

Full Length Research Paper

Study on the feature of land and labor contracts between landlords and tenants in Khyber Pakhtunkhwa Pakistan

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This study examines the present land tenancy arrangements and their long-term duration, which were manage informally in the landlord, tenant relationship. Also examines the relationship between each landlord and tenant in these tenancy contracts with their contractual parameters, then discuss the sole differences of the sample respondents in each contract, in comparison with famous previous agrarians research works in the field of land tenancy. The information were collected through base line survey in year 2014 from February 1st to March 16th. These information was based on three major growing crops Wheat, Sugar cane and Tobacco, which were grown in the cropping year 2013, from the selected three villages of district Swabi Khyber Pakhtunkhwa Pakistan. Mixed method were applied to explore the quantitative as well as qualitative significance of the selected 30 respondents in this research work, also discussed features, Age in (years), Education in (years), family labors (men) and Cultivated land size in (acre), as well as decision making behavior of the sampled respondents in these informal tenancy contracts. The finding of our study are long-term duration in tenancy contracts, which were recorded as, twenty one year's maximum and minimum of four years and their four different contract types, which were Share, Fixed, Owner cultivation and mixture of both Share and Fixed. All these finding shows the differences of this research work from the others researches empirical works in shape of long-term duration and multiple contract between one tenant and different landlords. This study recommends that the government should take some initiative towards land reforms and make these land tenancy contracts in written form in the study area and in country as a whole, so that it would be better for both the landlords and tenants to know about their contract contractual formation clearly, especially for the landless laborers in the rural Pakistan, which will give secure tenure status and more decision power, then the tenants will work hard and invest more in the land, through which we will see improvement in agriculture production in the country as well as for the whole region, which will also play key role in future food security.

Key words: Land tenancy, labor contracts, landlords, tenants, Pakistan.

INTRODUCTION

Agriculture is the backbone of the economy of Pakistan. It accounts for 22% of the country's GDP and provides employment to about 45% of the total employed labor in the country. Crop production is a major contributor to the value addition in the agricultural sector. Major and minor crops constitute 33 and 12%, respectively, of the overall value addition in agriculture (Government of Pakistan 2009). However, Khyber Pakhtunkhwa is 10.17 million

hectares, which is 13% of Pakistan's total area (Government of KP 2014). However, due to well irrigation system and fertile soil, agriculture activities, also land tenure arrangements are more general in the mid-part of

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Table 1. The feature of the present tenancy types and their contractual parameters in the study area.

Tenancy type	Land owner			Tenant		
	Cost	Labor	Yield	Cost	Labor	Yield
Owner cultivator	100 %	100 %	100 %	0%	0%	0%
Fixed-rent contract	0%	0%	0%	100 %	100 %	100 %
Share contract	50%	0%	50%	50%	100 %	50%

the province like Mardan, Nowshera, Swabi, Charsada and Peshawar. From the independence Pakistan has engaged in feudal land tenure system, the unfair distribution of natural resources which made highly conflict society and division of peoples in upper, middle and lower classes. According to the USAID (2010) land tenure and property rights are one aspect of chronic poverty, corruption, undermining economic growth and fueling conflict. Moreover, that a more equal distribution of land might result in significant gain in the economy (Ray, 1998 ch, 12 P. 456). Also the government was taken many initiative towards land reform regulation over the past many years to improve the landlord tenant relationship in the country but these legislations were still not existing.

Early post-independence period, redistribution land reforms was popular in South and Southeast Asian countries, even though its implementation failed because of strong opposition of the landed class (Like, India, Pakistan, Bangladesh and Nepal), (Herring 1983; Ladejinsky 1977). However most of the landlords and tenants in Pakistan and particularly in Khyber Pakhtunkhwa were involve in traditional land tenancy contracts, which were manage informally by these landlords; also they hire the landless laborers from a competitive labor market for different land tenancy contracts and make agriculture production for his own household consumption as well as for the region.

According to the World Bank (2009), 2% of households control more than 45% of all land, which severely constraining agricultural production competitiveness and livelihood opportunities.

In rural Khyber Pakhtunkhwa, land still exists the major form of wealth and family class differences among the rural people. According to the Arif (2004), the land tenure defines the social and political structures of a society, and determines the course of economic development, distribution of income and wealth. To clarify the system of land tenancy, we must explain that tenancy relationships are surrounding within the larger social structure of Pashtuns society, with their own traditional norms. At present, three variants of private or individual tenure exist in Pakistan (Naqvi et al; 1989). The first variant is owner-cultivation, second share cropping contract and third fixed-rent tenancy (Kousar and Abdulai 2015, Ali et al 2012; Hussain, 1988). Table 1 shows the present land tenancy types and their contractual parameters in the study area.

The objective of this study is to investigate the actual situation about land tenancy contracts in the study area, also to discuss the contractual parameters and duration on the basis of each tenancy contract in the landlord, tenant relationship.

