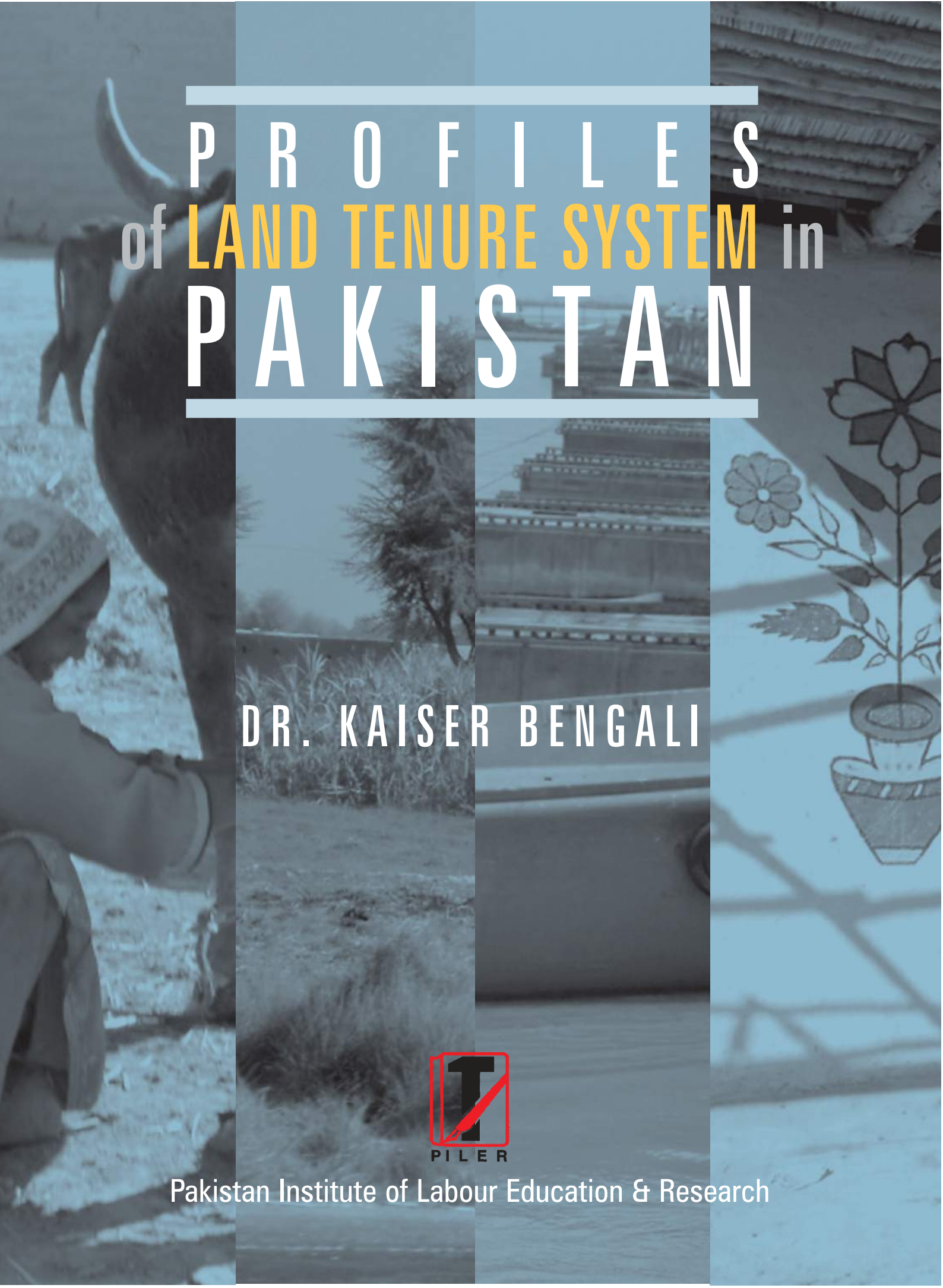

PROFILES of LAND TENURE SYSTEM in PAKISTAN

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PILER

Pakistan Institute of Labour Education & Research

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FOREWORD

Land is a principal factor of production and land ownership has historically been a major determinant in the distribution of output. This is true even today of agrarian economies like Pakistan. Land ownership is important not only because it determines the distribution of economic power, but of social and political power as well.

Land reform has been high on the agenda of almost all freedom movements and of national governments in the twentieth century. In Pakistan too, land reform comprised an important subject in the Muslim League debates and documents. Post-independence, land reform efforts began with improvements in tenancy laws, followed by distributive reforms in 1959, 1972 and 1977, with mixed results. Thereafter, the land reform debate petered off.

Recent research on poverty issues has shown that inequality is a more significant determinant of poverty reduction than growth and land equality is an important factor in rural poverty. There are important nuances, however. Land ownership alone cannot help the rural poor. There are instance of new small landowners by virtue of distributive land reforms, facing serious difficulties in operating in rural markets. This is because rural markets are inter-locked and owner-farmers need a degree of competence in dealing with the different input (seeds, fertilizers, machinery, credit, labour, etc.) and output markets. Bereft of these skills, crop failures are likely to occur and the new owner-farmer unlikely to derive much benefit from his lands.

Unequal land ownership has other social and political impact too. Unequal land ownership has historically fostered a feudal relationship in rural areas and created a range of privileged and underprivileged classes. The culture of inequality that unequal land ownership fosters has permeated gender relations too and impeded efforts to promote women's rights. This class and gender segregation has hindered access to educa-

tion and other services and limited vertical mobility. It is thus a major impediment in enabling the poor to escape the poverty trap. The privileged classes, by virtue of their land ownership, control over rural markets and social position, have also acquired a quasi-monopoly on the levers of political power and, thereby, managed to continuously reinforce their privileged position.

This study was conceptualized by Pakistan Institute of Labour Education and Research (PILER) in the last quarter of 2011, a period when the impacts of 2010 and 2011 floods exposed the extreme marginalization of the rural, landless populace. Of the 20 million internally displaced people, the majority were agricultural workers -- tenants, share-croppers and manual labour. Landless and asset less, the overwhelming majority of the flood affected people belonged to the settlements and villages located in the floodplain or katcha areas.

The study sought to understand the emerging patterns of the land tenure system in the provinces and its impact on the changing dynamics of power in the rural society. The main objective was to push for an informed debate on land reforms and explore options -- including that of equitable distribution of land among landless - for policy advocacy for socio-economic well being of the marginalized section of society.

The field survey, undertaken between January to July 2012, was designed to cover eight flood affected districts in the four provinces- Thatta, Badin and Shikarpur in Sindh, Muzaffargarh and Bahawalpur in Punjab, Charsadda and Swat in Khyber Pakhtunkwa, and Jaffarabad in Balochistan. The survey in the two Khyber-Pakhtunkhwa districts could not be conducted on account of adverse security situation and refusal of military authorities to grant permission. In each of the six districts, 100 households were surveyed and one male and one female member were interviewed, yielding 1,200 filled-in survey forms. Equal number of female respondents was included to capture women's views particularly on gender empowerment indicators. The statistical analysis of the data took considerable time and the report was written and finalized in mid-2014.

Karamat Ali
Executive Director
PILER

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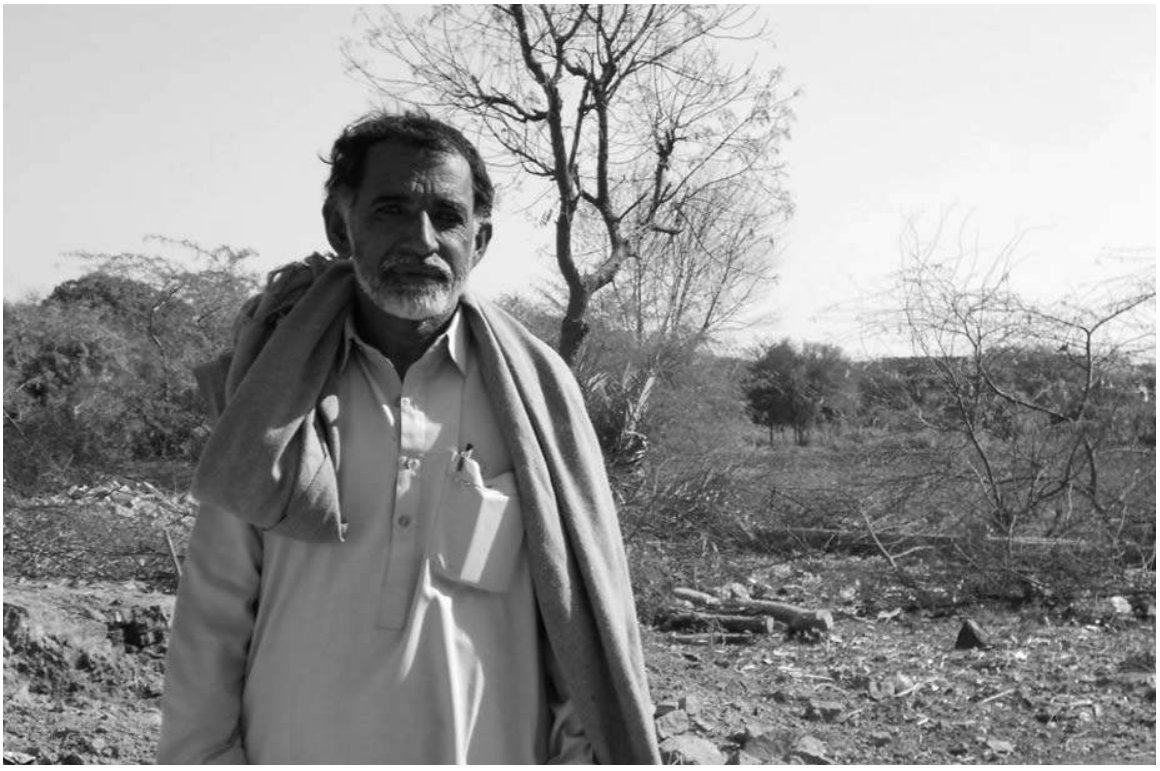
This study attempts to document the land tenure patterns as they currently exist in different provinces It also records the disparity in incomes, food consumption, and housing quality; impact of floods; indebtedness; and treatment of women in different categories of landowning and non-landowning classes.

INTRODUCTION

The great floods of 2010 affected all four provinces of Pakistan and displaced millions of people across the country. The major brunt of the floods was borne by the relatively more vulnerable sections of the population and the mass dislocation of families exposed the vastly differential impact of the floods on different income segments. In terms of housing and household assets, including live-stock, large landlords suffered the least as their houses were generally located on high ground and which remained somewhat safe from flood waters. Small farmers, tenants, and landless labour suffered the most, as their houses were generally located on low-lying marginal lands and which were swept away by raging flood waters.

The mass movement of affected population also highlighted extensive poverty among the vast majority of them. And a key contributing factor appears to be the skewed landholding, i.e., concentration of land in the hands of the few and landlessness among the majority. Notably, a com-mon refrain by more than half the internally displaced persons in relief



camps was: "… we do not want to go back to our village … there is nothing left for us there, except our debt …".

Land reforms occupied a prime place in the political debate and in election manifestoes of political parties till the 1970s. The military regime of General Zia-ul-Haq, which ruled the country for most of the 1980s, reversed the land reforms of the 1970s and had the military installed Shariat Appellate Bench of the Supreme Court declare land reforms as un-Islamic in 1989.

The upheaval caused by the floods has rekindled the land reform debate. However, considerable water has flown under the bridge over the last quarter of a century and the land tenure regime in different parts of the country is suspected to have acquired different forms. Empirical knowledge regarding these changes is not available and several political platforms relating to the land reform issue are being based on parameters that were relevant in the past, some as far back as half a century old!

This study attempts to document the land tenure patterns as they currently exist in different provinces[1]. It also records the disparity in incomes, food consumption, and housing quality; impact of floods; indebtedness; and treatment of women in different categories of landowning and non-landowning classes. The inferences are preliminary and there is need for more in-depth research. However, the conclusions are intended to guide the political debate regarding land issues towards more nuanced directions.

The analysis shows a highly skewed concentration of land and concomitant social inequality and concentration of political power. The districts are underdeveloped, over two-thirds of the population are poverty stricken, over half the population are bereft of education and over half the children are out of school. On the other hand, the elite lead 'first world' lifestyles, have multiple houses - on their lands, in provincial and federal capitals, and some abroad as well. Their children have studied or are studying in elite English medium schools and/or in universities abroad. And so on.

The unequal distribution of assets ensures the economic dominance of the feudal-tribal class and the socio-political order continuously reinforces their power over the people. Members of feudal-tribal families are or have been leading office-bearers in all political parties and/or members of national and/or provincial legislatures, and/or ministers or advisors in the government. The feudal-tribal chieftains enjoy de facto judicial powers and preside over jirgas and pass judgments on disputes

between members of the tribe. Customary law prevails and honour killings of women, sometimes sanctioned by a jirga, are not exceptional occurrences.

Prior to the establishment of the district government system in 2002, the Commissionerate system ensured that there was a countervailing administrative and judicial locus of power in relation to the political power of the feudal-tribal elite. Of course, the elite enjoyed significant influence over the district administration; nevertheless, the latter did exert a degree of check on arbitrary action on the part of the sardars, waderas, chaudhrys and khans.

The system introduced in 2002 concentrated administrative, judicial, and political authority and provided the feudal-tribal chieftains unchecked monopoly of power vis-à-vis the people at large. Effectively, the administrative and judicial structure of government became formally subservient to the political class in the district. Whether the new local government law introduced post-2008 manages to rein in the power and influence of the feudal-tribal class remains to be seen.

Sample Survey

The present study defines large, medium and small landowners as follows: land holdings of less than 16 acres are defined as small farms, holdings of 16-49 acres are defined as medium sized farms, and holdings of 50 or more acres are defined as large farms.

The survey was planned for all four provinces; however, it could not be carried out in Khyber-Pakhtunkhwa for security reasons. The 3-province sample was distributed over 6 districts and 54 villages as follows:

Province	No. of Districts	No. of Union Councils	No. of villages
Sindh	**3**	**9**	**21**
Balochistan	**1**	**2**	**7**
South Punjab	**2**	**6**	**18**

Spatially, the worst affected province was Sindh. As such, three districts have been selected from Sindh and include Shikarpur in the north, Dadu in the centre and Thatta in the south. Shikarpur and Dadu are on the right bank of the Indus and were the wrost affected. Thatta is on the left bank. South Punjab was severely affected, as along with floods coming down the Indus, there were torrential rains in Dera Ghazi Khan and Rajanpur hills, which added 239,600 cusecs of water to the flooded Indus. Both banks of the Indus were affected and Muzzafargarh on the right bank and Rahimyar Khan on the left bank have been selected for the survey. The

flood waters moved from Sindh towards Balochistan and flooded Nasirabad Division, including Jaffarabad, which has been selected for the survey.

Higher numbers of villages have been surveyed in Dadu, as village size in terms of number of households is smaller and they are more widely scattered. Relatively fewer villages have been surveyed as Jaffarabad, with relatively higher population density and the entire sample could be covered in the 7 villages. Higher numbers of villages had to be surveyed in Rahimyar Khan as sufficient numbers of respondents could not be identified in most of the villages surveyed.

The selection of villages was purposive, the criteria being that there are at least 100 families resident therein and the majority of them are engaged in farming. Agreement of the village elders for the survey to be conducted emerged as a de facto criterion in village selection. A total of 100 farming families in 6 to 8 villages in three Union Councils in each district and about 5-15 families in each village were interviewed. One large landowner was also interviewed in each district, and who was purposively selected. The total sample comprised 600 farming families: large, medium and small landowners, and tenants/sharecroppers. Landless labourers, without access to land, have not been included.

Field work was difficult owning to a host of logistical and security problems, particularly in Sindh and Balochistan. Generally, there are no hotels in the small towns in the farm area. There is no hotel or guest house in Shikarpur; as such, the team had to stay in Sukkur and commute almost 100 kilometers everyday to the survey area. In Muzaffarabad, the team stayed in Multan and commuted about 70 kilometers everyday to the survey area. In Jafferabad, the team stayed in the office of the collaborating NGO in Usta Mohammed and commuted about 45 kilometers everyday to the survey area. In Rahimyar Khan too, the team resided in the office of a local NGO. In Dadu and Thatta, the team resided in private guesthouses.

The hired transport lacked air conditioning and was rickety, which made the journey uncomfortable and exhausting. In south Punjab, the main highways are in very good condition and district roads in reasonable condition. In Sindh and Balochistan, though, the highways are in poor condition and the state of district roads worse still. Once off the highway, the roads were either severely pot-holed or the black top had completely disappeared and were covered with mud and slush. Flood water was still standing on either side of the roads, which were difficult to negotiate and much time was spent on the road, rather than in the villages. Average travelling speed was 20 kilometers an hour. ■

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Field investigation, however, shows that land ownership is concentrated in a few extended families and many of the farms reported in size bracket 50-149 acres are owned, de facto, by one of these upper end families. Actual average farm size for these families, in terms of ownership and control, is estimated at between 3,000 to 10,000 acres.

CASE OF SINDH

Introduction

Sindh is the second most populous province of Pakistan. Situated in the south-east of the country, it spans an area of 140,914 square kilometers. Its population is estimated at over 40 million, which accounts for 23% of the population of the country. There are 23 districts; all of which, except Karachi and Hyderabad, are primarily agricultural. It is, after Punjab, the major producer of agricultural products: food and cash crops, fruits and vegetables.

Sindh was inundated by 2010 floods in the River Indus, with peak discharges of 1.1 million at Guddu and Sukkur Barrages. A major breach occurred at Tori on August 6, 2010 and which inundated a vast area on the right bank of the Indus. Further south, discharge of 965,000 cusecs was recorded at Kotri Barrage, which caused a breach on the left bank of the Indus on August 27, 2010. The floods inundated 11,988 villages in 17 districts and caused 411 deaths and 1,235 injuries. It damaged or destroyed 879,978 houses, 1.043,500 hectares of cropped area, 6,990 water courses and 8,467 kms of road. Over 7 million people were uprooted, most of whom were associated with agriculture. The mass displacement brought to the fore serious problems of land tenure, land inequality, indebtedness and poverty. Shikarpur and Dadu on the right bank and Thatta on the left bank were among the affected districts.

This chapter covers three districts - Shikarpur in the north, Dadu in the centre, and Thatta in the south. The study is restricted to examining issues of ownership and access in the flood affected districts and does not deal with the subject of landless labour. As such, the sample on which this analysis is based includes large, medium and small landowners, and tenants. Leasing is very limited in Sindh and only one case of a landowner leasing neighbouring lands was found in the sample. Lessees are, such, not included in the analysis for Sindh.

DISTRICT PROFILES

Shikarpur

District Shikarpur covers an area of about 2,500 square kilometers and is bounded by Larkana, Jacobabad, Sukkur and Khairpur districts. It consists of four talukas: Shikarpur, Lakhi, Garhi Yaseen and Khanpur. The district's population was recorded at 880,000 in 1998 and, at the average annual 1981-1998 inter-censal growth rate of 2.3%, is now estimated at over 1.2 million, with 80% of the population residing in rural areas. Average household size is 6.4. Shikarpur is the district headquarters, with the current population estimated at 150,000-250,000.

The river Indus forms part of the eastern boundary and canals taking off from the Guddu and Sukkur barrages irrigate the district, rendering the land fertile. Rice is the principal crop, along with wheat, pulses and onions. Agriculture is the mainstay of the rural population, with 64% of the population engaged in agriculture. Rice husking is the major industry and 8% of the district's employed population is engaged in industry.

The district is relatively developed; ranking 4th out of 23 districts on the development scale[1]. However, asset and income inequality is high and poverty rampant. An indication of the extent of rural poverty is provided by housing conditions: a mere two-thirds of one percent of rural houses have RCC roofs and only one-third have brick walls[2]. The overall literacy rate is just 47%, with rural literacy rate at 41% and rural female literacy rate at 21%. In other words, more than half the population, 60% of the rural population and 80% of rural women is illiterate (PSLM 2013). The male-female sex ratio is 108, indicating high female mortality.

The social structure of Shikarpur is tribal and the major tribes/castes[3] are (in alphabetical order) Bhayo, Brohi, Essani, Gabol, Jatoi, Jhakrani, Kambrani, Khoso, Mahar, Marfani, Pahore, Pathan, Pitafi, Qambrani, Sheikh, Shar, Soomro and Tunio. A tribal chieftain is called sardar, which is a hereditary position.

Dadu

District Dadu covers an area of about 19,000 square kilometers and is bounded by the Kirthar hill range in the west and the River Indus in the east. It consists of 4 talukas: Dadu, Mehar, Khairpur Nathan Shah and Johi. The Kirthar range divides the provinces of Sindh and Balochistan, where Dadu borders Khuzdar and Lasbela districts of Balochistan. To the north lies Larkana district and to the south-west and south-east are Karachi and Thatta. Across the river are the districts of Naushero Feroze,

Shaheed Benazirabad and Hyderabad.

The district's population was recorded at 1.7 million in 1998 and, at the average annual 1981-1998 inter-censal growth rate of 2.65%, is now estimated at over 2.5 million, with nearly 80% of the population residing in rural areas. Average household size is 5.5. Dadu town is the district headquarters, with the current population estimated at 250,000-350,000.

The district is irrigated by canals taking off from the Sukkur Barrage and partly by the Kotri Barrage. The two main canals are the Rice Canal and the Dadu Canal. A large part of the district is in the flood plains and is irrigated by tube-wells. Rice, sugarcane and wheat are the principal crops Agriculture is the mainstay of the rural population, with 60% of the population engaged in agriculture. Rice husking, sugar and cement are some of the medium-scale industries and 4% of the population is employed in industry.

The district is relatively developed; ranking 8th out of 23 districts on the development scale[4]. However, asset and income inequality is high and poverty rampant. Housing conditions provide an indication of the extent of poverty. None of the rural houses have RCC roof and about half the houses have brick walls. In other words, half of rural houses have thatched walls. It ranks relatively well in terms of literacy, though. Overall literacy rate is 62%, rural literacy rate is 58% and rural female literacy rate is 36%. In other words, over one-third of the population, 40% of the rural population and nearly two-thirds of rural women is illiterate (PSLM 2013). The male-female sex ratio is 108, indicating high female mortality.

