PEASANT MIGRATION AND LAND MARKET
A STUDY OF A COMMAND AREA

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By

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GRAPHS

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CHAPTER -1

INTRODUCTION

1.0: The Problem:

The study of contracts and institutions has taken centre stage in one segment of Economic Theory, namely, New Institutional Economics. As Pranab Bardhan(1989) maintained, economic theory relegated institutional matters into a "Black box" which was seen to be vaguely important but did not receive "more then a nodding", and New Institutional Economics attempts to study these features. The old Institutional Economics is descriptive in method and analyze the affect/impact of institutions on the people. The New Institutional Economics school has the rational' individual as the basic unit of analysis and Coase theorem [Stiglitz(1989) calls it a conjecture] as its central tenet. The Coase theorem maintains that rational human beings would bargain among themselves and eliminate any inefficient recourse position. An extension of the above proposition was, "... (I)f one sees an institutional arrangement that looks inefficient, it looks so only because one has not fully understood the nature of economic problem that is faced."[Stiglitz(1989): P-20]. In other words the New Institutional Economics has shifted the emphasis to provide insights into what functions the institutions and contracts serve or have served at one time.

At a theoretical level New Institutional Economics analysis the 'individual rationality' of agents entering into contracts i.e., it maintains that the individuals chose the best form of contract given their constraint. New Institutional Economics analyses the 'rationality' of the existing contracts which look to be inefficient like share tenancy, bonded labor, existence of lease market, low turnover in land market etc. and in the process relax some of the assumptions of General equilibrium model like full information and well defined property rights on recourse. The important tenets of New

Institutional Economics are 'rationality' of the individual in the choice of contracts, asymmetric information between agents and that the forms of contracts evolve as a response to asymmetric information. Based on these, market as well as non-market exchanges are studied. As an extension of the above, Kirzner(1985) criticises the neo classical position for allowing no role for entrepreneur, and looks at the market as a creative process. He maintains that "... new products, new qualities of products, new methods of production and new forms of organisation that are endlessly generated in the course of entrepreneur process. "[Kirzner(1985), based on the reading from Buchanan. J. M and V.J. Vanberg(1994)].

It is in context nature that a study of rural land market was conducted to understand the nature and functioning of land market. Land market has an interesting feature in that there is low activity of permanent transfer market or sale and purchase market. A low turnover in the market would imply that the land transfers are few, further implying that there are constraints for transfer of land to efficient producers in the economy. In other words, an efficient farmer may not be able to buy land but would have to depend on temporary transfer market or lease. A lease arrangement has a temporary character with agents not interested to undertake capital investment on the land which may have an impact on efficiency. In sharp contrast to the low permanent transfer market, migration as an agency of change has generated a high turnover in permanent transfer market and this study would like to analyses land market in the presence of migration.

1.1 Land Market:

Land market is a different form of market as compared to markets, in general. Unlike normal markets, where different quantities can be assumed to be supplied and demanded at different prices, here, a specific quantity of land enters the market and is sold at different prices per acre. So here market exchanges in Land, are analysed to see if characteristics of agents are an explanation of the variability in price and land exchanged

The existence of "Many potential" buyers may lead to a situation where sellers can be responsive to price.

Land market transactions involve the transfer of property rights on land between two agents. The transfer could be a permanent transfer or a temporary transfer of land. If an agent transfers the right to use the recourse for a particular time period to another agent, the transfer is called a temporary transfer of land A transfer is called a permanent transfer if the agent transfers the ownership right to another agent An example of a temporary transfer is lease arrangement, while an example of a permanent transfer is the sale of land.

The institutions connected to land as a factor of production impinge on the proper development of an active land market. An active land market is a necessary condition for development, as substitutability between land and labour, land and capital are made possible, and with substitutability the allocation of resource, factor utilisation and productivity would improve.

Empirical studies on land market show a low turnover in the permanent transfer market and a high turnover in the temporary transfer market. This is shown by Bliss and Stern(1984) of Palanpur, ICRISAT village survey by Walker and Ryn(1989) and Shaufier(1994), study of Irevelpattu by Guhan and Mencher(1982), Guhan's(1983) study of Palakurchi, Athreya's(1983) study of Vadanalaipuram, V.M.Rao(1972) of 32 villages in ryotwari region of Gujarat and Maharastra, three village studies in Haryana by Sarap(1996) and Shergill(1986) study of 14 villages in Punjab. Authors like Bliss and Stern(1984), Shaufier(1994), Dreze(1997) have extended this argument of low turnover in the permanent transfer market and high turnover in temporary transfer market to represent a case of "active" temporary transfer market and "inactive" permanent transfer market.