THEORETICAL EXPLANATION OF THE LAND TENANCY CONTRACTS TYPES IN THE RESEARCH AREA

Owner-cultivation

In the research area, those respondents which utilized their natural resources by himself and were making agriculture production for their household consumption. In this case, the land owner taken all the responsibilities of management and supervision related to farm production by using his own family labors or sometime hiring causal labor, especially in the peak cropping season (growing or harvesting). The landlord could self-cultivate by hiring unskilled labor and providing both supervision and management himself (Eswaran and Kotwal, 1985). However, Kumar (2003) defined, the system under which land owner cultivates his land himself with the use of family labors only and minimal use of hired labor. On the other hand, due to the availability of time, very few owner-cultivators interviewed during the field survey in the selected villages. Generally, in the study district, the availability of farm cultivated area among the majority peoples were small (< 4 acre) and medium size and very small portion of people occupied large cultivated area. The distribution of land and family owned resources among farming households relatively homogenous, so efficient resource can be achieved without tenancy transaction (Otsuka et al. 1992).

The reasons due to which respondents were working as a self-cultivator are; like, the availability of own family labor, no governmental jobs or owned private business as well as education, all these constraints in the research area restrict the individual to work on his own piece of land. However, the statistical evidence, in case of owner-cultivator from the selected study villages related to, Age (years), Education (years), Cultivated area (acre) and Number of family labor (male) are reported.

Share contract

In the landlord-tenant relationship share cropping were the most dominant form of land tenancy arrangements in

the study area, which were working in different flavors, so the most general one is the 50:50 ratio, the 75:25 crop share is also existing. The task division between them are decided with mutual consultation related to which crop to grow and input cost sharing, fertilizer, pesticide, weedicide and so on, also the yield may be divided on equal basis immediate after the harvest. However, sharecropping contract, an arrangement is made between the landlord and operator, such that part of the output is given to the landlord as compensation for using the land (Abdulai et al. 2011).

Thus sharecropping emerges as a way to share, not just the output of the productive activity, but the risk that is associated with it as well (Ray, 1998 ch.12 P.434). However, Reid (1977) predict, the landlord and tenant as both contributing un-marketed resources in a share cropping arrangements. The landlord and tenant could make share contract in which the former provides management and the latter supervision, and output is shared (Eswaran and Kotwal, 1985).

On the other hand, the initial contract term and condition in the country as whole, specifically in research area were working with verbal commitment, traditional norms and the decision rule or unwritten commitments are very hard to violate during the contract period. In case, if a very severe conflict arises between them, either party must be informing before the end of the contract time. However the initial contract duration is one cropping year (e.g., two crop season), also the final decision power in share tenancy exist in the landlord hand in the selected villages. Moreover, the tenants status and decision making power in the share contract compared to fixed-rent contract were low in the research area. However, Steven Cheung (1969) defined that share cropping offers the advantage of risk sharing while the other two contracts characterized by lower transaction cost.

Fixed-rent contract

In the study villages the second dominant contract are fixed-rent tenancy, in which the tenant pays cash money to the land owner. So in this case the tenant taken all the responsibility related to management and supervision, decide about farm production which is more profitable for him. However, Eswaran and Kotwal (1985) defines, that landlord lease out the land to a tenant for fixed lump sum rental, the tenant hires unskilled labor and provide both management and supervisor. If the enforcement of tenant efforts is the defining problem of the contract, the fixed rent contract dominates any other contract (Cheung 1969).

On the other hand, the task division and decision making power of the tenant in fixed contract are similar like the landlord in owner cultivation, during the contract period. The initial contract duration for fixed-rent contract in the research area is one year with verbal norms and mostly the payment will pay after the harvest of cash crop,

for example tobacco and sugarcane, also some time it exists in written form, when a landlord have need of money for family oriented issues, (like son or daughter marriages or serious hospital issue etc.), then the initial duration were ranging from 1 to 5 years. In this case, the landlord received all money in advance.

The present way of payment per acre, especially in the selected villages and the study province as whole were depending on the fertility of the soil and irrigation system like equipped with canal, tube-well or unirrigated. So in our case, all these three villages have canal irrigation system and fertile soil. However, the landlord charges per acre in village Kadame were ranging from Rs 30,000 to 35,000, in Fazleabad and Kaludher Rs 35,000 - 45,000. However, the tenant has the incentive to maximize the surplus under a fixed rental contract where he keeps the entire output and pays only a fixed rent to the landlord, who has the bargaining power to extract the entire surplus by appropriately determining the rent (Sen 2011, Hritonenko et al, 2014).

Mixed contract

In the landlord-tenant relationship, we found a contract in which one tenant was working with more than two different landlords, both in share and fixed-rent contract. Due to the long settled of the tenant families in these villages, they know the landlord families as well as their relatives. However, the occupied farm cultivated area in acre of the respondents which involved in multiple contracts, the area in acre under share contract was higher than those of fixed contract. We observed from these respondents, that they made the fixed contract with the relative of share landlord, also some land they occupied in fixed are women oriented.

The mixing of different contracts may be difficult to accomplish in practice, it all depends on the structure of the market (Ray, 1998 ch.12 P. 436). However, Newbery (1977) described, even if mixing is possible to find a safe asset, such as a fixed-wage contract that is lacking in all uncertainty, in such circumstances sharecropping may well dominates whatever can be achieved by mixing fixed-rent tenancy with a risky wage contract.