The social structure of Dadu is tribal and the major tribes/castes are (in alphabetical order) Gabol, Jamali, Khosa, Lohana, Lund, Panhwar, Qazi, Qureshi, Sanatis, Shaikh, Siddiqui and Solangi. A tribal chieftain is called a sardar and a large landowner a wadera. Both are hereditary positions.

Thatta

District Thatta[5] covers an area of over 17,500 square kilometers and is bounded by Karachi, Hyderabad and Badin districts. To the south is the Arabian Sea. The River Indus traverses the district north to south and forms the delta at its mouth. The district has a varied topography: the north-western part is hilly and the southern part is sandy wastes, intersected by seasonal streams that carry hill torrents into the River Indus. The delta covers an area of 8,000 square kilometers and runs along the coast line for 200 kilometers. The southern part of the district, including the delta, has suffered from severe ecological degradation on account of

sea intrusion caused by rising sea levels and reduced river flows in the river Indus.

The district's population was recorded at 1.1 million in 1998 and, at the average annual 1981-1998 inter-censal growth rate of 2.26%, is now estimated at over 1.6 million, with 90% of the population residing in rural areas. Average household size is 5.1. Thatta is the district headquarters, with the current population estimated at 50,000-150,000.

On account of the nature of the topography and ecological degradation, the district does not classify as agriculturally rich. Where agriculture is carried out, the major crops are rice, wheat and sugarcane. Among minor crops, onions and bananas are the major produce. Despite ecological issues impacting on agriculture, farming and livestock continues to be the mainstay of the population, with 67% of the rural population engaged in agricultural occupations. Employment in industry is negligible.

The district is underdeveloped, economically and socially; ranking 22nd out of 23 districts on the development scale[6]. However, asset and income inequality is high and poverty is rampant. Overall literacy rate is a just 36%, rural literacy rate is 32% and rural female literacy rate is a mere 19%. In other words, nearly two-thirds of the population, two-thirds of the rural population and 80% of rural women is illiterate (PSLM 2013). The male-female sex ratio is 112.5, indicating high female mortality even by Sindh's standards. Housing conditions are mixed: 13% of rural houses have RCC roof, which is fairly high by rural Sindh standard; however, 74% of houses have thatched walls.

The social structure of Thatta is, despite its proximity to the cosmopolitan metropolis of Karachi, very traditional and the major castes are (in alpha-

A portrait of poverty?

Cases of extremely high consumption of tea and ghutka[7] are found to be pervasive in Thatta. And entire families — men, women, old, young, and including children - appear to be afflicted, particularly to addiction to ghutka. Almost the entire population appears to have stained teeth, many with visible gum disease.

Prima facie, there appears to be ignorance to the harmful health effects of excessive tea intake and ghutka chewing. The latter is particularly damaging. However, these practices can be traced to poverty. One response to excessive tea drinking was that a cup of tea costs Rs. 2, which kills hunger and saves Rs. 20 on a meal. It is likely that ghutka too serves the same purpose.

betical order) Rind, Lashari, Mekrani, Brohi, Chandio, Jat, Burfat, Chang, Jhakra, Palara, Sheikh, Qureshi, Gada, Khashkeli, Ghandra, and Macchi. A large landowner is called a wadera, which is a hereditary position.

A more recent phenomenon in Thatta is acquisition of large tracts of land by non-residents, but with ownership registered under different names, usually tenants. These are usually new tenants, loyalists of the new landowners, installed after the old tenants or small and medium sized landowners have been expelled. As such, a new breed of landowners has emerged, that are urban based but operating in as feudal a manner as the traditional feudal. The fact that over 85% of tenants are reporting acquiring tenancy within the last 10 years, and over 40% in the last 5 years, testifies to this trend.

PROFILE OF LAND TENURE

Land ownership in Sindh is highly uneven, as indicated by data for the three sample districts. According to the Agriculture Census 2010[8], there are 32,718 farms in Shikarpur, 57,000 farms in Dadu and 42,949 farms in Thatta. At one end, 69% to 91% of farms are in the size category 12.5 acres or less: 69% in Thatta and 91% in Dadu. Average farm size in this category is less than 5 acres, with average farm size in Shikarpur reported at less than 4 acres; indicating subsistence farming for a vast majority of the rural population. The distribution of subsistence farms sized 5 acres and less is indicative of the extent of land inequality. The percentage of small farmers with percentage of land owned is as follows. In Shikarpur: 86% of small farmers own 44% of land: in Dadu, 91% of small farmers own 71% of land,; and in Thatta, 69% of small farmers own 24% of land.

There are 5 landowners in Shikarpur in the 150 acre-plus category and only one in Dadu; however, Thatta has 234 landowners in this category. Average farm size in this category ranges from 222 acres in Thatta and 246

Table SD-1: Profile of Land Holdings in Shikarpur

Size Bracket (in acres)	No. of Farms	Share (%)	Area (in acres)	Share (%)	Average farm size (in acres)
12.5 or less	**28,101**	**85.9**	**108,004**	**43.9**	**3.8**
12.5-49	**3,958**	**12.1**	**96,493**	**39.2**	**24.4**
50-149	**654**	**2**	**39,703**	**16.1**	**60.7**
150 or more	**5**	**0.015**	**1,750**	**0.7**	**350**
Total	**32,718**	**100**	**245,950**	**100**	**7.5**

Source: Government of Pakistan, Agriculture Census 2010

Table SD-2: Profile of Land Holdings in Dadu

Size Bracket (in acres)	No. of Farms	Share (%)	Area (in acres)	Share (%)	Average farm size (in acres)
12.5 or less	**52,434**	**91.3**	**254,969**	**70.5**	**4.9**
12.5-49	**4,772**	**8.3**	**93,875**	**26.0**	**19.7**
50-149	**193**	**0.3**	**12,661**	**3.5**	**65.6**
150 or more	**0.007**	**0.1**	**246**	**0.07**	**246.0**
Total	**57,400**	**100.0**	**361,751**	**100.0**	**6.3**

Source: Government of Pakistan, Agriculture Census 2010

Table SD-3: Profile of Land Holdings in Thatta

Size Bracket (in acres)	No. of Farms	Share (%)	Area (in acres)	Share (%)	Average farm size (in acres)
12.5 or less	**29,549**	**68.8**	**137,527**	**24.1**	**4.7**
12.5-49	**11,840**	**27.6**	**285,478**	**50.0**	**24.1**
50-149	**1326**	**3.1**	**95,607**	**16.8**	**72.1**
150 or more	**234**	**0.5**	**52,018**	**9.1**	**222.2**
Total	**42,949**	**100.0**	**570,630**	**100.0**	**13.3**

Source: Government of Pakistan, Agriculture Census 2010

acres in Dadu to 350 acres in Shikarpur. [See Tables SD-1, SD-2, SD-3]. Field investigation, however, shows that land ownership is concentrated in a few extended families and many of the farms reported in size bracket 50-149 acres are owned, de facto, by one of these upper end families. Actual average farm size for these families, in terms of ownership and control, is estimated at between 3,000 to 10,000 acres.

Typical Village Profile

The typical villages surveyed are located 10 to 40 kilometers from the district headquarter city and comprises of about 250-400 families, with a population of about 1,500-3,000. It is dominated by one or two families, as in Shikarpur, or by about half a dozen families, as in Thatta. These families together own between 3,000-10,000 acres of land. There are a handful of small farmers, with a majority of them owing less than 5 acres of land. Some of them are also engaged in small scale businesses. Over three-fourths of the villagers are tenants working on the landlords' lands, sharing the produce on 50:50 basis; with the landlord deducting 50% of the input cost and a portion of the unwritten loan and interest owed to them. Some of the tenants also run small scale business in the form of village shops and tea stalls and nearly all tenant families — men, women and children - also engage in wage labour. Some women from small farmer and tenant families are engaged in making traditional bed covers, caps and dresses.

The village is registered with the government; however, the villagers reside in the village by virtue of the goodwill of the big landlords. Some of the tenants dwell on the landlords lands. The villagers dwell in mud houses and wooden shacks. The state of hygiene is appalling. It has a post office and a boy's primary school, but none for girls. About half the children, including girls, go to the village madrassah. However, despite being a weekday and late morning hours, the school is deserted. The village has electricity, but does not have piped water supply, drainage or sewage disposal, or any medical facility. One-third of the men and one tenth of the women are literate. Malaria, diarrhea, hepatitis C and respiratory illnesses are frequently mentioned as diseases afflicting the villagers. Skin diseases and malnutrition, especially among women and children, is visible.

A large part of the village was inundated by floods in 2010 and the damage caused is visible. The entire village population had left for government camps, along with their cattle, prior to the arrival of the floods; except for a handful of men who stayed behind to guard their houses from subsequent occupation by land grabbers and were provided food aid via helicopter drops. The village population has since returned and has rebuilt their mud houses. However, the state of hygiene is appalling. A local NGO, with its office in the autaq of the local landlord, has built a few 2-room houses, which are too small to place more than one charpoy; as such, they are used for storage purposes.

Fear and Violence

Fear is pervasive everywhere, particularly in upper Sindh. In one village, some of the women repeatedly said: hamara zamindar zalim nahi hai (our landlord is not a tyrant); which was unwarranted, as no questions about landlord oppression had been asked. One woman attempted to express an opinion, but was hushed up by others. In another village, male enumerators were not allowed to go beyond the autaq of the landowner and tenants were brought to the autaq to be interviewed in the presence of the landlord's men. Female enumerators were escorted to the village for interviewing women, but the landlord's male escort remained present. The female respondents glanced at the men before responding to every question. Where enumerators managed to evade the escorts and speak with the villagers directly, their responses changed; but the fear was visible.

The male escort frequently slapped the children who gathered around the team, asking them to go away; perhaps, as a way of asserting his authority. In one case, when a female enumerator entered a house to talk to women away from the presence of the escort, he called his men, hanging around at some distance, to bring an axe! Men dominate every aspect of women's lives and they are not allowed to leave the village unaccompanied by a male or to use cell phones. Women vote as per instructions from their men folk and men vote as per instructions from the landlords.

Personal insecurity is compounded by inter-tribal conflict. Customary law no longer holds moral legitimacy with respect to maintaining equilibrium between the tribes/castes. Traditional rivalry in upper Sindh has escalated into active conflict and land grabbing is prevalent on a large scale; with government (mostly, forest) land as well as private land forcibly occupied as a matter of routine. All sardars have at their command armed gangs, which are organized and armed enough to be referred to as tribal militias. These gangs are used to guard against occupation of their lands and of their tribesmen, stealing of crops and livestock, or kidnapping for ransom - including of women as a way of dishonoring the other side - and also used to mete out similar treatment to rival tribes. The intensity of land disputes has turned the area into a 'war zone', with land under the control of one tribe being a 'no-go' area for members of rival tribes. Normal life is paralyzed, with most of the schools and health care centres rendered dysfunctional. The writ of the State is virtually non-existent.

According to villagers, the sardars keep conflicts between the tribes alive, so as to maintain their dominance over their tribe by portraying themselves as their protectors. Small and medium sized landowners (zamindars), tenants/sharecroppers (haris), and landless peasants (mazdoors) are 'obliged' to remain under the protection of their sardar and suffer their oppression in return. Some of the major conflicts of Shikarpur are Jatoi-Mahar conflict, Brohi-Bhai-Marfani triangular conflict, Jafri-Marfani conflict, and Pathan-Jakhrani conflict. Hundreds of lives have been lost in these conflicts.

The breakdown of the writ of the State and 'warfare' between the tribes has also opened up avenues for criminal gangs and serious crime is rampant. Crimes include highway hold-ups, armed robberies, kidnapping for ransom, kidnapping of women, and murder. Most of the criminal gangs are said to operate under the protection of one sardar/wadera or another.

Threats to the Survey Team

When the survey team arrived in Thatta and was in the process of finalizing the logistical arrangements for the survey, a local resident arrived and offered to help with the survey. He was informed that the arrangement had been made and the team did not feel the need for additional assistance and further that there was no provision in the budget for any additional assistance. He, however, said that he was a member of a (nationalist) party and wished to help the people and that he was not asking for any remuneration. As such, he was allowed to accompany the team during the survey.

Upon completion of the survey, however, he demanded payment - and an exorbitant amount - for his services. Reminders that he was informed that there could be no payment did not move him and he began to level threats.

Since the survey had been completed, the team decided to leave for Karachi immediately and checked out of the guest house. Within half an hour of the team's departure, the guest house receptionist telephoned to say that the said individual had arrived with 6-8 armed men and demanded to know their whereabouts. However, the team had covered a safe distance and returned to the PILER office. Threatening text messages kept coming for some time, though.

Data Analysis

Land distribution in Sindh is highly skewed; with 76% of rural families[9] being landless, working on land owned by a large landowner as tenants. Among the 24% who own land, one percent own holdings of 50 acres or more and the rest own less than 50 acres each. [See Tables SD-4 and SD-5] The latter include:

- Medium farmers, of whom two-thirds own 16-25 acres and one-third own 26-49 acres
- Small farmers, of whom 54% own holdings of less than 5 acres and 46% own 5-15 acres
- Tenants, of whom 43% cultivate plots of less than 5 acres and 55% cultivate plots of 5-15 acres. A small percentage (2%) of tenants cultivate

Table SD-4: Distribution of Sample Respondents by Land Size category

Land size category	Number	Percentage
Large farmer	4	1.3
Medium farmer	10	3.3
Small farmer	58	19.3
Tenant / Sharecropper	228	76.1
Overall	300	100

Source: PILER Survey

Table SD-5: Distribution of Sample Respondents by Land Size (%)

Land Size	Land size (acres)				
Category	Less than 5	5 - 15	16 - 24	25 - 49	50 or more
Large farmer	0	0	0	0	100.0
Medium farmer	0	0	66.7	33.3	0
Small farmer	54.4	45.6	0	0	0
Tenant/Sharecropper	42.5	55.3	2.2	0	0
Overall	42.8	50.9	3.9	1.1	1.3

Source: PILER Survey

plots of 16-24 acres.

Large owner profile

There was only one large landowner each in the areas surveyed. The particular respondents reported owning 50 acres of land. However, information gathered from other sources revealed that the immediate extended families as a whole own/control over 3,000-10,000 acres each. All of the land in Shikarpur, over 80% in Dadu and 70% in Thatta is inherited and the rest purchased in more recent years.

Income and Expenditure

All large farmers are in the Rs. 100,000 and above monthly income bracket, 89% of medium farmers are in the income brackets below Rs. 100,000, 91% of small farmers are in the income brackets below Rs. 50,000, and 94% of tenants are in the income brackets below Rs. 30,000. [see Table SD-6]. Average monthly income for large farmers is reported at Rs. 1,038,000, while the mean income for the sample as a whole is 30-fold lower at Rs. 34,180 or a mere 3% [see Table SD-7].

Table SD-6: Distribution by Monthly Income (%)

Land tenure category	Income Group					
	10,000 or less	10,001 -20,000	20,001 -30,000	30,001 -50,000	50,001 -100,000	More than 100,000
Large farmer	**0**	**0**	**00**	**0**	**100.0**	
Medium farmer	**0**	**0**	**11.1**	**0**	**77.8**	**11.1**
Small farmer	**10.5**	**42.1**	**8.829.8**	**8.8**	**0**	
Tenant/Sharecropper	**11.8**	**56.6**	**25.9**	**5.7**	**0**	**0**
Overall	**11.0**	**51.0**	**21.8**	**10.1**	**4.3**	**1.7**

Source: PILER Survey

Table SD-7: Average Household Monthly Income and Expenditures (Rs.)

	Average Income	Average Expenditure	Per capita food expenditure
Large farmer	**1,038,000**	**385,250**	**6,712**
Medium farmer	**68,306**	**59,750**	**1,716**
Small farmer	**25,864**	**25,827**	**1,314**
Tenant/Sharecropper	**17,661**	**17,799**	**1,025**
Overall	**34,180**	**25,510**	**1,178**

Source: PILER Survey

Large farmers accrue 44% of their income from agriculture and livestock produce sales and 24% from salaried employment and business profits each. [see Table SD-8]. The fact that income from agricultural sources account for less than half of total income of large farmers raises questions of direct landowner interest in productivity and growth of agriculture.

Table SD-8: Sources of Income

Land tenure Category	Agriculture	Livestock Breeding & Milk Sales	Salary Wages	Business /Profits	BISP	Remittances	Others
Large farmer	**36.8**	**7.0**	**23.6**	**24.1**	**0**	**0**	**8.5**
Medium farmer	**65.1**	**9.3**	**10.9**	**9.2**	**0.5**	**0**	**5.0**
Small farmer	**56.4**	**8.5**	**19.9**	**4.5**	**1.7**	**2**	**6.9**
Tenant/Sharecropper	**54.2**	**9.2**	**23.0**	**3.2**	**3.1**	**0**	**7.1**
Overall	**54.8**	**9.0**	**22.2**	**3.9**	**2.7**	**0.4**	**7.0**

Source: PILER Survey

Table SD-9: Distribution by Monthly Expenditure (%)						
Land tenure category	Income Group					
	10,000 or less	10,001 -20,000	20,001 -30,000	30,001 -50,000	50,001 -100,000	More than 100,000
Large farmer	**0**	**0**	**00**	**0**	**100.0**	
Medium farmer	**0**	**0**	**11.1**	**22.2**	**55.5**	**11.1**
Small farmer	**7.0**	**45.6**	**8.829.8**	**8.8**	**0**	
Tenant/Sharecropper	**11.4**	**54.8**	**28.1**	**7.7**	**0**	**0**
Overall	**10.0**	**50.5**	**23.4**	**12.3**	**3.5**	**1.7**

Source: PILER Survey

The distribution of expenditure is similar to that of income [see Table SD-9]. The skewness of income between the large landowner and the rest of the farming community is underlined by the expenditure profile. While large owners spend an average of Rs. 385,250 per month, mean monthly expenditure for the sample as a whole is Rs. 25,510 - a 15-fold difference [see Table SD-9].

The perceived theory of expenditure indicates that families allocate their income first to essential needs and subsequently to comforts and to luxuries. The first call on essential expenditures is food. Hence, families with low incomes devote a greater share of their income to food and less to other items. Correspondingly, families with high incomes have income available for other expenditures after meeting food needs. As

Table SD-10: Distribution of Household Expenditure by Land Tenure Category (%)					
Expenditure Type	Large farmer	Medium farmer	Small farmer	Tenant/ Sharecropper	Overall
Food	**15.9**	**29.4**	**43.6**	**49.9**	**47.6**
Clothing	**4.8**	**4.2**	**3.4**	**3.5**	**3.5**
Education	**15.1**	**9.6**	**2.7**	**2.3**	**2.8**
Health	**7.6**	**9.6**	**11.3**	**12.9**	**12.4**
Electricity	**3.7**	**2.8**	**2.7**	**2.8**	**2.8**
Cooking fuel	**1.6**	**2.0**	**2.2**	**2.5**	**2.4**
Telephone	**9.4**	**8.0**	**8.6**	**6.3**	**6.8**
Conveyance	**21.7**	**18.7**	**12.2**	**9.1**	**10.2**
Addiction	**3.4**	**2.9**	**4.3**	**5.3**	**5.0**
Others	**16.8**	**12.8**	**9.0**	**5.4**	**6.5**

Source: PILER Survey

such, the share of their food expenditures is low. Herewith, the skewness in expenditure can be seen from the fact that large owners devote 16% of their expenditure to food, as against 48% for the sample as a whole. Per capita[10] food expenditure for large owners is Rs. 6,712, as compared to Rs. 1,178 for the sample as a whole - a 6-fold difference.

Large landowners also devote 15% of their expenditure on education, ostensibly on account of private education for their children, and 22% on transportation, ostensibly again on account of multiple private vehicle ownership. The corresponding shares for the sample as a whole are 3% and 10%, respectively. [see Table SD-10].

Table SD-11: Quality of Housing and Utilities (%)

Type	Large farmer	Medium farmer	Small farmer	Tenant/ Sharecropper	Overall
Roof					
Cemented	**100.0**	**66.7**	**35.1**	**18.9**	**24.7**
Thatched/Mud	**0**	**33.3**	**64.9**	**81.1**	**75.3**
Walls					
Brick	**100.0**	**100.0**	**45.6**	**19.7**	**28.4**
Thatched/Mud	**0**	**0**	**54.4**	**80.3**	**71.6**
Floor					
Cemented/Tiled	**100.0**	**100.0**	**35.1**	**13.6**	**21.7**
Mud	**0**	**0**	**64.9**	**86.4**	**78.3**
In-house toilet					
Yes	**100.0**	**100.0**	**66.7**	**65.4**	**67.2**
No	**0**	**0**	**33.3**	**34.6**	**32.8**
In-house Water Supply (Hand pump)					
Yes	**100.0**	**88.9**	**63.2**	**75.5**	**73.9**
No	**0**	**11.1**	**36.8**	**24.5**	**26.1**
Electricity					
Yes	**100.0**	**100.0**	**100.0**	**75.0**	**81.0**
No	**0**	**0**	**0**	**25.0**	**19.0**
Cooking Fuel (Wood, coal, gobar)					
Yes	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
No	**0**	**0**	**0**	**0**	**0**

Source: PILER Survey

Housing

Large owners have their houses on their own land and houses in other cities as well as abroad. Their multi-room houses on their lands have concrete roofs, plastered brick walls, and tiled floors. All houses have in-house water supply from hand pump, flush toilet, and electricity. Gas is not available in the areas surveyed and wood, coal or dung is used as fuel for cooking [see Table SD-11].

Medium owner profile

Medium owners are defined in this study as farmers owning between 16 to 49 acres of land and comprise 3% of the sample. [see Table SD4-4]. Two-thirds of medium farmers own 16-24 acres of land and one-third own 25-49 acres. All medium farmers have inherited their land and 22% have purchased additional land.

Income and Expenditure

Over three quarters of medium farmers (78%) are in the Rs. 50,000-100,000 monthly income bracket and 11% each are in the more than Rs. 100,000 and Rs. 20,000-30,000 bracket, respectively [see Table SD-6]. Per household monthly income stands at Rs. 68,306 or Rs. 2,277 per day, compared to Rs. 34,600 per day for large farmers. [see Table SD-7].