A issue related to the land market is the process involved in land transfers. Rajasekhar's(1988) is a historical study of land transfers in a village in Rayelseema region of A.P and the period of study is 1891-1984. Identifying the process of land transfers, he says that between 1891-1947 movement of land was from non-cultivating (Brahmin) families, who had out migrated, to large land owners. The second process was the transfers of land from small farmers to large farmers in lie of credit needs. On the eve of tenancy reforms, absentee landlords had sold off their land With land ceiling legislation of 1961, rich farmers ceased to buy land and land transfers were from one segment of small farmers to another who had cash reserves. Reddy(1996) studies lease arrangement in Nellore district from 1985-1990 using written contracts from old records. Most of the lessor were absentee [Brahmin and Reddy by caste] landlords, while the lessee were actual cultivators [Reddy and Sudras by caste]. The absentee landlords used to migrate to urban areas and lease the land in the villages. The lease with its provision helped the tenant to meet their subsistence needs and the landlord to claim rental proceeds. Reddy(1996) identified a process of land transfer where the tenant provides credit to the landlord and credit is used as an instrument to get access to land. Starting from a share cropping contract

> "(W)henever, the lessor asks for a loan or advance of rent, the tenant used the opportunity to get a medium-or-long term lease, generally for five years or so and get the input sharing provision canceled. The next stage was its conversion into a mortgage lease if the lessor failed to redeem the loan in the time and also when the lessor asked for another loan, and also when the interest on all them exceeds the usual rental amount. Not many mortgage were cleared in the stipulated time, and frequently the land involved passed on to its tenant cultivator through a sale deed, sometimes even without a registered sale deed". [Reddy(1996), p: 166-6]

Nancharaiah(1988) studies the changing land distribution, caste wise, in a village, "kanchakoduru" in Krishna district of Andhra Pradesh. The data was collected at four points of time. In the first period i.e., 1930 the Brahmins were the dominant land owners in the villages. They owned 76.99% of land, the non-Brahmins owned 20.53% and

scheduled caste 2.48%. By 1948, 42.7% was owned by Brahmins, 51.7% were owned by non-Brahmans and 5.59% by S.C. By the year 1965, 78.64% was owned by non-Brahmans, with S.C owning 14.68% and Brahmans 6 68%. While in 1982 the non-Brahmins increased their ownership to 82 54%, the SCs to 12.11% and the Brahmins to 3.38%. The factors influencing land transfers identified by Nancharaiah are, first, the Rent Reduction Act and the Estate Abolition Acts. Many of the land owners started to sell away the land due to irregularity of rent payment and low rates of rent fixed by the act. Secondly, employment options were increasing in government services and thirdly, due to conspicuous consumption of the Brahmans.

Broadly, the reason for sales as seen in the literature is debt compulsions [Bliss and Stern(1982), Guhan(1983), Athreya(1984), Guhan and Mencher(1984), Sarap (1996) etc.] While the second reason for sale is the transfer from non-cultivator owner to cultivators when the non-cultivators have migrated to non-agricultural sector [Rajasekhar(1986), A.Reddy(1987), Nancharaiah(1988)] etc. The second type of studies are historical in nature. These studies identify one important process of land transfers in which land is transferred from absentee landlord [Brahmin by caste] to cultivators castes in the village. In addition, the absentee landlord had employment in non-agricultural sector or urban areas. To this Reddy(1996) identified credit as an instrument of transfer of land by the tenant.