THEORETICAL EXPLANATION OF THE CONTRACT DURATION IN THE RESEARCH AREA

In the study area the land tenancy relationship in which both parties, landlords and tenants, were involve with annual years of tenancy contracts, which may be more than two crop seasons. Under these contracts, most tenants stayed with the same landlords for a number of years, also continuously involved in producing agricultural products for their own household consumption as well as for the country and region. In the relationship of the sample respondent in contract duration, the options of increasing punishment and reward, through inter-linked

contracts, provide extra work incentives to the tenant. Because the landlords support their tenant through advance credit, both in crops peak season and his family oriented issues, like marriage, death and political circumstances, especially in share tenancy. Sadoulet et al (1997) described the existence of kinship relations between landlords and tenants, and the characteristics of share tenants which may contribute to higher trust and confidence. For example, cheating is less likely to occur, reducing the conflict of interest, offering longer contractual relationship through stages of the life cycle and mutual insurance.

Especially for long-term contract it is important to discuss about the following points which and leads to best relationship between landlords and tenants for their future contracts with some famous literature.

Reputation

In our study area the landless farm population was usually long settled in the same district or villages' community and people know each other quite well through an efficient mouth to mouth communication with some traditional norms, except those who were come seasonally to the area. So reputation is certainly playing one of the important roles in landlord-tenant relationships. For example, if anyone interrupt these contract norms this fact soon become known in the close village community, which will make troubles for both parties in future tenancy arrangements.

In these three selected villages therefore for the long-term contract duration the tenant should be concerned with his reputation. This means he is more likely to care for the land as well as for landlord family and developed good social relationship with them, also with neighbor tenants.

However, we observed that tenants made investment more in the land during these long-term duration of tenancy contracts and were more efficient compared to those tenants which were involve in short-term contracts, at shortest one crop season, or working seasonally in our research area. Thus in the landlord-tenant relationship reputation will play key role for the continuation of these long-term duration in the selected villages. However, the loss of the reputation from both parties was decrease the expectance of these long-term contracts duration in the study area. So, if there is a failure to take the action prescribed by the contract that results in a loss of reputation that causes such a reduction in welfare, and at last the contract become effectively enforceable (Holmstrom, 1983).

Also interlink contract (like borrowing credits or enjoying other kinds of supports from his landlord) with reputation were working and both parties did actions according to the situations and made co-operation with each other, rather than agriculture related issues. For instance, they helped out each other, especially in their

traditionally ways of marriages, death circumstances and politically support as well.

Otsuka et al. (1992) in his agrarian studies pointed out, major puzzles, such as the prevalence of the 50:50 sharing ratio in tenancy, the absence of fixed payments in share tenancy, the equality of output and cost sharing rates, and the low interest rate charged on credit provided by the landlord to his tenanted laborer, cannot be understood without considering the inter-linking of contracts.

Eviction threats

The eviction threats are also one of the main points in this research, which works like a weapon for the landlords and they use it according to the circumstances, related to crops and tenancy contracts in the study villages. However, Banerjee and Ghatak (2004) described indeed, there is considerable evidence showing that the landlord-tenant relationship is typically a complex long-term informal contract with eviction threats often explicitly used as one of the incentive devices. In contrast, the degree to which a tenant actually uses threats of eviction, however, may depend on the degree of social distance inherent in landlords-tenant relation (Kassie and Holden 2007).

Also they were control the unobservable level efforts of the tenant to make sure the first-best output in share contract and rent per year in fixed-rent contract in the selected three villages. James (1974) described that under certain conditions, however, it is possible for the principal to elicit approximately the first-best effort level from the agent by threatening him with an arbitrarily severe penalty whenever a very small output may be observed.

We heard from the sample respondents, that most landlords tend to make the final discussion with their all tenants at one time in a year, especially after the harvest of cash crops (tobacco and sugarcane) about the total cost on production, yield, and income, (which was grown in the cropping year) in (50:50) share tenancy or rent per year from fixed-rent, in his home.

After the final discussion the landlord pointed out the weak points of the tenant from the previous year contract like (low productivity or tenant engaged in other activity) in share contract and timely payment of rent in fixed contract and give some threats related to his future contract, so to achieve the first best efficiency from the future contract. Moreover, Ray, (1998 Ch.12 P.463) described eviction as another instrument that the landlord might use to provide incentives and discussed situations in which eviction clauses may be implicit or explicit in tenancy arrangements.

Efficiency and behavior

In the study area we pointed out that the first best efficiency of tenancy contracts in the landlord-tenant

relationship are achieved, because of continuously working in the same farm from many years, due to which they invest more in the land, also tenants developed highly socialized and reliable environment in these long-term relationship with landlord family, as well as their efficient skills in agriculture production. This means these tenancy arrangements can be long-term contracts. Barrett (2005) explained that, farmers are taking care not only of material satisfaction, but also of the values of social interaction and they willingly pay dearly for these.

Also the availability of various choices of these land tenancy arrangement, which were working indifferent form of share and fixed-rent contract. On the other hand, the government institutional land reform laws still do not exist in the country as a whole and specifically in research area. We observed that those tenants who involved in short-term (one crop season) land tenancy contract or were working in labor contracts in the selected villages, their first-best efficiency is not reinstated, because of unenforceable work efforts of these landless laborer, with their behavioral aspect as well, comparatively those which were involve in long-term contract duration.

In agrarian literature Otsuka et al. (1992) explained that the significant inefficiency of share tenancy is not common in areas where both share and fixed-rent contracts are available options. Inefficiency tends to arise where contract choice is institutionally restricted. So it is clarified from the results that there is the availability of wide range of choices in informal traditional land tenancy arrangements in the study area, that the good decision opportunity to the landless labors are provided and they are making competent decision among them. However, the enforcement mechanism will be stronger in more tightly structured communities in which the rights and obligations of each member are more clearly defined by tradition (Hayami and Kikuchi 1981).