Bulk of medium owner income (74%) is obtained from farming and livestock and the remaining income is accrued from a variety of sources: 11% from salaries, 9% from business profits, and half a percent from BISP [see Table SD-8]. That two-thirds of medium owner income is accrued from agricultural sources implies that such farmers treat agriculture as their mainstay and can be assumed to be mindful of enhancing productivity and growth of the sector. Receipts from BISP constitute a very small share of income; however, the fact that medium size landowners in the monthly income range Rs. 20,000-30,000 have been scored as poor is indicative of leakages in the system.

The distribution of expenditure corresponds with that of income [see Table SD-9]. As stated before, a lower share of food expenditure implies that a greater share of income is available for other expenditures. Herewith, medium landowners allocate 29% of their household expenditure to food, compared to 16% in the case of large landowners and 44% in the case of small farmers.

The differential level of economic stress is confirmed by the inverse relationship between share of food expenditure and per capita food expenditure. Medium farmers spend Rs, 1,716 per household member per month on food, which is one-quarter of the amount spent by large farm-

ers, 30% higher than the amount spent by small farmers and 67% higher than the amount spent by tenants [see Table SD-9-10].

Consequent to the differential share of food expenditure, medium landowners are enabled to allocate up to 10% of their total monthly expenditure to education, compared to 15% by large farmers and 3% by small farmers. The case of health expenditure, as a percentage of total monthly expenditure, is the reverse; medium farmers spend 10% on health compared to 8% by large farmers.

Housing

Medium farmers have their houses on their own land and housing conditions are relatively reasonable. About 67% of medium farmer houses have cemented roofs, while 33% have roofs made of iron and bamboo frame and covered with thatch and mud. The walls are of brick and floor paved in all cases. All houses have electricity and 89% have in-house water supply from hand-pumps and all houses have toilets in-house. All houses use wood, coal and dung for cooking. [see Table SD-11].

Small owner profile

Small owners are defined in this study as farmers owning less than 16 acres of land and comprise 19% of the sample [see Table SD-4]. Over half of small farmers own less than 5 acres. All small farmers have inherited their land and 16% have purchased additional land.

Income and Expenditure

Over half (53%) of small farmers are in the income brackets below Rs. 20,000, of whom 11% are in the less than Rs. 10,000 bracket. About 39% of small farmers are in the Rs. 20,000-50,000 bracket and 9% are also in the Rs. 50,000-100,000 bracket. There are no small farmers in the greater than Rs. 100,000 income bracket [see Table SD-6]. Average monthly income for small farmers is Rs. 25,864 or Rs. 862 per day, which is 2.5% of large farmer income [see Table SD-7].

Nearly two-thirds of small farmer income (65%) is obtained from farming and livestock and the remaining income is accrued from a variety of sources: 20% from salaries and from wages earned from off-farm labour, 5% from small rural businesses (village shops, tea stalls, etc.), 2% from BISP, and 2% from remittances from family members working in Karachi. [see Table SD-8]. Receipts from BISP are assured on a regular basis and constitute an important addition to household income; with families earmarking certain expenditures to be met out of the receipt.

The distribution of expenditure corresponds with that of income [see

Table SD-9]. As stated earlier, the composition of expenditure, particularly the share of expenditure on food, throws light on relative economic stress facing different income groups. Herewith, small farmers devote almost half (44%) of their total expenditure to food, compared to large and medium farmers who spend 16% and 29%, respectively. [see Table SD-10].

Consequent to the large share of food expenditure, small farmers are enabled to allocate a mere 3% of their total monthly expenditure to education, compared to 15% and 10% by large and medium farmers, respectively. The case of health expenditure is the reverse. Small farmers spend 11% of their expenditure on health care, compared to 8% and 10% by large and medium farmers, respectively. The higher share of health care expenditure by small farmers is indicative of the greater burden of health care expenditures on families in lower income brackets in the absence of a credible preventive and curative public health care system.

The differential level of economic stress is confirmed by the inverse relationship between share of food expenditure and per capita food expenditure. While large landowners spend the least on food in terms of share of expenditure, their food expenditure per capita[11] is significantly higher at Rs. 6,712, compared to Rs. 1,314 for small farmers. In other words, small farmer per capita food expenditure is about one-fifth of that for large farmers [see Table SD-9].

Housing

Unlike in the case of large and medium landowners, who have their houses on their own land, the case of small farmers is somewhat different. Those owning between 5-15 acres generally live on their own land; however, those owning less than 5 acres live in government villages that are registered in the name of the sardar/wadera. They are, as such, susceptible to eviction by the sardar/wadera at will.

Small farmer housing conditions are poor. Just over one-third (35%) of small farmer houses have cemented roof and paved floor and more than half (54%) have thatched walls. All houses have electricity and use wood, coal or dung for cooking; given that gas is not available in the survey area. Water supply is through in-house hand pumps in 63% of houses and has to be fetched in 37% of houses. About two-thirds of houses have toilet adjacent to the house and the rest use fields [see Table SD-11].

Tenant Profile

Over three-quarters (76%) of rural families in the survey areas are tenants/sharecroppers, working on land belonging to large landowners [see Table SD-4]. The vast bulk of tenants (98%) cultivate small holdings of less than 16 acres, with 43% cultivating less than 5 acres each [see Table SD-5]. A small minority (2%) cultivates holdings of between 16 to 25 acres and represents a class of cultivators who appear to possess some enterprising potential and who are also engaged in small-scale trading, livestock breeding and/or milk sales.

Unlike in the case of landowners - large, medium and small - there appears to be a much greater element of turnover in sharecropping tenures. Cultivating tenures for tenant farmers stand as follows: 12% for over 20 years, 22% for 11-20 years, 37% for 6-10 years, and 29% for less than 5 years. The pattern indicates a serious lack of tenure security for the vast majority of non-landowning families. The higher numbers of tenant farmers with less than 10 years of cultivating tenure (66%) is largely on account of Thatta.

Income and Expenditure

Over two-thirds (68%) of tenant families are in the less than Rs. 20,000 per month income bracket, with 12% earning less than Rs. 10,000 per month. A further 26% are in the Rs. 20,000-30,000 racket and 6% of 'enterprising' tenants are in the Rs. 30,000-50,000 bracket. There are no tenant families in the Rs. 50,000 and above income bracket [see Table SD-6]. Average income per month is Rs. 17,661 or Rs. 589 per day, compared to about Rs. 34,600 per day for large farmers. In other words, tenant income is less than 2% of large farmer income. At the risk of repetition again, it needs to be stressed that income inequality is stark and which is a direct function of equally stark inequality in asset ownership [see Table SD-7].

Farming and livestock and wages are the main source of income [see Table SD-7]. About 63% of the income of tenants is obtained from farming and from renting in livestock and milk sales and nearly one-fourth (23%) is obtained from wages from off-farm labour. Off-farm wages are important supplement to insufficient farm income. About 3% of 'enterprising' tenants obtain their income from small businesses and 3% also receive support from BISP. For tenant families too, receipts from BISP constitute an important regular addition to household income and allow some essential needs to be met.

The distribution of tenant households by expenditure brackets is somewhat similar to the distribution of income [see Table SD-9]. Tenants allo-

cate the highest share of expenditure (50%) to food; indicating the higher economic vulnerability of the non-landowning group relative to those who own land [see Table SD-10]. Per capita food expenditure of sharecroppers is the lowest at Rs. 1,025, which is about one-sixth (15%) of that of large landowners [see Table SD-7]. Consequent to the higher share of food expenditure, sharecroppers are able to devote the least share (2%) to education, but allocate the highest share (13%) to health care. Health care expenditures comprise the second largest (13%) item after food and constitute a major drain on their meager income.

Housing

Less than 5% of tenants possess lease for their houses, while 95% of them have their houses in villages registered in the name of the large landowner (sardar/wadera) or on land belonging to those for whom they are sharecropping. Tenants are, as such, the most vulnerable; as apart from their livelihood, they are also beholden to the landowner for their abode.

Tenant houses are rudimentary, with less than one-fifth (19%) having cemented roofs, one-fifth (20%) having brick walls, and 14% having paved floor. The remaining houses have thatched/mud roofs and walls and unpaved floors. Three-fourths (75%) of houses have electricity and all use wood, coal or dung for cooking. Water supply is through shared hand pumps for 75% of families, while the rest need to fetch water from nearby sources. Over one-third (35%) do not have a toilet in or adjacent to their premises and use the fields [see Table SD-11].

IMPACT OF FLOODS 2010

The 2010 floods caused severe damage to infrastructure in several districts, including Shikarpur, Dadu and Thatta. Large owners suffered extensive and maximum crop losses on account of their large land holdings. However, they suffered no losses to their livestock and minimal losses to their houses or household assets due to the fact that their houses are generally located on higher ground and remained relatively secure from flood waters. Livestock too was moved to higher ground. Total large owner flood losses averaged Rs. 2.3 million; which is less than one-fifth of their annual income [see Table SD-16]. This compares highly favorably with the overall sample, where average flood losses to crops accounted for 123% of average annual income. Large owners received the amount of Rs. 20,000 from the Government initiated Watan Card scheme[12] and also received support to the extent of Rs. 25,000 from one of the NGOs carrying out relief and rehabilitation work in the flood affected areas[13]. Support received by large farmers amounted to a token 2% of their losses [see Table SD-17].

Medium farmers suffered minimal losses to their crops, ostensibly[14] because their land was located such that flood waters by-passed them and spared their crops. Their livestock remained safe for the same reason. Instead, they suffered maximum damage to their household assets [see Table SD-16]. Medium farmers received the amount of Rs. 20,000 from the Government initiated Watan Card scheme and also received support to the extent of Rs. 26,000 from one of the NGOs. Support received by medium farmers amounted to one-fifth of their losses [see Table SD-17].

Table SD-16: Losses and Costs of Flood 2010

Average Losses /Costs	Large farmer	Medium farmer	Small farmer	Tenant/ Sharecropper	Overall
Crops	**1,883,333**	**50,000**	**180,178**	**119,571**	**151,901**
Livestock	**0**	**0**	**110,000**	**46,444**	**56,574**
House	**150,000**	**25,000**	**61,875**	**49,778**	**52,598**
Household assets	**50,000**	**83,750**	**41,000**	**22,207**	**29,526**
Transportation	**96,500**	**50,000**	**11,950**	**26,144**	**25,106**
Medical care	**15,000**	**15,000**	**17,210**	**28,629**	**25,798**
Total	**2,294,833**	**160,000**	**267,720**	**292,773**	**309,583**
Average Annual Income	**12,456,000**	**819,672**	**310,368**	**211,932**	**410,158**
Average Losses /Costs as % of annual inc	**18.4**	**19.5**	**86.3**	**138.1**	**122.7**

Source: PILER Survey

The brunt of losses from floods has been borne by small farmers and tenants, with losses amounting to 86% and 138%, respectively, of their annual income. Small farmers suffered losses to their crops and livestock and maximum losses to their household assets; given that their lands and houses are, in general, are not located on high ground. Crop losses for tenants were lower as half their losses were shared by the landlord. [see Table SD-16].

However, their livestock, house and household asset losses were high and medical costs the highest. Livestock losses for small farmers and tenants were high as transport was not available and costly; reflected in the higher transportation costs for tenants. Transport cost for medium farmers was high as they hired private transport to move to safer places.

Small farmers and tenants received the Rs. 20,000 as part of the Government's Watan Card scheme, including support from NGOs and relatives, friends and neighbours. Some tenants also received token support from their landlords. Support received by small farmers amounted to 27% of their losses. Tenants received support of up to 37% of their losses. It can be said that there was a fair degree of equity in the distribution of support, with the most vulnerable receiving maximum assistance. lack of landlord support for their tenants is noteworthy. [see Table SD-17].

Table SD-17: Post-Flood Support (Average Rs.)

Land tenure Category	Government (Watan Card)	NGO	Landlord	Family, relatives, friends, etc.	Total Receipts	Support as % of Losses
Large farmer	**20,000**	**25,000**	**0**	**0**	**45,000**	**1.6**
Medium farmer	**20,000**	**26,000**	**0**	**0**	**46,000**	**28.8**
Small farmer	**20,000**	**27,556**	**0**	**25,250**	**72,806**	**27.2**
Tenant/						
Sharecropper	**20,000**	**23,929**	**6,500**	**6,071**	**56,500**	**36.8**
Overall	**20,000**	**24,711**	**4,947**	**9,493**	**59,151**	**34.2**

Source: PILER Survey

Social Impact of Floods

The 2010 flood has caused a range of adverse impacts. Even pre-floods, housing consisted of brick, mud and straw shacks. Post floods, housing quality has deteriorated further. And the loss of household assets - clothing, cooking utensils, watches, clocks, radio sets, television sets, bicycles, motor-cycles, jewelry, etc. - has rendered the flood affected households more asset poor than before. Emotional losses cannot be measured. One elderly woman said that her adult son had died of Hepatitis C a few years ago and all she had was his photograph. Now she had lost the photograph to the floods.

However, there appears to be some positive impacts as well. With respect to economic impacts, post-floods bumper crops have accrued higher incomes to farmers - including medium and small - and share-croppers. Landless farm labourers have earned higher incomes from greater work load that larger harvests entailed.

There have been positive social impacts too. Despite the availability

of modern communications, many of the villages had remained locked in time. Most women had never traveled to the nearest city or town, even if it was 20 kilometers away, and had never used a cell phone. The floods forced the population out of their villages and into relief camps, situated in cities - with varying degrees of exposure to the modern world.

More than 100,000 families were located in relief camps and with relatives, friends and acquaintances in the metropolis of Karachi. The relocation disturbed the time-bound social inertia. The families, with their women-folk, were cramped together in close proximity to each other and were forced to develop new kinds of inter-personal and social relationships. The experience exposed the families to an urban environment, and loosened many of the centuries-old norms.

Many of the men felt the freedom from the over-bearing shadow of the sardars and waderas and expressed their desire never to return to their village. "Only our debt is waiting for us there", many of them stated openly. Another often heard comment was "… we have to labour with our sweat there and we will labour here … at least, no one will kick us around here …"

The impact on women was more visible. The camps were visited by government officials and non-government volunteers, many of them women - without a burqa, speaking freely on their cell phones, speaking English, driving their own cars, and so on. For the first time in their lives, the IDP women saw a different world. One particular story signifies the change:

A female medical doctor, volunteering in the camps, was sitting with a middle-aged woman in a tent, when the woman's teenage daughter entered the tent. The mother began to scold the daughter, saying that "… you are roaming around the camp all day, somebody will deem you a kari and kill you …" and the girl replied " … amma, this is the first time I feel free, let me enjoy my freedom …"

Two years on, the change is evident in the villages. Women in villages which were not affected by floods and from where the population did not relocate appeared to be more tradition bound and subdued. They were found to be reticent to talk to men in the PILER team and frequently looked at their men folk before answering any of the questions. By contrast, women in villages that were affected by floods and from where the population had relocated appeared to converse more freely and express their own opinions.

DEBT PROFILE

All landowners and tenants report obtaining a loan. However, access to credit from formal sources is available to landowners only and declines along with land size. Half of large farmers, one-third of medium farmers and 13% of small farmers acquired credit from formal sources. Money lenders are the major source of financing for half of large and medium farmers and one-third of small farmers. Large farmers are the major source (46%) of credit financing for tenants, followed by shopkeepers (30%) and money lenders (17%). Medium and small farmers also access relatives, friends and neighbours in one-sixth and close t0 one-tenth of cases, respectively, for credit. Non-financial organizations, including NGOs, meet financing needs of about 7% of small farmers and tenants. [see Table SD-12]

Table SD-12: Source of Loan (%)

Expenditure Type	Large farmer	Medium farmer	Small farmer	Tenant/ Sharecropper	Overall
Bank/Financial Organization	**50.0**	**33.0**	**13.3**	**0**	**4.3**
NGO/Non-Financial Organization	**0**	**0**	**6.7**	**7.3**	**6.8**
Sardar / Wadera	**0**	**0**	**10.0**	**45.5**	**36.6**
Money Lender	**50.0**	**50.0**	**32.2**	**17.2**	**21.6**
Shopkeeper	**0**	**0**	**28.9**	**30.0**	**28.4**
Relative, friend or neighbor	**0**	**16.7**	**8.9**	**0**	**2.3**

Source: PILER Survey

Large farmers obtained loans valuing above Rs. 100,000, but declined to specify amounts. Medium farmers obtained loans in the range Rs. 25,000 to Rs. 100,000 and above. The largest loan size for small farmers and tenants is in the range Rs. 5,000-25,000. Both, small farmers and

Table SD-13: Size of Loan (Rs.)

Expenditure Type	Large farmer	Medium farmer	Small farmer	Tenant/ Sharecropper	Overall
Less than 5,000	**0**	**0**	**0**	**11.0**	**8.4**
5,001-25,000	**0**	**0**	**50.0**	**44.0**	**43.1**
25001-50,000	**0**	**33.3**	**13.3**	**22.9**	**21.1**
50,001-75,000	**0**	**0**	**10.0**	**3.7**	**4.7**
75,001-100,000	**0**	**33.3**	**16.7**	**10.1**	**12.0**
More than 100,000	**100.0**	**33.3**	**10.0**	**8.3**	**10.6**

Source: PILER Survey

tenants have also contracted loans in excess of Rs. 100,000. About 11% of tenants obtained loans of less than Rs. 5,000 [see Table SD-13].

Obtaining a loan for financing agricultural is the single largest reason for all landowners, while coping with flood losses is the single largest reason for tenants. Large landowners obtain loans primarily to finance agricultural operations. Medium farmers report obtaining loans to finance agricultural operations (67%), to meet educational expenses for their children (17%), and to rehabilitate themselves from flood losses (16%). [see Table SD-14].

The three main reasons for obtaining loans by small farmers are financing agricultural operations (40%), medical expenses (20%), and rehabilitation from flood losses (13%). Other reasons are financing household expenditure (8%), repayment of previous loan (3%), wedding expenses (3%), repayment of a previous loan (3%), purchase of supplies for their village store (3%), and financing education for their children (2%).

The reasons for which tenants obtain loans are more varied; the main reasons being rehabilitation from flood losses (32%), financing agricultural operations (27%), and medical expenses (25%). Other reasons include meeting daily household expenses (8%), repayment of loan (4%), wedding expenses (2%), purchase of supplies for the village store

Table SD-14: Reasons for Incurring Debt (%)

Expenditure Type	Large farmer	Medium farmer	Small farmer	Tenant/ Sharecropper	Overall
Productive purposes:	**100.0**	**68.0**	**50.0**	**28.1**	**32.6**
Agricultural operations	**100.0**	**66.8**	**40.0**	**26.6**	**24.4**
Livestock purchase	**0**	**0**	**0**	**0**	**4.9**
Purchase of land	**0**	**0**	**6.7**	**0**	**1.3**
Purchase of shop supplies	**0**	**0**	**3.3**	**1.5**	**2.0**
Consumptive purposes:	**0**	**32.0**	**50.0**	**71.9**	**67.4**
Flood losses	**0**	**16.4**	**13.3**	**32.1**	**27.5**
Medical treatment	**0**	**0**	**20.1**	**24.8**	**22.8**
Education	**0**	**16.8**	**1.6**	**0**	**4.6**
Marriage expenses	**0**	**0**	**3.3**	**1.8**	**2.0**
Court/judicial matters	**0**	**0**	**0**	**0.9**	**0.7**
Household consumption	**0**	**0**	**8.4**	**7.9**	**5.9**
Loan repayment	**0**	**0**	**3.3**	**4.4**	**4.0**

Source: PILER Survey

(1.5%), and one percent for judicial/police expenses.

Large farmers report repayment of loans entirely from agricultural income. Medium farmers finance repayment from agricultural income and from non-farm income. Small farmers repay their loans from agricultural income, from non-farm income and marginally from livestock income. Tenants also repay their loans from agricultural income, from non-farm income and marginally from livestock income. It appears that livestock income does not form a significant part of financing in rural areas; despite the sector's significant share in agricultural GDP. Small farmers and tenants also finance repayment of loans from new loans. [see Table SD-15].

Table SD-15: Modes of Repayment (%)

Land tenure category	From agricultural Income produce	From sale of livestock births	From non-farm Income	From new loans
Large farmer	**100.0**	**0**	**0**	**0**
Medium farmer	**50.0**	**0**	**50.0**	**0**
Small farmer	**56.7**	**3.3**	**40.0**	**6.8**
Tenant/Sharecropper	**69.7**	**5.5**	**24.8**	**3.9**
Overall	**64.0**	**4.8**	**28.2**	**4.3**

Source: PILER Survey

Large farmers declined to provide information on the exact size of their debt. Herewith, medium farmer are the most indebted, with their debt-to-income ratio at 115%. Small farmers and tenants are indebted to the extent of over 90% of their income [see Table SD-15]

Table SP-15: Average Debt to Income Ratio (%)

Land tenure category	Annual Income produce	Size of Debt	Debt-to-Income ratio
Large farmer	**12,456,000**	**--**	**--**
Medium farmer	**819,672**	**945,429**	**115.3**
Small farmer	**310,368**	**280,888**	**90.5**
Tenant	**211,932**	**198,037**	**93.4**
Overall	**410,158**	**--**	**--**

Source: PILER Survey

Five issues merit attention and which highlights the vulnerable situation of small farmers and tenants:

■ One, while the entire loan portfolio for large farmers is for productive purposes, one third of loans for medium farmers, half of loans for small farmers and over 70% of loans for tenants is for consumptive purposes. While debt for productive purposes creates the additional income flow to enable repayment, debt for consumptive purposes does not do so and imposes escalating debt burden. Herewith, small farmers and tenants need to obtain a loan to repay past loans, indicating inability to repay from their current income.
■ Two, financing medical treatment accounts for one-fifth and one-quarter of indebtedness for small farmers and tenants, respectively. Having to contract a loan for medical expenses is indicative of the stress that health care expenditures impose on limited family budgets.
■ Three, maximum indebtedness for tenants are on account of losses from the flood; indicating the fact that their villages/abodes were located on low-lying marginal land, which is prone to flooding.
■ Four, small farmer and tenant economic vulnerability is indicated by the fact that some of them need to borrow to finance household consumption expenditure.
■ And five, tenants also report having to obtain a loan to finance judicial/police expenses; indicating that they are vulnerable to involvement in cases and which they cannot manage through connections a la landowning classes.