Wealthier and skillful tenants

In our research area, we mainly focused on the tenants who were comparatively wealthier than other tenants, however in the study area, due to competitive labor market, when a landlord want to make contract with a tenant, at first landlords ask how many own family male members and which kinds of agriculture technology, like Bullocks, Tractor, other Equipment's and so on, they have.

Secondly, the landlords check his own experiences of each tenant, like how long the tenant had been working in agriculture sector. Especially in case of 50:50 share contracts, the landlords tend to want to share agriculture production risk with tenants, who make every effort to make the first best output from the contract. On the other hand, in case of fixed-rent tenancy, the landlord tends to check the financial position of the tenant because the land owner wants to make sure his per year rent, might

be cash money in many cases, from the contract. However, majority of the selected respondents in research area involved in share and fixed-rent tenancy contracts and few of them were owner cultivator. So all these characteristics in the landlord-tenant relationship in the study area were playing important role for the long-term contract duration.

Zusman and Bell (1989), explained that empirical research, which attempts to identify the determinants of contract choice with due consideration of household characteristics, is still lacking. Also Shetty (1988) stated in his paper that differences in tenant's wealth imply corresponding differences in liability when default is possible on fixed rental commitments. The selection of tenants and the contract terms they receive thus depend on wealth with wealthier tenants being preferred and receiving fixed rent contracts. His land endowment is largely hereditary, and is out of proportion to his farming experience and skill.

MATERIAL AND METHODS

The selected study area was District Swabi, which is situated in Khyber Pakhtunkhwa Pakistan. After the site selection, a comprehensive interview schedule and questionnaire was developed to collect the primary information from the respondents, First the questionnaire was pre-tested in the research area. After this pre-test, 30 respondents were selected in the three villages of District Swabi. The landlords who have reputation in the set three villages helped us and made advices in order to select 30 respondents. Each respondent has excellent skills of agricultural production, and producing all or some of three major crops (Tobacco, Sugarcane and Wheat). As a results, this sampling has the potential for bias, which these respondents are comparatively skillful in agricultural production and management. The interview schedule was pre-tested in the field accordingly on 1st Feb 2014 which was finished in 15th of March 2014. From which we were collected information about different tenancy contracts, their duration and data related to three major crops.

RESULTS AND DISCUSSION

Current statistical situation of the contracts duration in the study area

This section is based on the duration of the contract which has explained with different features of the sample respondents.

The tenancy contracts and its duration is a very important point in this research work, we made four different duration categories of the selected respondents with their villages and contracts duration.

Table 2 shows the distribution and the statistical values of the sample respondents about contract duration in the three selected villages.

Table 2. The feature of the contract duration in the three selected villages.

Variable	Villages				Statistics			
	Fazle Abad	Kadame	Kalu Dher	Total	Mean	Std	Max	Min
	(N of HH)	(N of HH)	(N of HH)	(N of HH)	(years)	(years)	(years)	(years)
Fazle Abad					10.0	3.0	20	4
Kadame					11.0	5.5	21	4
Kalu Dher					9.0	4.5	15	4
Duration 0-5	4	2	3	9	4.6	0.5	5	4
Duration 6-10	3	6	2	11	8.5	1.8	10	6
Duration 11-15	0	3	2	5	15.0	0.0	15	15
Duration 16-	3	2	0	5	19.4	1.7	21	16
total	10	13	7	30	10.2	5.5	21	4

Table 3. The feature of the age of tenants and the contract duration in the three selected villages.

Variable	Age (years old)					Statistics			
	-40	41-50	51-60	61-	total	mean	std	max	min
	(N of HH)	(N of HH)	(N of HH)	(N of HH)	(N of HH)	(years)	(years)	(years)	(years)
FAZLE ABAD	3	1	3	3	10	52.6	12.7	70	32
KADAME	7	2	2	2	13	43.7	13.9	70	24
KALU DHER	1	2	0	4	7	55.3	12.7	70	36
Duration 0-5	3	3	1	2	9	45.6	13.6	65	24
Duration 6-10	6	2	2	1	11	43.8	11.5	64	33
Duration 11-15	0	0	2	3	5	64.0	5.8	70	55
Duration 16-	2	0	0	3	5	53.8	15.0	70	32
total	11	5	5	9	30	49.4	14.2	70	24

So in village wise comparison, the maximum duration of village Kadame 21 years, Fazleabad 20 and Kaludher 15, with reported mean values are 11.0, 10.0 and 9.0 respectively. In the four contract duration categories, the respondents belong to "Duration 6-10", their mean value was 8.5. The second highest category was "Duration 0-5", with mean value 4.6, the other two duration categories "Duration 11-15" and "Duration 16-" were the same number of respondents, with their mean values 15.0 and 19.4 as reported. So in the village and contract duration wise mean value was 10.2 in years and its standard deviation was 5.5 of the sample respondents. These long-term durations of the respondent reveal that, they play the main role in producing agricultural products for their own family consumption as well as for landlord family and were making contribution in the socio-economics for the whole country and region.