PRISONERS OF PATRIARCHY

Patriarchy rules with an iron hand in the feudal-tribal fiefdom of rural Sindh. Women's role in decision-making, even in matters concerning themselves and their children, is limited or none at all. The extent of women's empowerment or options to make choices is assessed with respect to socialization (i.e., visiting relatives, attending village functions, shopping, etc.), decisions with respect to their and their children's health care, children's education and marriage, property matters, use of cell phones, and voting and voting choice[15]. [see Table SD-18]. It appears that there is some degree, albeit very limited, of social and economic empowerment in families in lower economic scale.

Socialization

Large farmers are relatively the least and tenants the most patriarchal with respect to socialization. Half of large farmers and nearly 80% of tenants require male permission for women to engage in any socialization activity; while in half the cases of large farmers and less than one-fifth of tenants decisions are made by mutual consent. In the case of medium and small farmers, about two-thirds of families reported requiring male permission for women to engage in socialization activity and in about one-third of cases decisions are made by mutual consent. Paradoxically,

Table SD-18: Profile of Women's Empowerment (%)					
Expenditure Type	Large farmer	Medium farmer	Small Sharecropper	Tenant/	Overall
Socialization*					
By male permission	**50.0**	**66.7**	**64.9**	**79.4**	**75.8**
By mutual consent	**50.0**	**33.3**	**35.1**	**18.4**	**22.5**
Women's decision	**0**	**0**	**0**	**2.2**	**1.7**
Health care decisions					
By male head	**75.0**	**33.3**	**59.6**	**64.0**	**62.3**
By mutual consent	**25.0**	**66.7**	**31.6**	**30.7**	**32.0**
Women's decision	**0**	**0**	**8.8**	**5.3**	**5.7**
Decisions regarding children's education					
By male head	**75.0**	**44.5**	**63.1**	**67.1**	**65.7**
By mutual consent	**25.0**	**55.5**	**35.1**	**31.1**	**32.6**
Women's decision	**0**	**0**	**1.8**	**1.8**	**1.7**
Decisions regarding children's marriage					
By male head	**50.0**	**44.5**	**52.6**	**65.9**	**62.4**
By mutual consent	**50.0**	**55.5**	**47.4**	**32.9**	**36.7**
Women's decision	**0**	**0**	**0.0**	**1.2**	**0.9**
Decisions regarding property					
By male head	**100**	**67.7**	**68.4**	**82.9**	**79.8**
By mutual consent	**0**	**33.3**	**29.8**	**11.4**	**15.5**
Women's decision	**0**	**0**	**1.8**	**5.7**	**4.7**
Permission to women to vote					
Yes 50.0	**100**	**94.7**	**91.2**	**91.6**	
No 50.0	**0**	**5.3**	**8.8**	**8.4**	
Voting choice for women					
By male head	**100**	**77.8**	**60.0**	**44.7**	**49.5**
By sardar/wadera/zamindar	**0**	**11.1**	**38.2**	**45.9**	**42.7**
By community	**0**	**11.1**	**1.8**	**9.4**	**7.9**
By self (women)	**0**	**0**	**0**	**0**	**0**
Permission to use cell phones					
Yes	**25.0**	**16.7**	**7.0**	**10.0**	**9.8**
In male presence	**0**	**33.3**	**66.6**	**43.9**	**47.4**
No	**75.0**	**50.0**	**26.4**	**46.1**	**42.8**

Source: PILER Survey

2% of women in tenant families take independent decisions.

Healthcare

In matters of health care decisions for women and children, large farmers are the most conservative, with three-fourths of families reporting such decisions to be a male prerogative. Medium farmers are in this respect the least patriarchal, with two-thirds reporting decisions by mutual consultation. In the case of small farmers and tenants, 60%-64% report decision making by the male head of family. However, 9% of women in small farmer families and 5% in tenant families take independent decisions.

Children's education

In decisions with regard to children's education too, large farmers are the most patriarchal, with male-dominated decision making in three-fourths of cases. Here again, medium farmers are the least patriarchal, with less than half of families reporting decision making by the male head of family. In the case of small farmers and tenants, 63%-67% report decision making by the male head of family. However, 2% of women in small farmer and tenant families take independent decisions.

Children's marriage

With regard to decisions about children's marriage, tenant families are the most conservative, with male dominance in two-thirds of cases. Male decision making is reported in half of large and small farmer families, indicating lower levels of patriarchal influence in this regard. Medium farmer families are the least patriarchal, with less than half reporting male dominated decision making. Notably, one percent of women in tenant families take independent decisions.

Property matters

Property related decisions are primarily a male prerogative in all cases: 100% in the case of large farmers, 83% in the case of tenants, and two-thirds in the case of medium and small farmers. However, women take independent decisions in 2% and 6% in the case of small farmers and tenants, respectively.

Cell phone use

Large farmer families are again the most conservative with regard to allowing women to use cell phones, with three-fourths of cases reporting prohibition for women to use cell phones. In the case of medium farmers and tenants, this prohibition applies to about half the cases. Small farmer families are the least patriarchal in this respect as just over

one-quarter of families disallow women from using cell phones; however, two-thirds - the highest - of small farmer families allow cell phone use in male presence. This percentage is 44% for tenant families and 33% for medium farmer families. However, all women respondents reported using cell phones, even without male presence.

Political rights

Women in large farmer families exercise the least political rights, with only half the cases reporting permission to women to vote. By contrast, medium farmer families report 100% permission to women to vote. The percentage for small farmer and tenant families regarding permission to women to vote is above 90%.

The question of the choice of who to vote for is, however, entirely a male prerogative. The decision, herewith, lies with the male head of the family, the landlord (sardar/wadera), or the community (i.e., males). The dominance of the landlord rises as economic vulnerability increases: 11% in the case of medium farmers, 38% in the case of small farmers and 46% in the case of tenants. It stands to reason that landlord dominance applies to male voting choice as well. In no case are women allowed to decide by themselves.

While the extent of patriarchy is mixed in the case of large, small and tenant families, it appears that medium farmer families are the least patriarchal - the exception being in the case of cell phone use and to some extent socialization. Some women in small farmer families do take independent decision with health care, children's education and property matter, while the extent of such decision making in tenant families is greater.

CONCLUSIONS

Sindh, outside of Karachi, is highly feudal and tribal. The feudal character of rural Sindh is indicated by the fact that over three-fourths of rural households engaged in agriculture are tenants and work as sharecroppers on land belonging to large landowners. This share is greater in upper Sindh; where, for example, the share of tenant families in Shikarpur is 84%. The tribal nature of the province is indicated by the fact that social relations, economic decisions and political alliances are determined by tribal and caste affiliations.

Asset inequality is stark. While a handful of large farmer families own thousands of acres of each, thousands of small farmer families own less than 5 acres each. Specifically, 54% of small farmers own less than 5 acres each and 40% of tenants cultivate plots of less than 5 acres each.

As such, subsistence and survival is their bane of life and livelihood.

The archaic traditional sociopolitical structure has remained unchanged by the fact that over two-thirds of the population continue to reside in rural areas and, other than Karachi and Hyderabad, the rate of urbanization is low and erratic. The lack of employment and educational opportunities in Sindh's secondary cities and towns and the sub-standard quality of urban services therein has failed to create the pull effect for the rural population to break out of the feudal-tribal stranglehold and migrate to urban centres.

The peasantry is trapped in villages that are characterized by derelict infrastructure, mud and straw housing, mud roads, unhygienic water supply, garbage dumps and sewage pools (in the absence of waste disposal facilities), and sub-standard educational and health facilities. The 2010 floods had washed away most of the villages and villagers who returned faced difficulty locating the site of their village and of their houses. The situation presented opportunities to re-build planned villages on high ground and with drainage to protect villages from future river and rain flooding. However, the feudal-tribal leadership opposed relocating the villages as they would lose control over their workforce and their vote banks - and, most of all, their debts.

The state of serfdom has also produced a situation of gross inequality and extensive poverty. Over three-quarters of rural families that have access to land by virtue of sharecropping have an income that is, on average, a mere 2% that of large landowners and their per capita food consumption is less than one-sixth. Tenant families average expenditure is one percent above average income, indicating dis-savings. Excessive tea and ghutka consumption to kill hunger so as to save money on meals, particularly in Thatta, is a telling comment on the economic and health well being of the rural citizens.

Fear and violence is pervasive almost everywhere. In upper Sindh, tribal sardars have created their own militias and are engaged in regular warfare - forced occupation of government (usually forest) land, lands belonging to other rival tribes, kidnapping of members of rival tribes, and so on. Criminals, taking advantage of the diminishing writ of the state, have mounted their own reign of terror. Tribal folk are obliged to remain under the protection of the sardars/waderas and suffer their oppression in return. Given that tenants live on government land that are generally registered in the name of the landlord or live on the landlords lands, they are susceptible to eviction at any time.

An instructive oft-heard comment by internally displaced persons in

government relief camps in Karachi during the 2010 floods was: "Give us work here, we do not want to go back to the village, we are mazdoors, we do mazdoori there, we will also do mazdoori here. There we do mazdoori and are kicked around, here we will do mazdoori with honour."

A comparative overview of economic and social behavior patterns reveals that medium farmers are relatively the most progressive. Medium farmers are likely to have the greatest stake in making agriculture a success, given that almost 75% of their income accrues from agriculture and livestock produce. Medium farmers also appear to be aware of the importance of education for their children and devote 10% of their household expenditure to education, despite limited resources.

Both these conclusions are reinforced by the fact that medium farmers have obtained loans for three purposes: agricultural operations and for education. However, medium farmers do not command adequate access to formal sources of credit, as they have to rely for credit on money lenders to the extent of 50% and on relatives, friends and neighbours to the extent of 17%

Medium farmers also appear to be the least patriarchal relative to large and small farmers and tenants. While male permission is required for women to socialize (i.e., visiting relatives, attending village functions, shopping, etc.) in two-thirds of cases, decisions are made in consultation with women folk in half to two-thirds of cases regarding matters relating to women's and children's health care and children's education and marriage. All women are permitted to vote, although the choice of who to vote for is a male prerogative. Use cell phone by women is, however, restricted.

The overall policy conclusion for Sindh appears to be as follows. Land reform, particularly redistribution of land to create a large cadre of medium size farmers, is likely to promote efficiency in productivity and growth of the agricultural sector as well as move Sindh rural society towards more progressive norms. ■

3

Land distribution in Jafferabad is highly skewed; with 70% of rural families being landless, working on land owned by a large landowner as tenants/sharecroppers. About 7% are medium farmers and 22% are small farmers. All medium sized farmers own between 16-25 acres. Half of small farmer holdings are of less than 5 acres. Among tenants, one-fifth farm plots of less than 5 acres or less, own 4% of land testifies to the acuteness of land inequality.

CASE OF JAFFERABAD, BALOCHISTAN

INTRODUCTION

Balochistan is the largest province of Pakistan in terms of area, but with the smallest population. It accounts for 44% of the country's land mass and 5% of the population. It is also the country's most heterogeneous province in almost every respect - from topography and ecology to demography and ethnicity. Altitudes range from less than 200 meters in the south to over 3,000 meters in the north-east. Density also varies significantly; the north-east region accounts for 18% of the area, but 40% of the population, while the rest of the province accounts for 82% of the area and 60% of the population.

The north-east of the province is at higher altitude, has a temperate climate and is relatively better endowed with forest cover and rainfall - and snow in winters. The rest of the province is generally arid. The north-west region comprises a series of low-lying desert plateaus, with inland drainage and dry lakes - Hamun-e-Mashkel and Hamum-e-Lora - which fill up during the rains. There are three plains areas, of which the Kacchi plains is the largest. Its elevation is about 400 meters above sea level. The Lasbela and Dasht plains have elevation of less than 200 meters above sea level. The latter two are drained by the seasonal Hub and Kech rivers, respectively. The coastline runs for about 750 kilometers.

Administratively, the Kacchi plains is largely under Nasirabad Division, which comprises of the districts of Nasirabad, Jafferabad, Jhal Magsi and Bolan and parts of Dera Bugti district. The Kacchi plains is the only area of Balochistan that is irrigated by the canal system of the river Indus; i.e., the Pat feeder Canal emanating from the Guddu Barage and the Kirthar Canal originating from the Sukkur Barrage. It is the only part of Balochistan that is connected to the Indus river system.

The vast land mass and the hugely differing topography and water availability situation has led to very different agricultural production modes in different ecological zones and equally different land tenure systems. While land tenure is determined by scarcity of arable land in the north-east and Nasirabad Divisions, it is defined by water scarcity in other areas. In the former, ownership of a few score acres of land can characterize wealth; in the latter, ownership if hundreds of acres sans water could be meaningless. Issues of land reform in Nasirabad Division are very different from that in the rest of the province.

Balochistan experienced flooding from heavy rains in July 2010, which affected north-eastern parts of the province. Subsequently, the Tori breach in Sindh caused flood water to move westwards through Kandhkot, Shikarpur, Jacobabad and Shahdadkot to Nasirabad Division in Balochistan. The floods caused 54 deaths and 104 injuries. It damaged or destroyed 79,720 houses, 132,500 hectares of cropped area and 2,077 kms of roads. The floods displaced 0.7 million people and brought to the fore serious issues of land tenure, land inequality, indebtedness, poverty and bondage. Jafferabad was one of the affected districts.

This chapter focuses on Nasirabad Division, which is well endowed with canal-supplied water resources and the land is flat; rendering it eminently suitable for crop cultivation. As such, land is valuable and competition for ownership and control acute. Those with the means - powerful tribal chiefs - have managed to take control of large tracts of land and acquired ownership, forcing a large section of the population to work on their lands for a living. As such, a classic feudal system prevails. The Division is a major producer of food and cash crops.

The study covers Jafferabad district as a sample for the analysis of the land tenure system in Nasirabad Division; however, the conclusions cannot at all be generalized for the rest of Balochistan. The study is restricted to examining issues of ownership and access and does not deal with the subject of landless agricultural labour. As such, the sample on which this analysis is based includes large, medium and small landowners, and tenants.

DISTRICT PROFILE: JAFFERABAD

District Jafferabad covers an area of about 2,445 square kilometers and is bounded by Nasirabad, Dera Bugti and Jhal Magsi districts in Balochistan and Jacobabad and Larkana in Sindh. It consists of two subdivisions: Jhat Pat and Usta Mohammed. The district's population was recorded at 432,817 in 1998 and, at the average annual inter-censal growth rate of 2.92%, is now estimated at over 0.7 million, with 80% of

the population residing in rural areas. Average household size is 7.1.

The district is irrigated by the Pat Feeder and Kirthar canals, which has made it a fertile land. Rice is the principal crop, along with wheat, pulses and onions. Agriculture is the mainstay of the rural population, with 70% of households engaged in agriculture and 4% in industry, e.g., flour mills. [rice mills?]

There are three urban centres in the district: Dera Allahyar, Usta Mohammed and Sohbatpur. Urban growth rates have been high at 10.2%, 9.2% and 8.5%, respectively and current population is estimated at 165,000, 145,000 and 30,000, respectively. Most of the urban population is engaged in marketing of agricultural produce; albeit, in an informal manner and at low wages.

The district is relatively developed; ranking 8th out of 30 districts on the development scale[1]. However, asset and income inequality is high and poverty rampant. An indication of poverty is provided by the fact that a mere one-third of one percent rural houses have RCC roof and 80% of them have thatched walls. The district's overall literacy rate is a mere 32%, with rural literacy rate at 29% and rural female literacy rate at a mere 9%. In other words, over two-thirds of the population, over 70% of the rural population and over 90% of rural women is illiterate (PSLM 2013). The male-female sex ratio is 108, indicating high female mortality. The social structure of Jafferabad is tribal and the major tribes are Jamali and Khosa. The tribal chieftains are called sardars, which is a hereditary position.

Fear and Violence

Fear is pervasive everywhere. Villagers appeared to be reticent in providing information even where no 'representative' of the sardar was present. In one village, an NGO had built a school; however, the villagers said that the sardar's men had threatened to demolish it on several occasions. In another village, the PILER survey team was, on arrival, asked to wait. After about an hour, a double cabin vehicle arrived accompanied by several armed men and a bearded, turbaned man alighted and sat on a charpoy that had been covered with a clean and starched white sheet. Two of the armed men stood astride him. He was introduced as the moulvi and the PILER team was presented to him, who interviewed - rather, interrogated - them as to their background and the purpose of their visit. After assuring himself, he allowed the team to carry out their task - at the same time indicating to the villagers that they could cooperate - and left. His final comment, though, was "… do your job, but also serve Islam …".

PROFILE OF LAND TENURE

Land ownership in Jafferabad is highly uneven. According to the Agriculture Census 2010, there are 27,891 farms in the district, distributed as follows. About 70% of farms are 12.5 acres or less in size, averaging about 7 acres each; indicating subsistence farming for a vast majority of farmers. The 70% of subsistence farmers own 36% of land. Moreover, the fact that 18% of very small farmers, owning 5 acres or less, own 4% of land testifies to the acuteness of land inequality. There are 77 farms or 0.3% of total number of landowning farms who own 150 acres or more and account for 4% of area. Average size of 150 acres and above farms is over 200 acres. [See Table JF-1]

Table JF-1: Profile of Land Holdings

Size Bracket (in acres)	No. of Farms	Share (%)	Area (in acres)	Share (%)	Average farm size (in acres)
12.5 or less	**19,413**	**69.6**	**139,040**	**36.0**	**7.2**
12.5-49	**7,378**	**26.4**	**154,542**	**40.0**	**20.9**
50-149	**1,023**	**3.7**	**76,712**	**20.0**	**75.0**
150 or more	**77**	**0.3**	**15,763**	**4.0**	**204.7**
Total	**27,891**	**100.0**	**386,057**	**100.0**	**13.8**

Source: Government of Pakistan, Agriculture Census, 2010

Field investigation, however, shows that land ownership is concentrated in 2 families and many of the farms reported in lower size brackets are owned, de facto, by one of these upper end families.

DATA ANALYSIS

Land distribution in Jafferabad is highly skewed; with 70% of rural families being landless, working on land owned by a large landowner as tenants/sharecroppers. About 7% are medium farmers and 22% are small

Table JF-2: Distribution of Respondents by Land Size Category

	Land size category	Number
Percentage		
Large farmer	**1**	**1.0**
Medium farmer	**7**	**7.0**
Small farmer	**22**	**22.0**
Tenant/Sharecropper	**70**	**70.0**
Overall	**100**	**100.0**

Source: PILER Survey

farmers [see Table JF-2]. All medium sized farmers own between 16-25 acres. Half of small farmer holdings are of less than 5 acres. Among tenants, one-fifth farm plots of less than 5 acres [See Tables JF-3]

Table JF-3: Distribution of Sample Respondents by Land Size (%)

Land size category	Land size (acres)				
	Less than 5	5 - 15	16 - 24	25 - 49	50 or more
Large farmer	**0**	**0**	**0**	**0**	**100.0**
Medium farmer	**0**	**0**	**100.0**	**0**	**0**
Small farmer	**50.0**	**50.0**	**0**	**0**	**0**
Tenant/Sharecropper	**20.0**	**60.0**	**20.0**	**0**	**0**
Overall	**25.0**	**53.0**	**21.0**	**0**	**1.0**

Source: PILER Survey

Large Owner Profile

There is only one large landowner in the surveyed area. The particular respondent reported owning 400 acres of land. However, information gathered from sources in the field, including local officials, revealed that the large farmer families in the area own significantly larger tracts. The Agricultural Census 2010 has reported about 19,000 farms in size category 12.5 acres and below and about 7,000 farms in size category 12.5-50 acres. Reportedly, many of the small and even medium farmers are de jure owners, but de facto tenants/sharecroppers of large landowners. About 10-15% of medium and small farmers are reported to be de facto tenants. Reportedly again, the extended large farmer families as a whole 'control' 10,000-20,000 acres each. The large farmers have inherited all the land in their possession.

Table JF-4: Distribution by Monthly Income (%)

Land tenure category	Income Group					
	10,000 or less	10,001 -20,000	20,001 -30,000	30,001 -50,000	50,001 -100,000	More than 100,000
Large farmer	**0**	**0**	**0**	**0**	**0**	**100.0**
Medium farmer	**0**	**0**	**0**	**50.0**	**50.0**	**0**
Small farmer	**0**	**81.8**	**13.6**	**4.5**	**0**	**0**
Tenant/Sharecropper	**25.7**	**45.7**	**28.5**	**0**	**0**	**0**
Overall	**18.0**	**50.1**	**22.9**	**4.5**	**3.5**	**1.0**

Source: PILER Survey

Income and Expenditure

All large farmers are in the Rs. 100,000 and above income bracket, with no other group in this income category [see Table JF-4]. Average monthly income for large farmers is reported at Rs. 800,000, while the mean income for the sample as a whole is 19-fold lower at Rs. 26,291 [see Table JF-5]. Large farmers accrue 58% of their income from agriculture and livestock, 20% from salaried employment and 16% from business profits [see Table JF-6].

Table JF-5: Average Household Monthly Income and Expenditures (Rs.)

	Average Income	Average Expenditure	Per capita food expenditure
Large farmer	**800,000**	**729,500**	**7,143**
Medium farmer	**59,358**	**58,955**	**1,721**
Small farmer	**16,756**	**17,064**	**1,133**
Tenant/Sharecropper	**14,928**	**15,316**	**1,075**
Overall	**26,291**	**25,897**	**1,194**

Source: PILER Survey

Table JF-6: Sources of Income

Land tenure Category	Agriculture	Livestock Breeding & Milk Sales	Salary/ Wages	Business Profits	BISP	Remittances	Others
Large farmer	**51.0**	**7.0**	**20.2**	**16.3**	**0.0**	**0**	**5.5**
Medium farmer	**62.8**	**4.5**	**27.2**	**0.0**	**0.5**	**0**	**5.0**
Small farmer	**66.9**	**4.9**	**24.3**	**0.0**	**0.9**	**0**	**3.0**
Tenant/Sharecropper	**70.4**	**3.1**	**13.9**	**5.0**	**1.5**	**0**	**6.1**
Overall	**68.9**	**3.6**	**17.2**	**3.7**	**1.3**	**0**	**5.3**

Source: PILER Survey

The distribution of expenditure is similar to that of income. The skewness of income between the large landowner and the rest of the farming community is demonstrated by the expenditure profile [see Table JF-7]. While the large owners spend an average of Rs. 729,500 per month, mean monthly expenditure for the sample as a whole is Rs. 25,897 - a 28-fold difference [see Table JF-5].

The perceived theory of expenditure indicates that families allocate their income first to essential needs and subsequently to comforts and to luxuries. The first call on essential expenditures is food. Hence, families

Table JF-7:Distribution by Monthly Expenditure (%)

Land tenure category	Income Group					
	10,000 or less	10,001 -20,000	20,001 -30,000	30,001 -50,000	50,001 -100,000	More than 100,000
Large farmer	**0**	**0**	**0**	**0**	**0**	**100.0**
Medium farmer	**0**	**0**	**0**	**51.5**	**48.5**	**0**
Small farmer	**0**	**81.2**	**13.3**	**5.5**	**0**	**0**
Tenant/Sharecropper	**25.7**	**44.3**	**30.0**	**0**	**0**	**0**
Overall	**18.0**	**48.9**	**23.9**	**4.8**	**3.4**	**1.0**

Source: PILER Survey

with low incomes devote a greater share of their income to food and less to other items. Correspondingly, families with high incomes have income available for other expenditures after meeting food needs. As such, the share of their food expenditures is low. Herewith, the skewness in expenditure is also shown by the fact that large owners devote 17% of their expenditure to food, as against 58% for the sample as a whole [see Table JF-8]. Per capita[2] food expenditure for large owners is Rs. 7,143, as compared to Rs. 1,194 for the sample as a whole - a six-fold difference. [see Table JF-5]

Table JF-8 Distribution of Household Expenditure by Land Tenure Category (%)

Expenditure Type	Large farmer	Medium farmer	Small farmer	Tenant/ Sharecropper	Overall
Food	**16.9**	**45.8**	**51.0**	**61.9**	**57.9**
Clothing	**7.3**	**3.5**	**3.3**	**1.5**	**2.1**
Education	**19.3**	**4.7**	**6.1**	**1.3**	**2.8**
Health	**4.5**	**9.5**	**11.7**	**14.6**	**13.5**
Electricity	**2.4**	**2.3**	**2.0**	**0**	**0.6**
Cooking fuel	**1.2**	**2.4**	**2.4**	**0**	**0.7**
Telephone	**10.1**	**7.5**	**9.9**	**5.5**	**6.7**
Conveyance	**22.4**	**14.2**	**5.9**	**5.8**	**6.6**
Addiction	**12.0**	**5.0**	**3.3**	**5.0**	**4.7**
Others	**3.9**	**5.1**	**4.4**	**4.4**	**4.4**

Source: PILER Survey

Large landowners also devote nearly one-fifth of their expenditure on education, ostensibly on account of private education for their children, and 22% on transportation, ostensibly again on account of multiple private vehicle ownership. The corresponding shares for the sample as a

whole are 3% and 7%, respectively. Expenditure on addiction is high at 12%.

Housing

Large owners have their houses on their own land as well as houses in other cities, including abroad. Their multi-room houses on their lands have concrete roofs, plastered brick walls, and iled floors. All houses have in-house water supply from hand pump, flush toilet, and electricity. Gas is not available in the areas surveyed and wood, coal or dung is used as fuel for cooking [see Table JF-9].

Table SD-18: Profile of Women's Empowerment (%)

Expenditure Type	Large	Medium farmer	Small farmer	Tenant/ farmer	Overall Sharecropper
Roof					
Cemented	**100.0**	**66.7**	**41.1**	**7.9**	**15.7**
Thatched/Mud	**0**	**33.3**	**58.9**	**92.1**	**84.3**
Walls					
Brick	**100.0**	**88.0**	**68.8**	**41.7**	**51.4**
Thatched/Mud	**0**	**12.0**	**31.4**	**58.3**	**48.6**
Floor					
Cemented/Tiled	**100.0**	**60.0**	**41.1**	**7.6**	**19.6**
Mud	**0**	**40.0**	**58.9**	**92.4**	**80.4**
In-house toilet					
Yes	**100.0**	**80.0**	**31.8**	**11.4**	**21.6**
No	**0**	**20.0**	**68.2**	**88.6**	**78.4**
In-house Water Supply (Hand pump)					
Yes	**100.0**	**20.0**	**4.5**	**1.4**	**13.6**
No	**0**	**80.0**	**95.5**	**98.6**	**86.4**
Electricity					
Yes	**100.0**	**100.0**	**88.6**	**9.1**	**54.9**
No	**0**	**0.0**	**11.4**	**90.9**	**45.1**
Cooking Fuel (Wood, coal, gobar)					
Yes	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
No	**0**	**0**	**0**	**0**	**0**

Source: PILER Survey

Medium owner profile

Medium owners are defined in this study as farmers owning between 16 to 49 acres of land and comprise 3% of the sample [see Table JF-3]. All medium farmers reported that they have inherited their land.

Income and Expenditure

Half of medium farmers are in the Rs. 30,000-50,000 monthly income bracket and half in the Rs. 50,000-100,000 [see Table JF-4]. Per household monthly income stands at Rs. 59,358 or Rs. 1,979 per day, compared to Rs. 26,667 per day for large farmers [see Table JF-5]. Medium farmers accrue two-thirds (67%) of their income from farming, over one-quarter (27%) from salary/wages and half a percent from BISP [see Table JF-6]. That two-thirds of medium owner income is accrued from agricultural sources implies that such farmers treat agriculture as their mainstay and can be assumed to be mindful of enhancing productivity and growth of the sector. Receipts from BISP constitute a very small share of income. Medium farmers receiving BISP support are likely to be de facto tenants.

The distribution of expenditure corresponds with that of income [see Table JF-7]. As stated before, a lower share of food expenditure implies that a greater share of income is available for other expenditures. Herewith, medium landowners allocate 46% of their household expenditure to food, compared to 17% in the case of large landowners, 51% in the case of small farmers and 62% in the case of tenants. That medium and small farmers and tenants are, more or less, in the same food share expenditure bracket lends credence to indications that many of de jure medium and small farmers are in fact de facto tenants; although, operating under better terms than de jure tenants. [see Table JF-8].

Consequent to the high share of food expenditure, medium landowners are enabled to allocate less than 5% of their total monthly expenditure to education, compared to 19% by large farmers. Incidentally, small farmers allocate a somewhat higher share to education. The case of health expenditure, as a percentage of total monthly expenditure, is the reverse; with medium farmers share of health expenditure being twice that to large farmers. Medium farmer share of expenditure on transportation is a high 14%, indicating ownership of private vehicles by some of them .

The stark inequality between large and medium farmers and the economically vulnerable situation of the latter is confirmed by the inverse relationship between share of food expenditure and per capita food expenditure. Medium farmers spend Rs, 1,721 per household member

per month on food, which is one-quarter that of the amount spent by large farmers. [see Table JF-5].

Housing

Medium farmers have their houses in government (revenue) villages and housing conditions are relatively reasonable. About 67% of medium landowner houses have cemented roofs, while 33% have roofs made of iron and wood/bamboo frame and covered with thatch and mud. The walls are of brick and floor paved in 88% and 60%, respectively, of cases. All houses have electricity, but 80% have in-house toilet and only 20% have in-house water supply from hand-pumps. All houses use wood, coal and dung for cooking. The houses with thatched roofs and/or mud floors and/or bereft of in-house water supply and in-house toilet are likely to be the de facto tenants and those with thatched walls more certainly so. [see Table JF-9].

Small owner profile

Small owners are defined in this study as farmers owning less than 16 acres of land and comprise 22% of the sample. Half of farmers in this category own between 5-15 acres of land and half own less than 5 acres [see Tables JF-2 and JF-3]. Nearly one-tenth (9%) of small farmers have purchased their land and the rest have inherited it. This is indicative of the fact that the market for land is somewhat weak.

Income and Expenditure

Over 80% of small farmers are in the Rs. 10,000-20,000 monthly income bracket, 14% are in the Rs. 20,000-30,000 bracket and 5% are in the Rs. 30,000-50,000 bracket [see Table JF-4]. Average monthly income for small farmers is Rs. 16,756 or Rs. 559 per day, which is 2% that of the income of large farmers. [see Table JF-5].

Bulk of small owner income (72%) is obtained from farming and live-stock, one-quarter from salary/wages (largely, daily wages) and one per-cent from BISP. [see Table JF-6]. Receipts from BISP are assured on a regular basis and constitute an important addition to household income; with families earmarking certain expenditures to be met out of the receipt. No family has reported income from remittances.

The distribution of expenditure corresponds with that of income [see Table JF-8]. As stated earlier, the composition of expenditure, particularly the share of expenditure on food, throws light on relative economic stress facing different income groups. Herewith, small farmers devote over half (51%) of their total expenditure to food, compared to large farmers who spend 17%. [see Table JF-8].

Consequent to the large share of food expenditure, small farmers are enabled to allocate 6% of their total monthly expenditure to education, but need to spend 12% on health care. The higher share of health care expenditure by small farmers is indicative of the greater burden of health care expenditures on families in lower income brackets in the absence of a credible preventive and curative public health care system.

The differential level of economic stress is indicated by the fact that while large landowners spend the least on food in terms of share of expenditure, their food expenditure per capita[3] is significantly higher at Rs. 7,143, compared to Rs. 1,133 for small farmers. In other words, small farmer per capita food expenditure is one-sixth of that for large farmers [see Table JF-5].

Housing

Small farmers live in houses in villages located on landlords' lands or in government (revenue) villages, of which most are registered in the landlord's name. No one possesses any titles to their houses. They are, as such, susceptible to eviction by the sardar at will.

Small farmer housing quality is poor. Nearly 60% of small farmer houses have thatched roof and mud floors and nearly one-third (31%) have thatched walls. Less than 5% of houses have in-house water supply from handpumps/tubewells and over two-third (68%) do not have in-house toilets. Nearly 90% of houses have electricity and all families use wood, coal, dung for cooking; given that gas is not available in the survey area. [see Table JF-9].

Tenant Profile

Nearly three-quarters (70%) of rural families in the survey areas are tenants/sharecroppers, working on land belonging to large landowners on sharecropping basis. [see Table JF-2]. The bulk of tenants (60%) cultivate holdings of 5-15 acres, with 20% cultivating plots of 16-24 acres and 20% cultivating plots of less than 5 acres [see Table JF-3].

Although the rural society is highly traditional, there appears to be a high degree of turnover in tenancy. This is indicated by the fact that cultivating tenures for tenant farmers stand as follows: 12% for over 20 years, 22% for 11-20 years, 37% for 6-10 years, and 29% for less than 5 years. The pattern indicates a serious lack of tenure security for the vast majority of non-landowning families. High turnover is reported to be on account of disputes between landowners and tenants on sharing of produce[4]. Given that tenants do not possess any leverage, landlords tend to expel tenants and any challenge to the landlord's authority is also not tol-

A Case of Vulnerability

Nazir was a tenant on the landlord's farm and lived on the farm in a thatched hut with his wife and three sons. He had inherited the tenancy from his father, along with his debts. He farmed the six acre piece of land with the help of his two elder sons, who had never been to school. His youngest son was fortunate and was in Class 8 in the local high school.

Nazir received a (varying) share of the wheat output and which was barely enough to feed the family over the year. The share varied, as deductions were made for the debt; which never seemed to be fully repaid. The two sons also earned some cash income from working as labourers on a road construction project. The contractor was a relative of the landlord and had hired the boys on the landlord's recommendation.

Two events occurred in 1985. One, Nazir approached the landlord to ask for a reduction in his debt service deductions, as he needed to prepare for his eldest son's marriage. The request was refused, but he was offered a loan - over and above the debt that he was servicing. Nazir declined, as another loan would further enhance the deductions and the family was surviving on the margin to begin with. Harvesting was due in a month's time and he reckoned that with his share and some additional off-farm labour, he would be able to manage the expenses. Later, he learnt from the village gossip that the non-acceptance of the loan offer had not been received well by the landlord.

The same year, Pakistan military ruler, General Zia-ul-Haq, announced local government elections in the country and the landlord declared his candidacy. He called all his tenants to his autaq for an election meeting and delivered a speech, asking all present to vote for him and warning that anyone voting for his opponent would face consequences.

Nazir stood up and explained that he was a member of a political party, which had also put up a candidate and he was obliged to vote for his party. The landlord ignored him. However, when he and his son went to the land to prepare for the harvest, the landlord's men did not them to work and asked them to go back. Later in the day, he was informed that his tenancy had been cancelled and the piece of land allotted to another tenant. He was also asked to vacate the 'house' on the landlord's lands and the road contractor laid off his two sons, saying they were not required any more.

The family was devastated. The harvest season was due in less than a month and their food stocks were almost exhausted. Not only did the family lose their livelihoods, they also lost their abode. And the youngest son had to give up school and take up work as a labourer.

erated. Force is used if necessary.

Income and Expenditure

Nearly half (46%) of tenant families are in the Rs. 10,000-20,000 per month income bracket, about 29% in the Rs. 20,000-30,000 bracket and one-quarter in the less than Rs. 10,000 bracket. Tenants are the only class in the less than Rs. 10,000 monthly income bracket and are evidently the poorest [see Table JF-4]. Average income per month is Rs. 14,928 or Rs. 498 per day, which is less than 2% of the income of large farmers [see Table JF-5]. At the risk of repetition again, it needs to be stressed that income inequality is stark and which is a direct function of equally stark inequality in asset ownership.

Farming and livestock and wages are the main source of income [see Table JF-6]. About three-fourths (74%) of the income of tenants is obtained from farming and from renting in livestock and milk sales, 14% from wages, 5% from small business profits and 1.5% from BISP. Receipts from BISP constitute an important regular addition to household income and allow some essential needs to be met.

The distribution of tenant households by expenditure brackets is somewhat similar to the distribution of income [see Table JF-7]. Tenants allocate the highest share of expenditure (62%) to food; indicating the higher economic vulnerability of the non-landowning group relative to those who own land, particularly large landowners. Per capita food expenditure of tenants is the lowest at Rs. 1,075, which is one-sixth of that of large landowners [see Table JF-8]. Consequent to the higher share of food expenditure, sharecroppers are able to devote the least share (one percent) to education, but allocate the highest share (15%) to health care. Health care expenditures comprise the second largest item after food and constitute a major drain on their meager income.

Housing

None of the tenants possess titles for their houses, which are located in villages that are registered in the name of the sardar or on the sardar's lands. Tenants are, as such, the most vulnerable; as apart from their livelihood, they are also beholden to the landowner for their abode - and evictions are common.

Tenant houses are rudimentary, with a mere 8% living in houses with cemented roofs or cemented floor. Nearly 60% (58%) of houses also have thatched walls. Only one percent have in-house water supply from hand pumps and 11% have in-house toilet. Less than 10% have electricity and all families use wood, coal or dung for cooking. [see Table JF-9].

FLOOD 2010 AND AFTERMATH

Large owners suffered extensive and maximum crop losses on account of their large land holdings. However, they suffered no losses to their livestock and minimal losses to their houses or household assets due to the fact that their houses are generally located on higher ground and remained relatively secure from flood waters. Total large owner flood losses averaged Rs. 1,585,000; which is one-sixth of their annual income [see Table JF-10]. This compares highly favorably with the overall sample, where average flood losses accounted for three-quarters of average annual income. Large owners received the amount of Rs. 20,000 from the Government initiated Watan Card scheme[5], which accounts for one percent of their losses. [see Table JF-11].

Table JF-10: Losses and Costs of Flood 2010

Average Losses / Costs	Large farmer	Medium farmer	Small farmer	Tenant/ Sharecropper	Overall
Crops	**1,500,000**	**285,000**	**76,900**	**78,100**	**106,538**
Livestock	**0**	**0**	**15,500**	**19,250**	**16,885**
House	**40,000**	**104,000**	**76,500**	**58,000**	**65,110**
Household assets	**25,000**	**90,000**	**24,000**	**15,000**	**22,330**
Transportation	**20,000**	**36,000**	**14,000**	**11,500**	**13,850**
Medical care	**0**	**13,750**	**5,300**	**10,500**	**9,479**
Total	**1,585,000**	**528,750**	**212,200**	**192,350**	**234,192**
Average Annual Income	**9,600,000**	**712,296**	**201,072**	**179,136**	**315,492**
Average Losses/Costs as % of annual inc	**16.5**	**74.2**	**105.5**	**107.4**	**74.2**

Source: PILER Survey

Crop losses for medium farmers was about one-fifth that of large farmers. However, they suffered maximum damage to their house and household assets. Total losses amounted to 74% of their annual income. [see Table JF-10]. Medium farmers received the amount of Rs. 20,000 from the Government initiated Watan Card scheme, nearly Rs. 50,000 from NGOs and about Rs. 10,000 from family, relatives and friends. Total assistance accounted for 27% of their losses. [see Table JF-11].

The brunt of losses from floods has been borne by small farmers and tenants, with losses estimated at 106% and 107% of their respective annual income. Their crop losses were lower on account of smaller land size and the fact that tenant losses were shared by the landlord. Both classes of farmers suffered livestock losses, indicating their inability (on

account of non-availability of transport and inflated transportation costs) to move their livestock to safer places in time.

Small farmers received support from the government, NGOs and family, relatives and friends to the extent of 64% of their losses. Tenants received support from government, NGOs and their landlord to the extent of 71% of their losses. Support from landlords to their tenants was the least at a mere 5% of their losses. On the whole, though, the distribution of support was equitable, with the most vulnerable receiving maximum assistance.

Table JF-11: Post-Flood Support (Average Rs.)

Land tenure Category	Government	NGO (Watan Card)	Landlord	Family, friends, etc.	Total Receipts	Support as % of Losses
Large farmer	**20,000**	**0**	**0**	**0**	**20,000**	**1.3**
Medium farmer	**20,000**	**45,500**	**0**	**10,000**	**75,500**	**26.5**
Small farmer	**20,000**	**25,700**	**0**	**3,800**	**49,500**	**64.4**
Tenant/Sharecropper	**20,000**	**25,500**	**10,000**	**0**	**55,500**	**71.1**

Source: PILER Survey

DEBT PROFILE

All landowners and tenants report having obtained a loan, with only large farmers having access to formal sources of credit. Medium and small farmers and tenants rely entirely on informal sources that include money lenders, shopkeepers and relatives, friends and neighbours. Tenants also access their landowners for credit; which is, in fact, their major source (41%) of financing. Part of debt incurred by small farmers and tenants is transactional and part is running credit provided by local shopkeepers [see Table JF-12].

Table JF-12: Source of Loan

Source	Large farmer	Medium farmer	Small farmer	Tenant/ Sharecropper	Overall
Bank/Financial Organization	**100.0**	**0**	**0**	**0**	**1.0**
NGO/Non-Financial Organization	**0**	**0**	**0**	**0**	**0**
Sardar / Wadera	**0**	**0**	**0**	**41.5**	**29.1**
Money Lender	**0**	**100.0**	**33.3**	**23.0**	**30.4**
Shopkeeper	**0**	**0**	**33.3**	**22.0**	**22.7**
Relative, friend or neighbor	**0**	**0**	**33.3**	**13.5**	**16.8**

Source: PILER Survey

Large landowners obtain loans primarily to finance agricultural operations. Flood losses have imposed a major debt burden on medium and small farmers and on tenants, with 50% of medium and small farmers and nearly 40% of tenants reporting indebtedness on this account. Bulk of the loans (85%) obtained by small farmers and tenants (93%) is for consumption purposes. Over one-sixth of small farmers reported obtaining loans to meet household consumption expenditure and another nearly one-sixth reported obtaining loans to finance medical costs. About 8% of tenants also obtained loans to finance marriage expenses. An indication of the oppressive environment facing small farmers and tenants is that they also have to incur expenditure on judicial and police matters [see Table JF-13].

Table JF-13: Reasons for Incurring Debt (%)

Source	Large farmer	Medium farmer	Small farmer	Tenant/ Sharecropper	Overall
Agricultural operations	100.0	50.0	15.0	0	7.8
Livestock purchase	0	0	0	2.7	1.9
Purchase of land	0	0	6.7	0	1.3
Purchase of shop supplies	0	0	3.3	1.5	2.0
Flood losses	0	50.0	41.0	38.9	39.8
Medical treatment	0	0	14.3	18.9	16.4
Education	0	0	0	0	0
Marriage expenses	0	0	0	8.1	5.7
Court/judicial matters	0	0	1.6	2.9	2.4
Household consumption	0	0	16.7	22.8	19.6
Loan repayment	0	0	11.4	5.7	6.5

Source: PILER Survey

Large farmers declined to provide information on loan amounts. Medium farmers obtained loans in the range Rs. 25,000-50,000 and more than Rs. 100,000. Ostensibly, the former own relatively small holdings or could be among the class of de facto tenants. Small farmers obtained loans in the range of Rs. 25,000-50,000 and Rs. 75,000-100,000. Loan size ranges for tenants are more varied. Nearly three-fourths of tenants obtained loans of less than Rs. 25,000, with 5% obtaining loans of less than Rs. 5,000. Nearly one-quarter obtained loans in the range R. 25,000-50,000 and 4% even fall in the Rs. 50,000-75,000 range. [see Table JF-14].

Large and medium farmers report repayment of loans entirely from agri-

Table JF-14: Size of Loan (Rs.)

Size bracket	Large farmer	Medium farmer	Small farmer	Tenant/ Sharecropper	Overall
Less than 5,000	**0**	**0**	**0**	**5.4**	**3.8**
5,001-25,000	**0**	**0**	**0**	**68.0**	**47.6**
25001-50,000	**0**	**33.3**	**66.7**	**22.9**	**33.0**
50,001-75,000	**0**	**0**	**0**	**3.7**	**2.6**
75,001-100,000	**0**	**0**	**33.3**	**0**	**7.3**
More than 100,000	**100.0**	**66.7**	**0**	**0**	**5.7**

Source: PILER Survey

cultural income, while small farmers repay their loans from agricultural income (78%) and from sale of livestock births (17%). Tenants report repayment from agricultural income (71%), sale of livestock births ((15%) and non-farm wage income (10%). About 6% of small farmers and 4% of tenants obtained loans to repay past loans. [see Table JF-15].