From the results of long-term duration of the contracts the new idea can be raised, that the landlord-tenant relation were working in strong mood. We observed from the selected respondents, that both parties feel much secure in these long-term duration of the contracts, especially in side of the tenants. Banergee and Ghatak (2004) explored that in the context of agricultural tenancy,

it is widely believed that tenants who have secure tenure will tend to invest more in the land, which seems to be a straight forward corollary of this preposition. However, in the country a considerable portion of the variation in tenancy duration, and hence in the security of tenure, is due to heterogeneity across landlords (Jacoby and Mansuri 2008).

Also in these relations, landlords who had enough decision making power, so they have easily monitor tenant behavior towards agricultural production because he had the enough power to implement his decision on his share tenant. On the other hand, in lease case, the landlord have restricted, like (about crop selection, input use etc.) during the period of the contract, but still occupied some power, like caring of irrigation channels, field boundaries etc.

Table 3 shows the age features of the sample respondent's bases on their duration of the contracts in the study area. Due to the inefficient attention of the previous researches work towards these features in the land tenancy arrangements, we were explore each characteristics of the sampled respondents in three different villages and pointed out that in village Kadame, the majority of tenants were younger with their mean

Table 4. The feature of the education in years and the contract duration in the three selected villages.

Classification	Education (Years old)				Statistics				
	0	5	8	10	Total	Mean	Std	Max	Min
	(N of HH)	(N of HH)	(N of HH)	(N of HH)	(N of HH)	(Years)	(Years)	(Years)	(Years)
FAZLE ABAD	6	2	1	1	10	2.8	3.7	10	0
KADAME	6	2	1	4	13	4.5	4.4	10	0
KALU DHER	4	1	1	1	7	3.3	4.0	10	0
Duration 0-5	5	1	2	1	9	3.4	4.0	10	0
Duration 6-10	2	3	1	5	11	6.6	3.7	10	0
Duration 11-15	5	0	0	0	5	0.0	0.0	0	0
Duration 16-	4	1	0	0	5	1.0	2.0	5	0
total	16	5	3	6	30	3.6	4.2	10	0

Table 5. The feature of the male family labor and the contract duration in the three selected villages.

Classification	Number of family labors (Male, over 15 years old)				Statistics				
	1	2-4	5-7	8 -	Total	Mean	Std	Max	Min
	(N of HH)	(N of HH)	(N of HH)	(N of HH)	(N of HH)	(Years)	(Years)	(Years)	(Years)
FAZLE ABAD	1	7	2	0	10	3.2	1.7	7	1
KADAME	1	8	3	1	13	3.9	1.9	8	1
KALU DHER	0	5	0	2	7	5.6	4.6	15	2
Duration 0-5	1	6	1	1	9	4.3	3.9	15	1
Duration 6-10	1	8	2	0	11	3.3	1.2	5	1
Duration 11-15	0	2	1	2	5	6.0	3.0	10	2
Duration 16-	0	4	1	0	5	3.4	1.9	7	2
total	2	20	5	3	30	4.1	2.9	15	1

value 43.7 as compared to other two villages, their mean values were 52.6 and 55.3 respectively. On the other hand, in comparison with their contract duration, the respondents involved in duration category (6-10) their mean reported value 43.8 which were comparatively younger, with highest numbers than those which involved in other duration categories. So the age in years of the sample respondents in different villages and contract duration groups, the total mean years' age was 49.4, variation 14.2, their maximum, minimum values were 70 and 24 as reported from the study area. Otsuka et al. (1992), pointed out that existing studies do not pay sufficient attention to the characteristics of households, market conditions, and the community structure that would determine relative contractual efficiency and contract choices.

Table 4 shows the education in years of the sampled respondents with their duration. So in the village wise comparison the respondents in Kadame, their number of year of education were high with mean value 4.5, compared to other two selected villages, then we were made educational comparison of the sampled respondents with their land tenancy contract duration, from which the respondents belong to 6-10 years

duration, their year of education and numbers were high with their average value 6.6, compared to those respondents which involved in other contract duration categories 0-5, 11-15 and above 16 years respectively. We assumed in the study area that comparison of education status in the relationship between landlord and tenant, the education status of the landlord family was high because of highly available resources, and the tenant family education status were not high, depending on their low wealth and available resources. Rao (1971) described that landlord families, with their higher wealth and social standing, are likely to have required better education compared to tenant families.

Table 5 shows the number of male family labors in the selected three villages, then we were spread out all the respondents in four different parts, the higher number of male labor were working in village Kludair, with their mean value 5.6, the maximum number of male family labors was 15 and minimum was 2 as depicted, comparatively higher than in other two selected villages. In comparison with duration of the contracts, the duration 6-10 with the mean value 3.3 was the highest number of respondents in the study area. The second highest respondents who involved in the study area with the

Table 6. The feature of the land use and the contract duration in the three selected villages.