Table JF-15: Sources of Repayment (%)

Land tenure category	From agricultural Income	From sale of produce	From non-farm livestock births	From new Income loans
Large farmer	**100.0**	**0**	**0**	**0**
Medium farmer	**100.0**	**0**	**0**	**0**
Small farmer	**77.6**	**16.7**	**0**	**5.7**
Tenant/Sharecropper	**70.8**	**15.5**	**9.9**	**3.8**
Overall	**74.6**	**14.5**	**6.9**	**3.9**

Source: PILER Survey

Given that large and medium farmers declined to provide information about the exact size of debt, the debt to income ratio for them is not available. For the remaining classes, small farmers are indebted to the extent of 150% of the annual income and tenants are indebted to the extent of 100% of their annual income [see Table JF-16].

Five issues merit attention and which highlights the vulnerable situation of medium, and particularly, small farmers and tenants. One, the fact that half of medium farmer, and a vast majority of small farmer and tenant loans are not for investment purposes implies that repayment will need to be financed from existing income. Notably, small farmers and tenants need to obtain a loan to repay past loans, indicating inability to repay. Two, maximum indebtedness for small farmers and tenants are on account of losses from the flood; indicating the fact that their

Table JF-16:Debt-to-Income Ratio (%)

Land tenure category	Annual Income (Average) Produce	Size of Debt (Average)	Debt-to-Income ratio (Average)
Large farmer	**9,600,000**	**Not available**	**--**
Medium farmer	**712,296**	**Not available**	**--**
Small farmer	**201,072**	**300,547**	**149.5**
Tenant	**179,136**	**180,150**	**100.0**
Overall	**315,492**	**--**	**--**

Source: PILER Survey

villages/abodes are located on low-lying marginal land, which is prone to flooding. Three, having to contract a loan for medical expenses is indicative of the stress that health care expenditures impose on limited family budgets. Four, economic vulnerability is also indicated by the fact that some of them need to borrow to finance household consumption expenditure. And five, small farmers and tenants also report having to obtain a loan to finance judicial/police expenses; indicating that they are vulnerable to involvement in cases and which they cannot manage through connections a la large landowning classes. In fact, there is a pervasive dependence on larger farmers for bailing them out of police cases.

PRISONERS OF PATRIARCHY

Patriarchy rules with an iron hand in the feudal-tribal fiefdom of Jafferabad. Women's role in decision-making, even in matters concerning themselves and their children, is limited at best or none at all. The extent of women's empowerment or options to make choices at the least is assessed with respect to socialization (i.e., visiting relatives, attending village functions, shopping, etc.), and decisions with respect to their and their children's health care, children's education and marriage, property matters, voting and voting choice, and use of cell phones [see Table JF-17].

Relatively, large farmers are the most and small farmers the least patriarchal with respect to socialization. All large and medium farmer families, over half of small farmer families and two-thirds of tenant families require male permission for women to engage in any socialization activity; while in nearly half the cases of small farmers and one-third of tenants decisions are made by mutual consent. In no case are women allowed to make independent decisions.

In matters of health care decisions for women and children, large farmers are the most conservative and medium and small farmers the least,

Table JF-17: Profile of Women's Empowerment (%)					
Decision	Large farmer	Medium farmer	Small farmer	Tenant/ Sharecropper	Overall
Socialization[6]					
By male permission	**100.0**	**100.0**	**55.5**	**67.1**	**67.2**
By mutual consent	**0**	**0**	**45.5**	**32.9**	**32.8**
Women's decision	**0**	**0**	**0**	**0**	**0**
Health care decisions					
By male head	**100.0**	**20.0**	**22.7**	**50.0**	**42.4**
By mutual consent	**0**	**80.0**	**72.7**	**48.6**	**55.6**
Women's decision	**0**	**0**	**4.6**	**1.4**	**2.0**
Decisions regarding children's education					
By male head	**100.0**	**20.0**	**36.4**	**60.0**	**52.4**
By mutual consent	**0**	**80.0**	**63.6**	**40.0**	**47.6**
Women's decision	**0**	**0**	**0**	**0**	**0**
Decisions regarding children's marriage					
By male head	**50.0**	**40.0**	**36.4**	**58.6**	**52.3**
By mutual consent	**50.0**	**60.0**	**63.6**	**41.4**	**47.7**
Women's decision	**0**	**0**	**0**	**0**	**0**
Decisions regarding property					
By male head	**100.0**	**80.0**	**75.4**	**67.2**	**70.2**
By mutual consent	**0**	**20.0**	**24.6**	**32.8**	**29.8**
Women's decision	**0**	**0**	**0**	**0**	**0**
Permission to women to vote					
Yes	**100.0**	**100**	**100.0**	**94.3**	**96.0**
No	**0**	**0**	**0**	**5.7**	**4.0**
Voting choice for women					
By male head	**100.0**	**60.0**	**40.9**	**44.2**	**45.1**
By sardar/wadera/zamindar	**0**	**40.0**	**50.0**	**45.7**	**45.8**
By community	**0**	**0**	**9.1**	**10.1**	**9.1**
By self (women)	**0**	**0**	**0**	**0**	**0**
Permission to use cell phones					
Yes	**0**	**0**	**0**	**5.7**	**4.0**
In male presence	**100.00**	**100.0**	**90.9**	**60.0**	**70.0**
No	**0**	**0**	**9.1**	**34.3**	**26.0**

Source: PILER Survey

as can be seen from the fact that in all larger farmer families and in only about one-fifth of medium and small farmer families, such decisions are a male prerogative. In 50% of tenant families, health care decisions are made by males. However, in 5% of small farmer families and one percent of tenant families, women also take independent decisions in this respect.

In decisions with regard to children's education too, male dominated decision making prevails in large farmer families; however, medium and small farmers are far less patriarchal, with 80% and 64%, respectively, reporting decisions by mutual consent. Among tenant families, 60% report decision by males and 40% by mutual consent. In no case women take independent decisions.

Women have relatively more space with regard to decisions about children's marriage in all classes of families. Decision by mutual consent is made in 50% of large farmers, 60% of medium and small farmer families, and about 40% of tenant families.

Property related decisions are primarily a male prerogative in all cases: 100% in the case of large farmers, 80% in the case of medium farmers, 75% in the case of small farmers and 67% in the case of tenants. It, thus, appears that there is some degree, albeit very limited, degree of economic empowerment in families in lower economic scale.

Women in all land owning families exercise their political right to vote; although the choice of the vote is determined by male heads in all of

large farmer families, 60% of medium farmer families and 41% of small farmer families. Women are allowed to vote in 94% of tenant families and in 44% of cases, the choice of the vote is determined by the male head. Notably, in between 40% to 50% of cases in medium farmer, small farmer and tenant families, the choice of the vote is determined by the sardar; indicating the subservient position of the rural population with respect to the large landowner.

No landowning family allows unrestricted freedom to women to use cell phones. However, all large and medium farmer families and 91% of small farmer families allow cell phone use in male presence. About one-tenth of small farmers do not at all permit women to use cell phones. Some tenant families (6%) allow women to use cell phones. About 60% allow cell phone use in male presence, but over one-third do not permit cell phone use at all. However, all women in all groups reported using cell phones.

While the extent of patriarchy is mixed in the case of large, small and tenant families, it appears that medium farmer families are the least patriarchal — the exception being in the case of socialization. Some women in small farmer and tenant families do take independent decision with health care matters. ■

4

Punjab is characterized by a north-south divide on many counts. South Punjab comprises nearly half the area, but one-third of the population of the province. Population density in south Punjab is lower than in upper Punjab. About 80% of the population is rural. Unlike the north, the south is less industrialized and typified by highly concentrated agricultural land holdings and dominated by a feudal order.

THE CASE OF SOUTH PUNJAB

Introduction

Punjab is the most populous province of Pakistan. Its population is estimated at about 100 million, which accounts for 57% of the population of the country and about two-thirds of the population reside in rural areas. It is the most urbanized province with a number of large and medium and small sized cities and towns. The province is the granary of Pakistan and the major producer of agricultural products: food and cash crops, fruits and vegetables.

Punjab is, however, characterized by a north-south divide on many counts. South Punjab comprises nearly half the area, but one-third of the population of the province. As such, population density in south Punjab is lower than in upper Punjab. While, on average, one-third of the province's population resides in urban areas, the share of south Punjab is lower at one-fifth. In other words, about 80% of the population is rural. Unlike the north, the south is less industrialized and typified by highly concentrated agricultural land holdings. In sociopolitical terms, it is said to be dominated by a feudal order.

Heavy rains in the upper reaches of the River Indus, combined with the flow of flood waters from the Swat and Kabul rivers, flooded the area between the Jinnah and Taunsa Barrages in Punjab, with peak floods at Jinnah Barrage recorded at 937,453 cusecs. Flood flow at Taunsa Barrage was recorded at 9,600,000 cusecs on August 2, 2010 and which caused a number of breaches in the flood protection structures. Heavy rain in the Suleman Range Mountains in south Punjab caused hill torrents, which added 239,600 cusecs to the already swollen River Indus. The floods inundated 1,778 villages in 11 districts and caused 110 deaths and 262 injuries. It damaged or destroyed 375,773 houses, 746,900 hectares of cropped area, 2,598 water courses and 2,819 kms of roads, as well as power stations and oil supply installations. Much of the

destruction was in south Punjab, with entire villages wiped out and over a million families forced displaced. The mass relocation brought to the fore serious issues of land tenure, land inequality, unemployment and poverty. Muzaffargrh and Rahimyar Khan were among the affected districts.

This chapter covers two districts in south Punjab - Muzaffargarh, on the right bank of the River Indus, and Rahim Yar Khan, on the left bank. Both districts were severely affected by the floods of 2010. The study is restricted to examining issues of ownership and access and does not deal with the subject of landless labour. As such, the sample on which this analysis is based includes large, medium and small landowners, and tenants.

DISTRICT PROFILES

Muzzaffargarh

District Muzaffargarh covers an area of about 8,250 square kilometers and is bounded by the River Indus to the west and the River Chenab to the east. It is bordered by the districts of Rajanpur, Dera Ghazi Khan, Layyah, Khanewal, Multan, Bahawalpur and Rahimyar Khan. It consists of four tehsils: Muzaffargarh, Alipur, Jatoi and Kot Addu. The district's population was recorded at 2.6 million in 1998 and, at the average annual inter-censal growth rate of 3.38%, is now estimated at about 4.5 million, with 85% of the population residing in rural areas. Average household size is 7.3. Muzaffargarh is the district headquarters, with the current population estimated at 275,000.

The district is largely a part of the Thal desert and despite the availability of water from the rivers Indus and Chenab and canals emanating there from, agriculture is limited, with only 40% of the area under cultivation and another 40% suffering from water-logging due to drainage problems created by the construction of canals. The remaining land is uncultivable. Resultantly, agriculture is not the mainstay of the rural population, with only about 55% of the employed rural population engaged in the sector. Wheat is the main crop of the districts. Employment in industry is negligible.

The district is relatively underdeveloped; ranking 34th out of 36 districts on the development scale[1]. Asset and income inequality is also high and poverty rampant. Poverty is indicated by the fact that only 2% of rural houses having RCC roofs and about half have thatched walls. About 58% of the district population, 62% of the rural population and 69% of the rural female population is illiterate. (PSLM 2013). The male-female

sex ratio is 109, indicating high female mortality.

The social structure of Muzaffargarh is tribal and the major tribes/castes[2] are (in alphabetical order) Arain, Bukhari, Dasti, Gilani, Gopang, Gurmani, Hinjra, Jat, Jatoi, Khar, Langrial, Pirhar, Qalandari, Qureshi, Rajput, Sheikh and Tarragar. A tribal leader is called a sardar and a cast leader, who is generally a large landowner, is called a chaudhry.

Rahimyar Khan

District Rahimyar Khan covers an area of about 11,880 square kilometers and is bordered by Muzaffargarh, Rajanpur and Bahawalpur districts of Punjab, Ghotki district of Sindh and India to the south-east. It consists of four tehsils: Rahimyar Khan, Khanpur, Liaquatpur and Sadiqabad.

The district's population was recorded at 3.1 million in 1998 and, at the average annual inter-censal growth rate of 3.19%, is now estimated at over 5 million, with nearly 80% of the population residing in rural areas. Average household size is 7.5. Rahimyar Khan town is the district head-quarters, with the current population estimated at 425,000.

The district is traversed by the River Indus on its north-eastern side and a canal system and has three topographical areas: riverine, canal-irrigated and desert. The district is considered agriculturally rich, with 84% of the area cultivated. Major agricultural products are wheat, cotton and mangoes. However, only about 57% of the population is engaged in agriculture and less than 10% of the district's employed population is engaged in industry.

Despite the agricultural endowments, however, the district is relatively underdeveloped; ranking 33rd out of 36 districts on the development scale[3]. Asset and income inequality is also high and poverty rampant. Rural housing quality is poor, with less than one percent of houses having RCC roof; however, about two-thirds of houses have brick walls. About 55% of the population, 61% of the rural population and 73% of rural women are illiterate. (PSLM 2011). The male-female sex ratio is 109, indicating high female mortality.

The social structure of Rahimyar Khan is caste based and the major castes are (in alphabetical order) Arain, Bhen, Bohar, Dahar, Gujjar, Jat, Kakar, Lark, Mehra and Rajput. Of these, the Arains, Gujjars, Jats and Rajputs are migrants from upper Punjab, while the others are indigenous tribes. A caste leader, who is generally a large landowner, is called a *chaudhry*.

PROFILE OF LAND TENURE

Land ownership in south Punjab is highly uneven, as indicated by data for the two sample districts. According to the Agriculture Census 2010[4], there are 292,843 farms in Muzaffargarh and 231,694 farms in Rahimyar Khan. At one end, 90% of farms are in the size category 12.5 acres or less; however, they account for 63% of farm area in Muzaffargarh and 45% in Rahimyar Khan. With respect to 5 acres and less farms, 70% of farmers in Muzaffargarh own 25% of land and 68% of farmers in Rahimyar Khan own 19% of land. Average size of farms 150 acres and above is 429 acres in Muzaffargarh and 361 acres in Rahimyar Khan.

Table SP-1: Profile of Land Holdings in Muzaffargarh

Size Bracket (in acres)	No. of Farms	Share (%)	Area (in acres)	Share (%)	Average farm size (in acres)
12.5 or less	**269,274**	**93.0**	**819,156**	**63.3**	**3.0**
12.5-49	**19,670**	**6.7**	**378,387**	**29.3**	**19.2**
50-149	**813**	**0.3**	**56,516**	**4.4**	**69.5**
150 or more	**89**	**0.03**	**38,135**	**3.0**	**428.5**
Total	**292,843**	**100.0**	**1,292,195**	**100.0**	**4.4**

Source: Government of Pakistan, Agriculture Census, 2010

Table SP-1: Profile of Land Holdings in Rahimyar Khan

Size Bracket (in acres)	No. of Farms	Share (%)	Area (in acres)	Share (%)	Average farm size (in acres)
12.5 or less	**207,528**	**89.6**	**665,264**	**44.7**	**3.2**
12.5-49	**21,126**	**9.1**	**430,287**	**28.9**	**20.4**
50-149	**2,415**	**1.0**	**166,328**	**11.2**	**68.9**
150 or more	**625**	**0.3**	**225,526**	**15.2**	**360.8**
Total	**231,694**	**100.0**	**1,487,406**	**100.0**	**6.4**

Source: Government of Pakistan, Agriculture Census, 2010

Overall, averge farm size is 4.4 acres in Muzaffargarh and 6.4 acres in Rahimyar Khan. [See Tables SP-1, SP-2, SP-3]

Field investigation, however, shows that land ownership is concentrated in a few extended families and many of the farms reported in size bracket 50-149 acres are owned, de facto, by one of these upper end families. Actual farm size for these families, in terms of ownership, leasing and control, is estimated at between 3,000 to 5,000 acres.

Where Have the Tenants gone?

South Punjab is generally thought of as a feudal fiefdom. And the feudal order in this part of the country was defined by large landholdings, with the land parceled out to tenants in small sizes. The production mode was sharecropping, where landowners and tenants shared the harvest, usually on a 50:50 basis, net of costs. Over the last two decades, however, south Punjab appears to have undergone a dramatic change. Tenancy and sharecropping has given way to leasing and a nascent form of corporate farming. Hundreds, perhaps thousands, of families have been evicted from the land and their traditional abodes and forced to migrate

The case of one of the large landowners - a respondent in this survey - is revealing. The particular landowner now owns and controls by leasing a total of 2,700 acres of land. The area housed several villages and was home to about 450 small farmer and tenant families and another about 100 families that worked as wage labour. The area provided direct permanent employment to nearly 1,500 people. Currently, the 2,700 acre farm is organized in corporate mode, hiring about 300 permanent workers and another 500 workers hired seasonally. Small farmers have been bought out and tenants ejected. Overall, on-farm employment prospects is down by half and permanent employment is down by 80%.

None of the farm workers now live in villages located within the farmland. All currently employed farm labour live in government (revenue) villages adjacent to the farm. Interviews with residents elicited a similar story across every household: tales of family members, neighbours and relatives who had left for nearby cities, but mostly to Lahore and Karachi. About 40% of the population appears to have emigrated.

Typical Village Profile

The typical villages surveyed are located 10 to 40 kilometers from the district headquarter city and comprises of about 300-400 families, with a population of about 1,500-3,000. It is dominated by about half a dozen (extended) families. These families each own between 3,000-5,000 acres of land. There are a handful of small farmers, with a majority of them owing less than 5 acres of land. Some of them are also engaged in small scale businesses. About half the village population work as wage labourers on large farms. Some women are engaged in making traditional bed covers, caps and dresses.

The village is registered with the government; however, the villagers

do not possess any papers that bestow official title to ownership. Habitation on landlord lands is no longer common. The villages are, relative to Sindh and Balochistan, better in terms of housing; although, bulk of the houses are with thatched roofs. Village lanes are brick-paved with drains for waste water disposal. However, hygienic conditions are poor. While the main roads are in excellent condition, the roads to the villages are often unpaved or in poor shape. The village has functioning boys and girls primary schools, a functioning BHU and a post office. About half the children, including girls, go to the village madrassah. The village has electricity, but does not have piped water supply, drainage or sewage disposal. A quarter of the men and one-sixth of the women are literate. Malaria and respiratory illnesses are frequently mentioned as diseases afflicting the villagers. A large part of the village was inundated by floods in 2010 and the damage caused is visible. One near permanent damage is the ground water turning brackish, depriving the people of the ready source of water. The entire village population had left for government camps, along with their cattle, prior to the arrival of the floods. The village population has since returned and has rebuilt their houses. The Turkish government has built a modern village, with about 400 houses and with school, clinic, and other facilities.

Control and Coercion

Despite elements of modernized agriculture, the social structure continues to be archaic and feudals-turned-commercial farmers continue to maintain age-old practices of control and coercion. The traditional chaudhry remains a powerful figure socio-politically.

In one of the villages, small farmers complained that the area's chaudhry had diverted the canal and deprived their lands over about 50 acres of water. In another village, a canal passed adjacent to a village, but the chaudhry has not allowed a water course to be built to enable the small farmers in the area to access water for irrigation.

Control is also maintained via marketing channels. There appears to be a colluding network of large landowners, the government's Food Department officials and middlemen, known as aarti in local parlance. The government maintains minimum support price of key crops and purchases at the official price are made by the Food Department. For this, the Food Department provides jute/cotton bags (bardana) to farmers, who are required to bring their produce in them. However, small farmers face difficulty in obtaining bardana, because of which they are unable to sell their produce to the Food Department at the

official rate. Herewith enters the aarti, who offers to purchase produce at below official rates; resulting in a lower return to small farmers. The aartis control the market and farmers who attempt to sell directly are offered the same lower rate.

There is no overt fear of the chaudhry or his men; however, the PILER survey team was constantly accompanied - uninvited - by at least one 'representative' of the local chaudhry and frequently attempted to prompt villagers' responses. One case of control over the lives of economically weaker segments of the population was of a wage labourer who had incurred the wrath of the chaudhry and was ordered off farm work and assigned to the local graveyard to work as a grave digger - a form of punishment to demean the individual.

Women continue to be oppressed. Education for women is generally not favoured in Muzzafargarh, although the same is not the case in Rahimyar Khan. Marriages of minor girls is, however, common.

DATA ANALYSIS

Land ownership in south Punjab is highly skewed; with 72% of rural families[5] being in the small farmer category and more than half of them owning less than 5 acres each. Medium sized farmers account for a mere 4% of rural families. Leasing is a prominent trend, accounting for 15% of farmers. Bulk of the lessees (96%) are medium sized farmers, with land size ranging from 15 to 75 acres. Surprisingly, tenants/sharecroppers account for only 8% of rural families; indicating that the mode of agricultural production is no longer feudal and has been commercialized. The rural land tenure landscape is characterized by, on the one hand, a handful of very large and, on the other hand, thousands of very small farms, with the former worked by wage labour. [See Tables SP-3 and SP-4]

Table SP-3: Distribution of Sample Respondents by Land Size Category

Land size category	Number	Percentage
Large farmer	**2**	**1.0**
Medium farmer	**8**	**3.9**
Small farmer	**147**	**72.1**
Lessee	**30**	**14.7**
Tenant/Sharecropper	**17**	**8.3**
Overall	**204**	**100**

Source: PILER Survey

Table SP-4: Distribution of Sample Respondents by Land Size (%)

Land size category	Land size (acres)				
	Less than 5	5 - 15	16 - 24	25 - 49	50 or more
Large farmer	**0**	**0**	**0**	**0**	**100**
Medium farmer	**0**	**0**	**87.5**	**12.5**	**0**
Small farmer	**53.1**	**46.9**	**0**	**0**	**0**
Lessee	**0**	**0**	**0**	**73.3**	**26.7**
Tenant/Sharecropper	**88.2**	**11.8**	**0**	**0**	**0**
Overall	**45.6**	**34.8**	**3.4**	**11.3**	**4.9**

Source: PILER Survey

Large Owner Profile

There was only one large owner in each of the two districts surveyed. One of the two large landowner family possesses 800 acres of land; however, the extended family owns up to 4,000 acres. Half of the farm area is leased out to other farmers, with the sized of leased farms ranging from 40-75 acres. Almost 80% of the land is inherited and some land - about 1,000 acres - has also been purchased in recent years. The second large landowner owning 50 acres of land in his own name; however, total land ownership for the extended family is 2,700 acres. About a thousand acres is inherited, another thousand acres have been purchased and about 700 acres have been obtained on lease from adjacent farms. The market for land is robust, largely on account of the leasing phenomena.