Classification	Land use (Cultivated area, acre)				Statistics				
	-4	4-8	8-12	12 -	Total	Mean	Std	Max	Min
	(N of HH)	(N of HH)	(N of HH)	(N of HH)	(N of HH)	(Acre)	(Acre)	(Acre)	(Acre)
FAZLE ABAD	1	7	1	1	10	6.3	2.6	12	2
KADAME	1	7	3	2	13	7.7	3.9	17	3
KALU DHER	1	3	1	2	7	9.3	6.6	22	2.5
Duration 0-5	1	6	1	1	9	7.1	5.5	22	2
Duration 6-10	2	6	3	0	11	6.3	2.5	10	2.5
Duration 11-15	0	2	0	3	5	11.4	5.0	17	5
Duration 16-	0	3	1	1	5	7.7	2.8	12	4
total	3	17	5	5	30	7.6	4.5	22	2

duration of 0-5 and its mean value was 4.3, the lowest number of respondents was 5 for both the duration of 11-15 and above 16 their reported mean value was 6.0 and 3.4 respectively. In the research area it very hard for the landlord to cultivate his own land, because some of them were engaged in their own private business and some were working in governmental sector, also due to the lack of latest agricultural technological equipment's in the study area as well in the region, the agriculture production required high intensive labors, so they were hiring some landless labor to utilize their natural resources and grow agriculture crops, so the landlords were making different forms of land tenancy and labor contracts with these landless laborers. However, we observed, in our research area, that to monitor the landless labor efforts in permanent labor contract, it's very hard and costly for landlord. The institution of permanent labor creates a variety in agricultural labor contracts that is of intrinsic interest, it may be both better off and worse off than those in causal labor contracts (Ray, 1998 Ch.13 P.505). However, in India, Pakistan, the permanent labor contract is closely associated with caste status: permanent laborers belong to the lower castes and their employers to the higher caste (Thorner and Thorner, 1962; Breman, 1974; Bardhan, 1984, Ch.3 and George, 1987). Also he was willing to give his land on share and fixed-rent contracts or he becomes an owner- cultivator by hiring some causal labor.

Table 6 shows the farm size cultivated area in acre of the sample respondents with their tenancy contract duration in the study area. The differences of the villages show that farm size in village Kludair were high with their reported mean value 9.3 and their maximum cultivated area was 22 acres, as compared with other two selected villages, their means values were 6.3 and 7.7 acre respectively. In the comparison with duration years of the contract the average cultivated area in acre of the respondents in duration 11-15 were 11.4, higher than those respondents which belong from other duration categories. In the study area majority of farm size were small and medium, also most of the landlords and

tenants were in relations of share tenancy (50:50) ratio. Because the landlord was living together with his tenants in the same village or neighbor to the tenant village. So the landlord has advantage of monitoring his tenants' work effort, compared with absentee landlord, which were living outside from the research area or living outside of the country. We observed that, due to the insufficient attention of governmental sector towards land resources in the country as whole and especially in research province, highly fertile agriculture farm cultivated area were rapidly changes to the housing scheme as well as supermarkets. Also highly increased population over the past years, the most severe problem of the research villages, that the present growers highly restricted to grow different fruits crops like melon, orange, water melon etc., and sugar cane as well. Also we checked out such type of characteristics in the long-term duration contract relationship of the sample respondents in research area.

The types of the tenancy contracts with empirical results in study area

To explain the four types of contracts in study area we learned from the literature that among these contracts the share tenancy is more common in Asia. So the information which was collected from the selected respondents provides evidence that in Pakistan, especially in Khyber Pakhtunkhwa the share tenancy was dominant as compare to fixed-rent and fixe-wage contracts. On the other hand, a landlord personal capacity to monitor farm work of his tenant on daily or weekly basis are limited in the study area, however large land owner tends to choose fixed-rent tenancy, also landlords, who have good experienced in the field of farming and have the ability to monitor their tenants efforts and behavior on daily or monthly basis or from the yield, also has a good management skills are involved in share contract. However, in Eswaran and Kotwal (1985) permanent labor contract model, when work effort cannot be effectively monitored and enforced, the fixed-rent contract dominates the share and fixed-wage contracts in

Table 7. The feature of the age of respondents and the types of contract in the three selected villages.

Classification	Age (Years)				Statistics				
	-40	41-50	51-60	61 -	Total	Mean	Std	Max	Min
	(N of HH)	(N of HH)	(N of HH)	(N of HH)	(N of HH)	(Years)	(Years)	(Years)	(Years)
FAZLE ABAD	3	1	3	3	10	52.6	12.7	70	32
KADAME	7	2	2	2	13	43.7	13.9	70	24
KALU DHER	1	2	0	4	7	55.3	12.7	70	36
Duration 0-5	0	0	1	0	1	60.0	0.0	60	60
Duration 6-10	5	3	2	7	17	52.2	13.8	70	32
Duration 11-15	5	2	2	1	10	43.4	13.5	70	24
Duration 16-	1	0	0	1	2	50.0	14.0	64	36
total	11	5	5	9	30	49.4	14.2	70	24

the absence of risk aversion. In contrast, if the contracting parties are concerned with income risk and work effort is unenforceable, a trade-off arises between providing incentives and sharing risk and these results in the choice of a share contract (Otsuka et al, 1992).

Thus, the statistical results of land tenancy contracts in study area and evidence from the literature shows that landless laborer in the rural Pakistan as well as in the region were make efficient choices from a wide land tenancy arrangement spectrum, which were ranging from casual and permanent labor employment to long-term tenancy as well as owner cultivation. We considered that respondents in the selected three villages were make efficient choices among them, because all these contracts arrangements were working under no institutional constraints. On the other hand, the landlord in the study area, who were manage all these contracts arrangements informally, tend to choose those contract in which he has the ability to enforce contractual term and condition. Zusman and Bell (1989) explained that the principal chooses the contract to offer in full knowledge of the optimizing behavior of the agent, under the constraint that the contract be at least as attractive to the agent as the agent's alternative opportunities for employing his resources. Also in the wide range of agrarian's literature share cropping has been explained as a mechanism for risk sharing and for screening of tenants (Cheung, 1969; Newbery and Stiglitz, 1979).