Both large farmers reported carrying on cultivation in the past with the help of tenants on sharecropping basis. Over the last two decades, though, the mode of production has begun to change, tenants have been 'expelled' and both farms are now administered by professional managers with wage labour, none of whom live on the farm.

Income and Expenditure

All large farmers and 57% of lessees are in the Rs. 100,000 and above monthly income bracket, while 91% of the sample is in the income bracket below Rs. 100,000, 81% earn less than Rs. 50,000, 75% earn less than Rs. 30,000, 54% earn less than Rs. 20,000, and 16% earn below Rs. 10, 000. [see Table SP-5]. Average monthly income for large farmers is reported at Rs. 1,450,000, while the mean income for the sample as a whole is 33-fold lower at Rs. 44,151 [see Table SP-6].

Table SP-6: Distribution by Monthly Income (%)

Land tenure category	Income Group					
	10,000 or less	10,001 -20,000	20,001-30,000	30,001-50,000	50,001-100,000	More than 100,000
Large farmer	**0**	**0**	**0**	**0**	**0**	**100**
Medium farmer	**0**	**0**	**0**	**25.0**	**75.0**	**0**
Small farmer	**17.7**	**44.9**	**29.9**	**7.5**	**0**	**0**
Lessee	**0**	**0**	**0**	**0**	**43.4**	**56.6**
Tenant/Sharecropper	**41.2**	**58.8**	**0**	**0**	**0**	**0**
Overall	**16.2**	**37.3**	**21.6**	**6.4**	**9.3**	**9.3**

Source: PILER Survey

Table SP-6: Average Household Monthly Income and Expenditures (Rs.)

	Average Income	Average Expenditure	Per capita food expenditure
Large farmer	**1,450,000**	**308,150**	**7,454**
Medium farmer	**65,225**	**61,575**	**2,457**
Small farmer	**19,155**	**18,951**	**1,195**
Lessee	**83,946**	**54,198**	**3,591**
Tenant/Sharecropper	**11,519**	**11,974**	**1,015**
Overall	**44,141**	**28,108**	**1,644**

Source: PILER Survey

Table SP-7: Sources of Income

Land tenure Category	Agriculture & Milk Sales	Livestock Breeding	Salary/ Wages	Business Profits	BISP	Remittances	Others
Large farmer	**63.3**	**11.1**	**0**	**15.6**	**0**	**0**	**10.0**
Medium farmer	**72.4**	**4.5**	**17.9**	**1.9**	**0.5**	**0**	**2.8**
Small farmer	**48.2**	**2.2**	**27.4**	**9.7**	**1.0**	**5.5**	**6.0**
Lessee	**68.1**	**0**	**4.1**	**19.7**	**1.0**	**0**	**7.1**
Tenant/Sharecropper	**53.2**	**5.8**	**31.4**	**3.1**	**1.5**	**0**	**5.0**
Overall	**52.6**	**2.4**	**23.7**	**10.4**	**1.0**	**4.0**	**6.0**

Source: PILER Survey

Large farmers accrue 74% of their income from agriculture and livestock produce sales, 16% from agri-business profits and 10% from other sources. [see Table SP-7]. That farming, livestock and agri-business account for 90% of large farmer income indicates serious interest in the land and in output, productivity and profitability from agriculture.

The distribution of expenditure is similar to that of income. The skewness of income between the large landowner and the rest of the farming community is demonstrated by the expenditure profile. While the large owners spend an average of Rs. 308,150 per month, mean monthly expenditure for the sample as a whole is Rs. 28,608 - an 11-fold difference [see Table SP-6].

The perceived theory of expenditure indicates that families allocate their income first to essential needs and subsequently to comforts and to luxuries. The first call on essential expenditures is food. Hence, families with low incomes devote a greater share of their income to food and less to other items. Correspondingly, families with high incomes have income available for other expenditures after meeting food needs. As such, the share of their food expenditures is low. Herewith, the skewness in expenditure is also shown by the fact that large owners devote 17% of their expenditure to food, as against 44% for the sample as a whole [see Table SP-9]. Per capita[6] food expenditure for large owners is Rs. 7,454, as compared to Rs. 1,644 for the sample as a whole - a 4.5-fold difference [see Table SP-6].

Table JF-8: Distribution of Household Expenditure by Land Tenure Category (%)

Expenditure Type	Large farmer	Medium farmer	Small farmer	Tenant/ Sharecropper	Overall
Food	**16.7**	**24.6**	**48.0**	**22.5**	**55.7**
Clothing	**5.3**	**4.5**	**4.2**	**4.9**	**3.4**
Education	**18.8**	**15.1**	**8.4**	**16.6**	**6.4**
Health	**3.3**	**7.4**	**7.5**	**5.3**	**11.4**
Electricity	**4.7**	**4.4**	**4.1**	**3.9**	**3.8**
Cooking fuel	**2.3**	**2.8**	**2.4**	**2.6**	**1.2**
Telephone	**8.3**	**6.3**	**4.7**	**7.0**	**3.5**
Conveyance	**21.0**	**19.0**	**6.8**	**21.0**	**5.8**
Addiction	**3.5**	**3.5**	**3.0**	**3.5**	**4.0**
Others	**16.1**	**12.4**	**10.9**	**12.7**	**4.8**

Source: PILER Survey

Large landowners also devote 19% of their expenditure on education, ostensibly on account of private education for their children, and 21% on transportation, ostensibly again on account of multiple vehicle ownership. The corresponding shares for the sample as a whole are 10% and 9%, respectively. [see Table SP-10].

Housing

Large owners have their houses on their own land and houses in other cities, as well as abroad. Their multi-room houses have concrete roofs, plastered brick walls, and tiled floors. All houses have in-house water supply from hand pump, flush toilet, and electricity. Gas is not available in the areas surveyed and wood, coal or dung is used as fuel for cooking [see Table SP-10].

Table SP-10: Quality of Housing and Utilities (%)

Type	Large farme	Medium farmer	Small farmer	Tenant/ Sharecropper	Overall
Roof					
Cemented	**100.0**	**75.0**	**51.0**	**100.0**	**40.20**
Thatched/Mud	**0**	**25.0**	**49.0**	**0**	**59.8**
Walls					
Brick	**100.0**	**87.5**	**65.0**	**100.0**	**29.6**
Thatched/Mud	**0**	**12.5**	**35.0**	**0**	**70.4**
Floor					
Cemented/Tiled	**100.0**	**75.0**	**39.0**	**100.0**	**35.0**
Mud	**0**	**25.0**	**61.0**	**0**	**65.0**
In-house toilet					
Yes	**100.0**	**100.0**	**54.4**	**100.0**	**41.2**
No	**0**	**0**	**45.6**	**0**	**58.8**
In-house Water Supply (Hand pump)					
Yes	**100.0**	**100.0**	**98.0**	**100.0**	**88.2**
No	**0**	**0**	**2.0**	**0**	**11.8**
Electricity					
Yes	**100.0**	**100.0**	**94.6**	**100**	**75.0**
No	**0**	**0**	**5.4**	**0**	**25.0**
Cooking Fuel (Wood, coal, gobar)					
Yes	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
No	**0**	**0**	**0**	**0**	**0**

Source: PILER Survey

Medium Owner Profile

Medium owners are defined in this study as farmers owning between 16 to 49 acres of land and comprise 4% of the sample. [see Table SP-3]. All medium farmers have inherited their land, but all of them have also purchased land to add to their holdings. The market for land appears to be more robust relative to other provinces.

Income and Expenditure

About 88% of medium farmers own 16-24 acres of land and 12% own 25-49 acres. In other words, the bulk of medium farmer are at the lower end of the 'medium' size bracket [see Table SP-4]. However, three-quarters of medium farmers are in the Rs. 50,000-100,000 monthly income bracket - indicating high productivity - and one-quarter are in the Rs. 30,000-50,000 bracket [see SP-5]. Per household monthly income stands at Rs. 65,225 or Rs. 2,174 per day, compared to Rs. 48,300 per day for large farmers. [see Table SP-6].

Over three-quarters (77%) of medium owner income is obtained from farming and livestock, nearly one-fifth (18%) from salary and 2% from business. Half a percent of medium farmers also receive the amount from BISP, indicating targeting flaws. [see Table SP-7]. That over three-quarters of medium owner income is accrued from agricultural sources implies that such farmers treat agriculture as their mainstay and can be assumed to be mindful of enhancing productivity and growth of the sector.

The distribution of expenditure corresponds with that of income [see Table SP-8]. As stated before, a lower share of food expenditure implies that a greater share of income is available for other expenditures. Herewith, medium landowners allocate 25% of their household expenditure to food, compared to 17% in the case of large landowners and 48% in the case of small farmers. [see Table SP-9].

Consequent to the differential share of food expenditure, medium landowners are enabled to allocate up to 15% of their total monthly expenditure to education, compared to 19% by large farmers and 8% by small farmers. The case of health expenditure, as a percentage of total monthly expenditure, is the reverse. Medium farmers spend 7% on health care compared to 3% in the case of large farmers and 11% in the case of tenants.

The differential level of economic stress is confirmed by the inverse relationship between share of food expenditure and per capita food expenditure. Medium farmers spend Rs, 2,457 per household member per

month on food, which is one-third of the amount spent by large farmers, twice the amount spent by small farmers and two and a half times the amount spent by tenants [see Table SP-6].

Housing

Medium farmers have their houses on their own land and housing conditions are relatively reasonable. Three-quarters of medium landowner houses have concrete roofs, and cemented or tiled floors and 88% have brick walls. All houses have electricity and in-house water supply from hand-pumps and toilets in-house. All houses use wood, coal and dung for cooking. [see Table SP-10].

Small Owner Profile

Small owners are defined in this study as farmers owning less than 16 acres of land and comprise 72% of the sample [see Table SP-3]. Over half of farmers in this category (53%) own less than 5 acres and close to half (47%) own between 5-15 acres. [see Table SP-4]. Over 90% of small farmers have inherited their land. This is indicative of the fact that small farmer participation in the otherwise robust land market is weak

Income and Expenditure

Over 92% of small farmers are in the monthly income brackets below Rs. 30,000, 63% are in the Rs. 10,000-20,000 bracket and 18% are in the less than Rs. 10,000 bracket. About 8% are in the Rs. 30,000-50,000 bracket, while there are no small farmers in the over Rs. 50,000 bracket. [see Table SP-5]. Average monthly income for small farmers is Rs. 19,155 or Rs. 639 per day, which is one percent of large farmer income. [see Table SP-6].

Half of small owner income (50%) is obtained from farming and livestock and the remaining income is accrued from a variety of sources: 27% from salaries and wages (largely, daily wages), 10% from small rural businesses (village shops, tea stalls, etc.), one percent from BISP, and 6% from foreign remittances [see Table SP-7]. That half of income is accrued from non-farm sources is on account of insufficient income from their small holdings. Receipts from BISP are assured on a regular basis and constitute an important addition to household income; with families earmarking certain expenditures to be met out of the receipt. However, a mere one percent of small farmers receiving BISP support is indicative of low coverage of potentially deserving families.

The distribution of expenditure corresponds with that of income [see Table SP-8]. The economic stress facing small farmers is indicated by the fact that they devote nearly half (48%) of their total expenditure to

food, compared to large and medium farmers who spend 19% and 25%, respectively, on food. [see Table SP-9].

Consequent to the large share of food expenditure, small farmers are enabled to allocate a relative smaller part of their expenditure (8%) to education, compared to 19% and 15% by large and medium farmers, respectively. The case of health expenditure is the reverse. Small farmers spend 8% of their expenditure on health care, compared to 3% in the case of large farmers.

The differential level of economic stress is confirmed by the inverse relationship between share of food expenditure and per capita[6] food expenditure. While large landowners spend the least on food in terms of share of expenditure, their food expenditure per capita[6] is significantly high at Rs. 7,454, compared to Rs. 1,195 for small farmers. Small farmer per capita food expenditure is one-sixth of that for large farmers [see Table SP-6].

Housing

Most small farmers in south Punjab live in government (revenue) villages and most possess titles to their houses. Over half of small farmer houses have cemented roof, two-thirds have brick walls and about 40% have cemented floors. About 95% of houses have electricity and 68% have in-house water supply through hand-pumps and over half have in-house or adjacent toilet. All houses use wood, coal or dung for cooking; given that gas is not available in the survey area. [see Table SP-10].

Lessee Profile

Leasing is now a fairly common and growing phenomenon in south Punjab. All large and medium landowners lease land, sometimes for short periods - even for one crop cycle. Some have leased land and developed it for a longer term - almost permanently. However, there are also farmers that do not own land but farm on leased land[7]. This survey covered the latter category of lessees only. About 15% of farmers are classified as lessees [see Table SP-3]; of whom nearly three-quarter farm land in the size range 25-49 acres and over one-quarter farm land in the size range 50-150 acres [see Table SP-4].

Income and Expenditure

Lessee family incomes range from Rs. 50,000 to over Rs. 100,000. [see Table SP-5]. Average lessee monthly income is Rs. 83,946; which is about 6% of average large farmer income [see Table SP-6]. Over two-thirds of lessee income is obtained from farming, one-fifth from agri-business and 4% from salary. One percent of lessee families also receive

the amount from BISP, indicating targeting flaws. [see Table SP-7]. That 88% of lessee income is accrued from agricultural sources, including agri-business, implies that such farmers treat agriculture as their mainstay and can be assumed to be mindful of enhancing productivity and growth of the sector.

The distribution of expenditure corresponds with that of income [see Table SP-8]. As stated before, a lower share of food expenditure implies that a greater share of income is available for other expenditures. Herewith, lessee families spend 23% of their household expenditure to food, compared to 17% in the case of large landowners, 25% in the case of medium farmers, and 48% in the case of small farmers. [see Table SP-9].

Consequent to the differential share of food expenditure, lessee families are enabled to allocate up to 17% of their total monthly expenditure to education, close to the share allocated by large and medium sized farmers. The share of health expenditure, as a percentage of total monthly expenditure, is somewhat higher than that for large farmers, but lower than that for medium farmers.

The differential level of economic stress, and the extent of income inequality, is confirmed by the inverse relationship between share of food expenditure and per capita food expenditure. Lessee families spend Rs. 3,591 per household member per month on food, which is nearly half the amount spent by large farmers, nearly 50% higher than that spent by medium farmers, thrice the amount spent by small farmers, and nearly three and a half times the amount spent by tenants [see Table SP-6].

Housing

Lessee families live in their own houses in nearby urban areas or on houses on land that they have leased. All lessee houses have concrete roofs, brick walls and tiled floors. All lessee families have electricity, in-house water supply and toilets in-house. All houses use wood, coal and dung for cooking. [see Table SP-10].

Tenant/Sharecropper Profile

Contrary to popular belief, a mere 8% of rural families in the sample area are tenants, working as sharecroppers; of whom 88% of them cultivate plots of less than 5 acres each and 12% cultivate plots of 5-15 acres each [see Tables SP-3 and SP-4]. About 90% of tenant families are hereditary tenants on the land. However, all 18 villages reported that between two-thirds to three-quarters of tenant families, particularly those that were

resident on large landowner lands, have migrated from the area to different cities in central Punjab and to Karachi[8].

Income and Expenditure

All tenant families are in the less than Rs. 20,000 per month income brackets, with 41% earning less than Rs. 10,000 per month. [see Table SP-5]. Average income per month is Rs. 11,519 or Rs. 384 per day, which is less than one percent that of large farmers [see Table SP-6]. At the risk of repetition again, it needs to be stressed that income inequality and poverty is stark and which is a direct function of equally stark inequality in asset ownership [see Table SP-9].

Farming and livestock and wages are the main source of income [see Table SP-7]. Almost 60% of tenant income is obtained from farming and from renting in livestock and milk sales and nearly one-third (31%) is obtained from wages. All tenant families reported having to engage in off-farm labour to supplement meager farm income, with children engaged in work as well. About 3% of 'enterprising' tenants obtain their income from small rural businesses (village shops, tea stalls, etc.) and 2% also receive support from BISP. For sharecropping families too, receipts from BISP constitute an important regular addition to household income and allow some essential needs to be met. BISP coverage appears to be quite limited, though.

The distribution of sharecropper households by expenditure brackets is somewhat similar to the distribution of income [see Table SP-8]. Sharecroppers allocate the highest share of expenditure (56%) to food; indicating the higher economic vulnerability of the non-landowning group relative to those who own land [see Table SP-9]. However, per capita food expenditure of tenant families is the lowest at Rs. 1,015, which is a mere 13% of that allocated by large farmers. [see Table SP-6]. Consequent to the higher share of food expenditure, sharecroppers devote the least share (6%) to education, but allocate the highest share (11%) to health care. Health care expenditures comprise the second largest item after food and constitute a major drain on their meager income. [see Table SP-10]

Housing

All tenant families live in government (revenue) villages, but do not possess titles to their houses. These villages are located within the ambit of or adjacent to large landholdings. Tenant houses are rudimentary, with 60% having thatched roofs, 70% having thatched walls, and two-thirds having mud floor. Three-fourths of houses have electricity and all use wood, dung or coal for cooking. Water supply is through shared hand

pumps for 88% of families, while the rest need to fetch water from nearby sources. About 60% do not have an in-house or adjacent toilet. [see Table SP-10].

IMPACT OF FLOODS 2010

Large owners suffered extensive and maximum crop losses on account of their large land holdings. Losses to their houses or household assets were relatively lower due to the fact that their houses are generally located on higher ground and remained relatively secure from flood waters. They also suffered no losses to their livestock, as they were moved to higher ground. Total large owner flood losses averaged over Rs. one million; which is one-fifth of their annual income [see Table SP-11]. This compares highly favorably with the overall sample, where average flood losses accounted for two-thirds of average annual income. Large owners received the amount of Rs. 20,000 from the Government initiated Watan Card scheme[9] and support received by large farmers amounted to a token 2% of their losses [see Table SP-12].

Table SP-11: Losses and Costs of Flood 2010

Average Losses / Costs	Large farmer	Medium farmer	Small farmer	Tenant/ Sharecropper	Overall
Crops	**900,000**	**328,000**	**100,800**	**170,000**	**74,000**
Livestock	**0**	**0**	**22,300**	**10,800**	**6,500**
House	**100,000**	**120,000**	**76,800**	**110,700**	**54,500**
Household assets	**50,000**	**30,665**	**22,000**	**34,375**	**14,900**
Transportation	**20,000**	**19,000**	**14,100**	**19,700**	**11,000**
Medical care	**0**	**16,700**	**8,900**	**3,950**	**8,125**
Total	**1,070,000**	**514,365**	**244,900**	**349,525**	**169,025**
Average Annual Income	**5,400,000**	**857,520**	**229,995**	**1,007,352**	**136,043**
Average Losses/Costs as % of annual inc	**19.8**	**60.0**	**106.5**	**34.7**	**124.2**

Source: PILER Survey

Medium farmers' crop losses were about one-third that of large farmers, but damage to their houses was higher by 20%. Their total losses amount to two-thirds of their total annual income. [see Table SP-11]. Medium farmers received the amount of Rs. 20,000 from the Government initiated Watan Card scheme, Rs. 65,000 from one of the NGOs and Rs. 10,000 from family, relatives, friends or neighbours. Support received by medium farmers amounted to nearly one-fifth of their total losses. [see Table SP-12].

Lessee crop losses were about half that of medium farmers, perhaps because their lands were on higher ground. However, the damage to their houses and households assets are about the same as that of medium farmers. Total losses suffered by lessee families amounted to over one-third of their annual income, while support from Watan Cards, NGOs, and family, relative and friends amounted to 4% of their total losses. The brunt of losses from floods has been borne by small farmers and sharecroppers. Small farmers' losses amounted to 107% of their total annual income, while tenant losses amounted to122% of their annual income.

Small farmers and tenants suffered greater losses; given that their lands and houses are, in general, are not located on high ground. Crop losses for tenant losses were lower, as their crop losses were shared by landowners. Small farmers suffered greater livestock losses. Losses to houses for tenants were the least, as their houses were thatched and, as such, low cost.

Small farmers and tenants received the Rs. 20,000 as part of the Government's Watan Card scheme, including support from NGOs and relatives, friends and neighbours. Maximum NGO support was directed to tenants and landlord share of total support to tenants amounted to a meagre 3%. Support received by small farmers amounted to 29% of their losses. Tenants received support of up to 73% of their losses. It can be said that there was a fair degree of equity in the distribution of support, with the most vulnerable receiving maximum assistance [see Table SP-12].

Table SP-12: Post-Flood Support (Average Rs.)

Land tenure Category	Government	NGO (Watan Card)	Landlord	Family, friends, etc.	Total Receipts	Support as % of Losses
Large farmer	**20,000**		**0**	**0**	**20,000**	**1.8**
Medium farmer	**20,000**	**65,000**	**0**	**10,000**	**95,000**	**18.5**
Small farmer	**20,000**	**30,000**	**0**	**11,000**	**71,000**	**29.0**
Lessee	**20,000**	**12,000**	**0**	**10,000**	**42,000**	**4.2**
Tenant/Sharecropper	**20,000**	**78,000**	**3,500**	**0**	**101,500**	**73.4**

Source: PILER Survey

DEBT PROFILE

All landowners, lessees and tenants report having obtained a loan and, except for tenants, have access to formal sources of credit. Banks and financial institutions cater to all large farmers, two-thirds of lessees, over one-quarter of medium farmers, and 6% of small farmers for their credit needs. Tenants appear to be excluded from the formal credit market. Moneylenders are a major source of lending for all, except large landowners and cater to about 41% and 34%, respectively, of small farmers and lessees. One-quarter of medium farmers and tenants also source moneylenders for their credit needs. Large farmers provide credit to about one-sixth of medium and small farmers and to one-quarter of tenants. Shopkeepers provide transactional credit to 13-14% of small and medium farmers and to 38% of tenants. Rather, shopkeepers are the major sources of financing for tenants. NGOs provide credit only to tenants and 12.5% of tenants benefit from NGO financing [see Table SP-13].