Table 7 shows the age wise distribution of sample respondents with respect to type of land tenancy contracts in the study area. The table shows that majority of the respondents were in the age group of below 40 years, in both villages and contract wise, also the table shown village wise distribution of respondents from each selected village, which belonging from the same age group. The second dominant group of the respondent was of those which age group was of 60 years and above. The statistics of the study shows that in village Fazle Abad the average age was 52.6 years while maximum age observed was 70 years and minimum age observed was 32 years. In village Kadame the mean age

was 43.7 with maximum age of 70 years and minimum age of 24 years. In Kaludher the mean age observed was 60 years while the maximum age was again 70 years with minimum age of 36 years was reported. The table also shows that the majority of respondents followed share contract as well as both share and fixed type of contracts. In the group of share contract, the number of respondents were 17 with different age group as the mean age was 52.2 years, maximum age was 70 years and minimum age was 32 years for respondents with share contracts. On the other side in the group of both share and fixed contracts the total number of respondents was 10 with different age groups but mean age was 43.4, maximum age was 70 years and minimum age observed was 24 years. A small proportion of the respondents also followed fixed contracts and a few were owner cultivator. The table reveals that in the landlord, tenant relationship in study area majority of the sample respondents were farmers with very few owner cultivator and were involve with many types of land tenancy contracts agreements.

Table 8 shows the education status of the respondents within each selected village and tenancy contracts, with their education year groups, which were ranging from 0 to 10. At the first step, in village wise comparison, the number of respondents in village Kadame, their mean year education was 4.5 and the other two villages with their educational year means was reported as 3.3 and 2.8 respectively, with their same maximum and minimum year of education. In the second step we made comparison on the basis of share and both share and fixed contracts, so the respondents which involved in share contract, their mean years of education was 2.2 and respondents which were involve in multiple contracts, their mean years of education was 5.6. On the other hand, the respondents belong in 0-year education group, they were high in numbers, compared with others education years groups. We observed that in landlord, tenant relationship in research area, the respondents which were involve in multiple type land tenancy contracts, they were more skillful because of his high

Table 8. The feature of the education in years and the types of contract in the three selected villages.

Classification	Education (Years)				Statistics				
	0	5	8	10	Total	Mean	Std	Max	Min
	(N of HH)	(N of HH)	(N of HH)	(N of HH)	(N of HH)	(Years)	(Years)	(Years)	(Years)
FAZLE ABAD	6	2	1	1	10	2.8	3.7	10	0
KADAME	6	2	1	4	13	4.5	4.4	10	0
KALU DHER	4	1	1	1	7	3.3	4.0	10	0
Fixed contract	1	0	0	0	1	0.0	0.0	0	0
Share contract	12	2	1	2	17	2.2	3.7	10	0
Both F and S	3	2	2	3	10	5.6	4.1	10	0
Owner cultivation	0	1	0	1	2	7.5	2.5	10	5
total	16	5	3	6	30	3.6	4.2	10	0

Table 9. The feature of the male family labor and the types of contract in the three selected villages,

Classification	Number of family labors (Male, over 15 years old)				Statistics				
	1	2-4	5-7	8 -	Total	Mean	Std	Max	Min
	(N of HH)	(N of HH)	(N of HH)	(N of HH)	(N of HH)	(Years)	(Years)	(Years)	(Years)
FAZLE ABAD	1	7	2	0	10	3.2	1.7	7	1
KADAME	1	8	3	1	13	3.9	1.9	8	1
KALU DHER	0	5	0	2	7	5.6	4.6	15	2
Fixed contract	0	1	0	0	1	4.0	0.0	4	4
Share contract	1	12	3	1	17	3.6	2.1	10	1
Both F and S	1	5	2	2	10	5.2	3.8	15	1
Owner cultivation	0	2	0	0	2	2.5	0.5	3	2
total	2	20	5	3	30	4.1	2.9	15	1

years of schooling. We also assumed that recently changes in agricultural technologies in the country as well as in developing region, the educated tenants will play important role in the production of high quality agriculture products.

Table 9 describes the number of male family labor involved in the four types of tenancy contracts in the selected study area, the first part of table shows the distribution of sample respondents in four different family labor size categories and in second part we made the comparison with types of tenancy contracts, so in the village wise comparison the mean value of Kaludher village was 5.6, and the other two villages was reported 3.9 and 3.2 respectively. On the other hand male family labor in the multiple contracts was high with reported mean value 5.2, which was higher than those of share contract. So in total the average male family labor was 4.1. However, Pant (1983) explained that in a tenancy contract family labor is regarded as a crucial resource, since it is easier to supervise one's own family labor than to supervise hired workers, a tenant may be considered to have labor supervision abilities superior as compared to landlord.

Table 10 describes the cross tabulation of current contracts duration on the basis of four different types of

land tenancy contracts. In the first stage, we made village wise comparison of the sampled respondents, so in village Kadame, the maximum year 21 of duration of the sampled respondents were high compared to other two selected villages, but their minimum year 4 of duration were same in all selected three villages respectively. Also in the year duration category 6-10 their numbers were high compared with other duration years categories. In the second stage, we made contracts type wise comparison with their contract duration. So we choose only share contract and both fixed and share tenancy contracts in the selected three villages. So in the comparison, the number of respondents which involved in share contract, their mean and maximum values were 10.8 and 21, compared with both fixed and share.

Table 11 describes the cultivated area in acres, which was used in year 2013 for selected three major crops. First we made analysis of each selected village with their farm size cultivated area, the mean farm size in village Fazle Abad was 6.3 which is less than the mean value of the other two selected villages, their cultivated area in acre were 7.7 and 9.3 as reported from the research area, the variation of farm size in Village Fazle Abad was 2.6, which was less than as compare to other two study villages, there values was 3.9 and 6.6. The farm

Table 10. The feature of the current contracts duration and the types of contract in the three selected villages.

Classification	Duration of the current contract (Years)					Statistics			
	0-5	6-10	11-15	16 -	Total	Mean	Std	Max	Min
	(N of HH)	(N of HH)	(N of HH)	(N of HH)	(N of HH)	(Years)	(Years)	(Years)	(Years)
FAZLE ABAD	4	3	0	3	10	10.0	6.0	20	4
KADAME	2	6	3	2	13	11.0	5.5	21	4
KALU DHER	3	2	2	0	7	9.0	4.5	15	4
Fixed contract	0	1	0	0	1	7.0	0.0	7	7
Share contract	7	3	2	5	17	10.8	6.5	21	4
Both F and S	2	5	3	0	10	9.6	4.1	15	4
Owner cultivation	0	2	0	0	2	10.0	0.0	10	10
total	9	11	5	5	30	10.2	5.5	21	4

Table 11. The feature of the land use and the types of contract in the three selected villages.

Classification	Land use (Cultivated area, acre)					Statistics			
	-4	4-8	8-12	12 -	Total	Mean	Std	Max	Min
	(N of HH)	(N of HH)	(N of HH)	(N of HH)	(N of HH)	(Acre)	(Acre)	(Acre)	(Acre)
FAZLE ABAD	1	7	1	1	10	6.3	2.6	12	2
KADAME	1	7	3	2	13	7.7	3.9	17	3
KALU DHER	1	3	1	2	7	9.3	6.6	22	2.5
Fixed contract	0	1	0	0	1	6.5	0.0	6.5	6.5
Share contract	1	12	2	2	17	6.7	3.2	16	2
Both F and S	1	3	3	3	10	10.0	5.7	22	3
Owner cultivation	1	1	0	0	2	4.3	1.8	6	2.5
total	3	17	5	5	30	7.6	4.5	22	2

Table 12. The feature of the land use and the dominant type of contract in the three selected villages.

Classification	Land use (Cultivated area, both F and S, acre)					Statistics			
	-1	1-2	2-3	3 -	Total	Mean	Std	Max	Min
	(N of HH)	(N of HH)	(N of HH)	(N of HH)	(N of HH)	(Acre)	(Acre)	(Acre)	(Acre)
F = S	0	0	1	1	2	2.8	0.3	3	2.5
F > S	0	0	0	0	0	0.0	0.0	0	0
F < S	0	2	2	4	8	2.6	1.0	4	1
Total	0	2	3	5	10	2.6	0.9	4	1

size minimum values of each selected village were not so high but the maximum farm size 22 in village Kāludher was high. In case of tenancy contracts the average farm size in share contract was 6.7, which was less as compare to both fixed and share contract, the average was 10. On the other side, sampled respondents which belong from farm size category 4-8, they were in majority, compared with other farm size categories.

The table also reveals that the cultivated area in the study district either small or medium size, so the majority of the sampled respondents were involved in share tenancy. Also the landlord who's cultivated land area are

small and familiar with agriculture technology, market as well, were prefer share contract. But those Landlords were far away from their field or government employee, they give their land on fixed contract in the research area. Table 12 represents the cultivated area in acre of the respondents which involved in both fixed and share contracts. Then we made four different categories of farm size on the basis of their sample differences. We were also make three different assumption of the mixed contract, first, two respondents have the same cultivated area, their mean value was 2.8, maximum and minimum values were 3 and 2.5 acre respectively. In the second

assumption there were no such respondents which have greater cultivated area than share contract. Third, the maximum number of respondents has less than cultivated area in acre from share contracts, their mean value was 2.6, Max and Mini values 4 and 1 as reported. In general, cultivated area in the study villages were small. However, the income status of both landlords and tenants were not so high, also the opportunities to earn income from others sources were very low, specifically in case of tenants. We also heard from the respondents during the field visits that in the mixed contract the land area of the landlords were very small or he involved other activities like governmental job, private business etc. or women oriented land.

Conclusion

This study was based on the baseline survey which was conducted in Feb, 2014 and was checked out the features of land tenancy contracts between the landlords and tenants in study area, Swabi in Khyber Pakhtunkhwa of Pakistan. Especially the multiple tenancy contracts and the long term duration were much surprising in the study area because from the literature most of the empirical studies were worked on short-term tenancy contracts, which mean one crop season, and relationship between single landlord and tenants or labor contracts.

In the next step, in depth interview to some of the respondents in this study from the study area should be made on the basis of long term duration and types of the contract and the reasons why the landlord and the tenant proceed for the long term contracts can be clarified. And to finalize the model on decision making and estimation on the basis of the crop selection with their dynamics in each type of tenancy contracts may be very important in the decision support to the tenant when they are facing on the arrangement to cultivate and to select the suitable crops.

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