Family, relatives, friends or neighbours are also major sources of credit for one-fifth of medium farmers and one-quarter of small farmers. Notably, tenants do not or cannot source banks and financial institutions and family, relatives, friends or neighbor for financing. They do not have the necessary collateral to qualify for formal financial institution requirements and the latter themselves do not have the means of supporting anyone else.

Table SP-13: Source of Loan

Source	Large farmer	Medium farmer	Small farmer	Lessee	Tenant/ Share-cropper	Overall
Bank/Financial Organization	**100.0**	**27.1**	**5.7**	**66.5**	**0**	**15.9**
NGO/Non-Financial Organization	**0**	**0**	**0**	**0**	**12.5**	**1.0**
Sardar /Wadera	**0**	**14.3**	**16.5**	**0**	**25.0**	**14.5**
Money Lender	**0**	**24.3**	**40.9**	**33.5**	**25.0**	**37.4**
Shopkeeper	**0**	**14.3**	**13.0**	**0**	**37.5**	**13.0**
Relative, friend or neighbor	**0**	**20.0**	**23.9**	**0**	**0**	**18.0**

Source: PILER Survey

All large landowners, 86% of medium farmers and 78% of lessees contracted loans for productive purposes: agricultural operations and purchase of land, livestock and shop supplies. However, 62% of small farmers and 73% of tenants contracted loans for a range of consumptive purposes. Notably, except for large landowners, all groups reported obtaining loans to cover medical expenses. Only small farmers obtained loans for meeting education expenses. Lessees and small farmers also

obtained loans for marriage expenses, a purely consumptive purpose [see Table SP-14].

While large and medium farmers and lessees contracted loans largely for productive purposes, small farmers and tenants did so largely for consumptive purposes. Flood losses stand out as the most important reason for tenants and the second reason for small farmers. Notably, small farmer and tenant families report having to obtain a loan to meet daily household expenses and are also shown to be obtaining loans to cover police and judicial matters and to repay past loans. Lessees also obtained loans to repay past loans, but such loans are part of business transactions. [see Table SP-14].

Table SP-14: Reasons for Incurring Debt (%)

Source	Large farmer	Medium farmer	Small farmer	Lessee	Tenant/ Share-cropper	Overall
Productive purposes	**100.0**	**85.7**	**37.7**	**77.8**	**27.5**	**45.2**
Agricultural operations	**100.0**	**85.7**	**26.9**	**66.7**	**15.0**	**34.8**
Livestock purchase	**0**	**0**	**4.3**	**0**	**12.5**	**4.1**
Purchase of land	**0**	**0**	**2.2**	**11.1**	**0**	**3.2**
Purchase of shop supplies	**0**	**0**	**4.3**	**0**	**0**	**3.1**
Consumptive purposes	**0**	**14.3**	**62.3**	**22.2**	**72.5**	**54.8**
Flood losses	**0**	**0**	**13.2**	**0**	**25.0**	**11.6**
Medical treatment	**0**	**14.3**	**10.0**	**0**	**12.5**	**8.8**
Education	**0**	**0**	**8.7**	**0**	**0**	**6.3**
Marriage expenses	**0**	**0**	**13.0**	**11.1**	**0**	**11.0**
Court/judicial matters	**0**	**0**	**3.0**	**0**	**1.9**	**2.3**
Household consumption	**0**	**0**	**2.2**	**0**	**6.6**	**2.1**
Loan repayment	**0**	**0**	**12.2**	**0**	**18.4**	**12.0**

Source: PILER Survey

Five issues merit attention and which highlights the vulnerable situation of small farmers and tenants. One, they need to obtain a loan to repay past loans, indicating inability to repay. Two, financing medical treatment accounts for over one-tenth of indebtedness. Having to contract a loan for medical expenses is indicative of the stress that health care expenditures impose on limited family budgets. Three, maximum indebtedness for tenants is on account of losses from floods; indicating the fact that their villages/abodes are located on low-lying marginal land, which is prone to flooding. Four, they also report having to obtain a loan to finance police and judicial expenses; indicating that they are vulnera-

ble to involvement in cases and which they cannot manage through connections. And five, their economic vulnerability is indicated by the fact that some of them need to borrow to finance household consumption expenditure. All the above factors are consumptive in nature and impose a repayment burden on future incomes.

Table SP-15: Size of Loan (Rs.)

Size Bracket	Large farmer	Medium farmer	Small farmer	Lessee	Tenant/ Share-cropper	Overall
Less than 5,000	**0**	**0**	**0**	**0**	**0**	**0**
5,001-25,000	**0**	**0**	**23.9**	**0**	**50.0**	**21.4**
25001-50,000	**0**	**14.3**	**54.5**	**0**	**37.5**	**43.0**
50,001-75,000	**0**	**14.3**	**10.9**	**0**	**12.5**	**9.5**
75,001-100,000	**0**	**14.3**	**10.9**	**55.6**	**0**	**16.6**
More than 100,000	**100.0**	**57.1**	**0**	**44.4**	**0**	**9.8**

Source: PILER Survey

All large farmers, 57% of medium farmers and 44% of lessees obtained loans exceeding Rs. 100,000. No lessee obtained a loan below Rs. 75,000 and no medium farmer obtained a loan below Rs. 25,000. Loan size brackets in the case of lessees show that about 57% obtained loan in the range Rs. 75,000-100,000 and 44% obtained a loan exceeding Rs. 100,000. About 55% of small farmers obtained loans in the range Rs. 25,000-50,000 and 24% in the range Rs. 5,000-25,000. No small farmer obtained loans exceeding Rs. 100,000. The major loan bracket for tenants is Rs. 5,000-25,000, followed by the Rs. 25,000-50,000 bracket. No tenant obtained loans exceeding Rs. 75,000. [see Table SP-15].

Table SP-16: Modes of Repayment (%)

Land tenure category	From agricultural Income produce	From sale of livestock births	From non-farm Income	From new loans
Large farmer	**100.0**	**0**	**0**	**0**
Medium farmer	**100.0**	**0**	**0**	**0**
Small farmer	**67.4**	**10.9**	**21.7**	**13.0**
Lessee	**100.0**	**0**	**0**	**0**
Tenant/Sharecropper	**75.0**	**0**	**25.0**	**11.0**
Overall	**64.1**	**7.9**	**17.7**	**10.3**

Source: PILER Survey

Large and medium farmers and lessees report repayment of loans entirely from agricultural income. Small farmers finance repayment primarily from agricultural income (67%) and also from sale proceeds of livestock (11%) and non-farm income (11%). Tenants finance repayment form agricultural income (75%) and non-farm income, i.e., wages (22%). It appears that livestock income does not form a significant source of financing in rural areas; despite the sector's significant share in agricultural GDP. About 13% of small farmers and 11% of tenants report repayment from new loans [see Table SP-16].

The most highly indebted among all categories of farm families are tenants, whose debt-income ratio stands at 243% of their annual income, followed by small farmers at nearly 200%. Medium farmers are indebtedness to the extent of 88% and lessees to the extent of over 100%. Lessee and medium farmer indebtedness is a cause for less concern, as most of the debt is for productive purposes, which generates autonomous repayment capacity. However, small farmer and tenant indebtedness is a cause for alarm, as 60-70% of the debt is for consumptive purposes and repayment will require them to reduce their already low consumption or seek more loans; thereby, deepening their indebtedness. [Table SP-17]

Table SP-17: Debt-to-Income Ratio (%)

Land tenure category	Annual Income (Average) Produce	Size of Debt (Average)	Debt-to-Income ratio (Average)
Large farmer	**5,400,000**	**Not available**	**--**
Medium farmer	**857,520**	**750,143**	**87.5**
Small farmer	**229,995**	**450,047**	**195.7**
Lessee	**1,007,352**	**1,050,000**	**104.2**
Tenant	**136,043**	**330,500**	**242.9**
Overall	**412,642**	**--**	**--**

Source: PILER Survey

PRISONERS OF PATRIARCHY

Patriarchy is the dominating norm in south Punjab, with some exceptions though. Relatively speaking, Muzaffarabad district on the right bank of the Indus is more restrictive for women than Rahimyar Khan on the left bank. This is particularly true of large, medium and small farmers Lessee and tenant families appear to be less conservative across the board. The relatively greater space provided to women in lessee families can be attributed to the fact that such families are influenced by mercantile norms and not weighed down by feudal/tribal traditions as

Table SP-18: Profile of Women's Empowerment (%)						
Decision	Large farmer	Medium farmer	Small Farmer	Lessee	Tenant/ Sharecropper	Overall
Socialization[11]						
By male permission	50.0	75.0	53.7	40.0	41.2	51.5
By mutual consent	50.0	25.0	44.9	46.7	36.8	48.5
Women's decision	0	0	1.4	13.3	22.0	0
Health care decisions						
By male head	50.0	50.0	46.5	18.3	33.6	41.5
By mutual consent	50.0	50.0	45.3	66.7	56.0	49.5
Women's decision	0	0	8.2	15.0	10.4	9.0
Decisions regarding children's education						
By male head	50.0	62.5	56.5	33.3	35.3	51.5
By mutual consent	50.0	37.5	43.5	66.7	64.7	48.5
Women's decision	0	0	0	0	0	0
Decisions regarding children's marriage						
By male head	50.0	50.0	49.7	33.3	41.2	46.6
By mutual consent	50.0	50.0	50.3	66.7	58.8	53.4
Women's decision	0	0	0	0	0	0
Decisions regarding property						
By male head	100.0	100.0	68.7	59.0	67.1	68.7
By mutual consent	0	0	31.3	41.0	32.9	31.3
Women's decision	0	0	0	0	0	0
Permission to women to vote						
Yes	100.0	88.0	98.3	90.0	100.0	96.8
No	0	12.0	1.7	10.0	0	3.2
Voting choice for women						
By male head	100.0	73.8	57.1	96.7	64.3	64.6
By sardar/wadera/ zamindar	0	19.7	14.3	0	28.6	13.5
By community	0	6.5	28.6	3.3	7.1	21.9
By self (women)	0	0	0	0	0	0
Permission to use cell phones						
Yes	50.0	37.5	6.1	100.0	0	21.1
In male presence	50.0	12.5	45.6	0	76.5	40.2
No	0	50.0	48.3	0	23.5	38.7

Source: PILER Survey

landowning classes. Another pattern that appears is that families in the lower asset/income scale are the least conservative. This is indicated by the fact that, unlike in the case of large and medium farmer families, women in some small farmer, lessee and tenant families do make independent decisions - in rising order - with respect to socialization[10]. [see Table SP-18].

Medium farmers are the most and lessees and tenants are the least patriarchal with respect to socialization. In 75% of medium farmer families, women need male permission to socialize. This constraint is the least (about 40%) in lessee and tenant families. In one percent of small farmer families, 13% of lessee families and 22% of tenant families, women are enabled to make socialization decisions independently. Mutual decisions in this respect are made the most (50%) in large farmer families and the

least (25%) in medium farmer families.

In matters of health care decisions for women and children, large and medium farmers are the most conservative, with half of families reporting such decisions to be a male prerogative. Lessees are, in this respect, the least patriarchal, with two-thirds reporting decisions by mutual consultation, and in one-sixth of cases, women being allowed to take independent decisions. Tenants and small farmers are also less patriarchal, with 56% of the former reporting decisions by mutual consent and 10% reporting independent decision making by women. In the case of the latter, 8% of women take independent decisions.

In decisions with regard to children's education too, medium farmers are the most patriarchal, followed by small farmers. Half of large farmers

and about two-thirds of lessee and tenant families take decisions regarding children's education by mutual consent. With regard to decisions about children's marriage, 50% of large, medium and small farmer families report decisions by mutual consent. This pattern is the most prevalent (67%) in lessee families, followed by tenant families (59%).

Property related decisions are primarily a male prerogative in all cases: 100% in the case of large and medium farmers, up to about 70% in the case of small farmers and tenants, and the lowest at 59% in the case of lessee families. The latter case is again evidence of the relative progressivity of this particular class.

Nearly all women in all classes of respondents are allowed the right to vote; the exception being 12% of medium farmer families, 10% of lessee families and 2% of small farmer families, where women are not allowed to vote. However, women generally do not have the right to make their own voting choices. This decision is made by the male head, landlord, or community. The landlord decides in the case of 20% of medium farmers, 14% of small farmers, and 29% of tenants. The case of medium and small farmers is indicative of the extent of political control that larger farmers exercise even over families that own their own land.

Lessee families are the least conservative with regard to allowing women to use cell phones and tenant families the most conservative. While women in 50% of large farmer families use cell phones freely, women in about half of medium and small farmer families are not allowed to use cell phones at all; although, nearly half of small farmer families permit use of cell phones in male presence. Nearly one-quarter of women in tenant families are not allowed to use cell phones at all and over three-quarters can do so in male presence. However, all women reported using cell phones. ■

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The archaic centuries old sociopolitical structure of rural society in Sindh and Balochistan has remained more or less unchanged. Over two-thirds of the population continuing to reside in rural areas and the rate of growth of secondary cities has been low. The lack of employment and educational opportunities in secondary urban areas and the sub-standard quality of civic services therein has failed to create the pull effect for the rural population to break out of the feudal-tribal stranglehold.

SUMMARY AND CONCLUSIONS

The analysis of land tenure patterns in the provinces of Pakistan shows considerable variation. Rural Sindh and Nasirabad Division of Balochistan are highly feudal, with 70-85% of the rural labour force working as tenants on sharecropping basis on lands belonging to large landlords. By contrast, south Punjab has undergone radical changes, with sharecropping largely replaced by large-scale self-cultivation or leasing - a la corporate farming.

Irrespective of the difference in land tenure patterns, there are some constants. Asset (land) inequality is stark. While a handful of large farmer families own/control thousands of acres of land, thousands of small farmer families own less than 5 acres each and thousands of tenants (in Sindh and Balochistan) farm plots of less than 5 acres each. The inequality is indicated by the fact that, for 6 districts in 3 provinces, 88% of small farmers (holding less than 12.5% of land) own 49% of land and 1.5% of large farmers (holding more than 150 acres of land) own 8% of land. Land holding and control over land by large farmers is said to be actually larger with many de jure small and medium landowners being de facto tenants.

The archaic centuries old sociopolitical structure of rural society in Sindh and Balochistan has remained more or less unchanged. Over two-thirds of the population continuing to reside in rural areas and the rate of growth of secondary cities has been low. The lack of employment and educational opportunities in secondary urban areas and the sub-standard quality of civic services therein has failed to create the pull effect for the rural population to break out of the feudal-tribal stranglehold.

The peasantry is locked in villages that are characterized by derelict infrastructure, mud and straw housing, mud roads, unhygienic water supply, garbage dumps and sewage pools (in the absence of waste disposal facilities), and sub-standard educational and health facilities. The

2010 floods had washed away most of the villages and villagers who returned faced difficulty locating the site of their village and of their houses. The situation presented opportunities to re-build planned villages on high ground and with drainage to protect villages from future river and rain flooding. However, the feudal-tribal leadership opposed relocating the villages as they would lose control over their workforce and their vote banks - and, most of all, their debts.

On the other hand, an oft-heard comment by internally displaced persons in Sindh government relief camps in Karachi during the 2010 floods was: "We do not want to go back to our village … we have lost everything … only our debt is waiting for us … give us work here, we do not want to go back to the village, we are mazdoors, we do mazdoori there, we will also do mazdoori here. There we do mazdoori and are kicked around, here we will do mazdoori with respect."

While the landed elite in Sindh and Balochistan is opposed to relocation of the peasantry even within the area, the case in south Punjab is the opposite: the peasantry has been expelled from the land and who have been forced to migrate to cities, including and particularly to Karachi. The remaining peasantry is now employed on land as wage labour. Thus, while rural Sindh and Balochistan remains trapped in an age-old order, south Punjab has moved towards a relatively modern, mercantile regime.

Land inequality in all three provinces is reflected in glaring income inequality: large landowner income is 31 times higher than the average sample income, with the income differential somewhat greater in south Punjab. It has also imposed a state of chronic poverty for the landless, tenants and even the small farmers. A higher share of expenditure on food is considered an indicator of poverty; herewith, larger farmers allocate 17% of their expenditure to food, compared to 50% for the sample as a whole. On the other hand, per capita food expenditure in large farmer families is 5 times higher than the sample average. The share of food expenditure in Balochistan for the sample as a whole is almost 60% and per capita food expenditure difference 6-fold. Further, thatched walls are an indicator of abject deprivation; herewith, half of the sample respondents reside in houses with thatched walls. The extent of deprivation in terms of residence in houses with thatched walls is the highest in Sindh (71%) and the lowest in south Punjab (32%).

The floods of 2010 affected large farmers and small farmers and tenants differentially. Generally large farmer houses are on higher ground and remained protected from the ravages of the floods. They also managed to move their livestock to higher ground. Small farmer and tenant

abodes were located on low-lying land and were submerged and washed away along with their meager belongings. They remain vulnerable to flood damage in future as well. An indication of the differential losses is provided by the fact that large farmer losses accounted for less than one-fifth of the annual income, compared to 123% for the sample as a whole.

The debt situation throws interesting light on differential vulnerability, with the debt to income ratio ranging from xx for large farmers to xx for the sample as a whole. Access to formal credit decreases with declining land size. Large and medium farmers and lessees have access to formal sources of financing for most of their credit needs and tenants have no access at all. The money lender and the shopkeeper - in that order - are major sources of financing for small farmers, while the landlord, shopkeeper and money lender - in that order - are major sources of credit for tenants.

The purpose for which a loan is taken also reflects vulnerability. All large farmers have obtained loans for productive purposes: agricultural operations and purchase of land, livestock or supplies. However, two-thirds of small farmers and over 80% of tenants have obtained a loan for consumptive purposes: flood losses, medical expenses, etc. Loans for consumptive purposes do not lead to creation of new assets and has to be repaid from current income or from new loans. That small farmers and tenants have to incur debt for meeting household expenses is indicative to economic stress. And that they have to incur debt for meeting police and court related costs is indicative of involvement in criminal cases which they cannot manage through connections a la the landed classes.

Coercion, fear and violence are endemic. In south Punjab, farm workers and even small and medium farmers continue to be subservient to now mercantile large farmer; given that the latter are in most cases pirs (spiritual leaders) as well and command quasi-religious allegiance. In Sindh and Balochistan, resort to direct violence is not unusual. Eviction of tenants is common in (southern) Sindh and Balochistan. Landless labourers and tenants are also resident on landlords' lands or in villages registered in the name of the landlord and are susceptible to eviction, which is a common form of coercion. Small farmers are also vulnerable in this respect.

The feudal-tribal order has ensured the continuation of patriarchy, which rules with an iron hand in rural Pakistan. Women have almost no freedom to make independent choices about socialization, health care, children's education and marriage, voting and voting choice, and even cell phone use. However, the level of conservatism varies with land size and

pattern of tenure. Except in Rahimyar Khan in south Punjab, large and small farmers and tenants are relatively more conservative and medium farmers and lessees are relatively less conservative. Large farmers in Rahimyar Khan share similar mercantile characteristics with lessees. Some women in tenant families do have independent decision making roles in some respects. All women use cell phones, male restrictions notwithstanding; exceptions being the abject poor who cannot afford cell phones and who have no one to call. The last case signifies social isolation. ■

NOTES

INTRODUCTION

1. There are differences within provinces as well, but is not taken up in this study.

CASE OF SINDH

1. Haroon Jamal, District Indices of Multiple deprivation for Pakistan 2011, Research Report RR-82, Social Policy Development Centre
2. Families living in houses with thatched walls can be considered to be the poorest of the poor.
3. Castes are sub-divisions of tribes (not to be confused with the Hindu caste system)
4. Haroon Jamal, District Indices of Multiple Deprivation for Pakistan 2011, Research Report RR-82, Social Policy Development Centre.
5. District Thatta has since been split into Thatta and Sujawal
6. Haroon Jamal, District Indices of Multiple deprivation for Pakistan 2011, Research Report RR-82, Social Policy Development Centre.
7. A mixture of betel leaves, tobacco and narcotic ingredients that is chewed and sucked.
8. Government of Pakistan, Agriculture Census 2010
9. Reference here is to families that own land or have access to land.
10. Total family expenditure on food divided by number of persons in the family
11. Total expenditure on food divided by total number of persons in the households
12. Identification of affectees in a flood-affected district was made electronically based on NADRA database and all residents in the district were provided compensation.
13. The NGO was run by a family member of the large farmer
14. This is due to small sample bias.
15. The responses of male and female respondents are remarkably similar; ostensibly because nowhere were women allowed to be interviewed without dominating male presence.

CASE OF JAFFERABAD, BALOCHISTAN

1. Haroon Jamal, District Indices of Multiple Deprivation for Pakistan 2011, Research Report RR-82 Social Policy Development Centre
2. Total family expenditure divided by number of persons in the family
3. One medium farmer owns 2 private vehicles.
4. Total divided by total number of persons in the households
5. The disputes arise largely out of disagreements over deductions made by the landlord with regard to input costs and debt servicing. Some disputes also arise on account of landlord demand to provide free labour.
6. Identification of affectees in a flood-affected district was made electronically based on NADRA database and all residents in the district were provided compensation.
7. Male and female responses have been averaged; however, there is remarkable similarity between the two, ostensibly because interviews with women were held under dominating male presence and with frequent prompting.

CASE OF SOUTH PUNJAB

1. Haroon Jamal, District Indices of Multiple Deprivation for Pakistan 2011, Research Report RR-82, Social Policy Development Centre
2. Castes are sub-divisions of tribes (not to be confused with the Hindu caste system)
3. Ibid.
4. Government of Pakistan, Agricultural Census, 2010
5. Reference here is to families that own or sharecrop land.
6. Total family expenditure divided by number of persons in the family
7. Total divided by total number of persons in the households
8. These farmers have a rural background
9. More than half the emigrants were reported to have headed for Karachi, as - according to the remaining villagers - there is some kind of resistance to absorption of south Punjab migrants in the Lahore labour market.
10. Identification of affectees in a flood-affected district was made electronically based on NADRA database and all residents in the district were provided compensation.
11. Male and female responses have been averaged; however, there is remarkable similarity in the responses, ostensibly because nowhere were women allowed to be interviewed without dominating male presence.