At a theoretical level there are broadly two explanations for the low turnover in the permanent transfer market. One of the explanations is by Bhaduri(1986 a,b). He maintains that in an agrarian economy, agents have a preference to hold on to land and any sale of land is a reflection of "distress" condition of seller. A "distress" sale represents a case of sale when agents participate in an exchange without "gaining from trade" while normal sales represents a case of Voluntary involvement in exchange with "gains from trade" motive". In a semi-feudal economy, Bhaduri maintains, "distress" sales dominate over "normal" sales. Bhaduri maintains that agents may not adjust price

quantity to excess demand-supply conditions. Basu(1986) provides another explanation for the low turnover in the land market. He also identifies two types of sales, one is "interim sales" and the second is "normal sales". A normal sale is one where agents sell land without wanting to buy land at a later date, while an interim sale is one where agents sell land with an intention to buy land at a later time. In an economy where sales are low, agents do not have the surety that they can buy back land at a later period and so they would not want to sell land and any sales would be in response to the cash need of agents. As the seller is in need of cash these agents would like to buy back land at a later date once the need is overcome. So these forms of sale are identified as interim sales. One sees that in both the models of economy, agents are not responsive to price but to cash need of the households. R. Vijay and R. Kavita Rao(1996), have attempted to show the conditions generating interim transaction. It was shown that interim transactions are generated as a result of a temporary shock facing a tenant. The result of the shock is affecting the expenditure stream of the peasant but not the income stream. To face the shock, the peasant may have to sell land but would like to buy back the land at a later time. An interim transaction would result if the expenditure is greater than the income and there do not exist any institution to internalise/smoothen the risk in the village. While a regular sale would result if there exists a permanent change such that the income from non-land is much larger than the income from land leading to sale of land. [A detailed description on the permanent transaction market is given in chapter-Ill]. At an empirical level, the permanent transfer market depicts a low turnover while the explanation at the theoretical level is in terms of presence of non-responsive agents in the economy.

The lease arrangement is known to depict heterogeneity in rent, land exchanged and forms of contracts. There are two explanations on the functioning of lease market both of which rest on the assumption of 'inactivity' of permanent transfer market or the assumption that the adjustment of resources at household level is done in the temporary transfer market. The first explanation is the Resource Adjustment Models given by Bliss and Stern(1984), Shaufier(1994) etc. These models maintain that functioning of lease

market has to be seen in terms of recourse adjustment of households in the presence of non-marketed resources. Agents with excess of non-marketed resources with respect to land lease out land to households with deficit of non-marketed recourse. While the second explanation of the functioning is to see lease market as a process of appropriation of rent by absentee landlord or non-agriculturist [see for a detailed description of temporary transfer market in chapter-IV].

Following is an attempt to classify the interaction between the two markets. A partial equilibrium analyses is attempted of the land market, where land is taken as a productive asset. Exchanges in the land market are seen as recourse adjustment process by households. Recourse adjustment could take place either in the permanent transfer market or in the temporary transfer market.

The first case is where the permanent transactions and the temporary transactions are low; in other words recourse adjustments are neither in the permanent transfer market nor in temporary transfer market. A low turnover in the market could be a result of either demand and/or supply constraint in the economy. A demand constraint could be due to lack of purchasing power with farmers. Then exchanges should be in the temporary transfer market. As exchanges are absent in the temporary transfer market also, this type of economy has a situation where demand as well as supply are constraints. This type of market is identified as traditional market.

The second case is one where the turnover in permanent transfer market is high while the turnover in temporary transfer market is low. This represents a case where adjustments are in the permanent transfer market and not in the temporary transfer market. This would imply that there exist buyers of land and there is a supply of land in the market. As farmers can buy and sell land in the market, lease market is not the instrument for recourse adjustment in the market. This market would have features of 'normal' sales, a la Basu(1986) or Bhaduri(1986).

The third case is one where the turnover in permanent transfer market is low while temporary transfer market is high or adjustments are in the temporary transfer market. In this form of market there exist constraints on the supply of land in the market. As the supply is not in the permanent transfer market, agents supply in the temporary transfer market. This is the form of land market studied by Bliss and Stern(1984) Shaufier(1994), Dreze(1997).

A high turnover in the permanent transfer market and temporary transfer market represents the fourth case. This represents a situation where agents can adjust resource either in permanent transfer market or temporary transfer market. This form of market is said to be a modern market.

Here an attempt is made to describe an active land market in terms of the nature of exchanges. The existence of a market for a resource implies that the resource can be obtained at a price. The exchanges of land could be a result of normal sales or distress sales. The inactivity or inertia of the market is expressed in the notion that supply is not responsive to price. Distress sales can be seen as a condition where land as a resource has a price but the agent who sells the land is not responding to price but sell as a result of non-economic stimuli.

In the above context an attempt was made to identify active and inactive land market by the response of agents to prices in the economy

Land market is **said to** be active **if the** agents are **price** responsive **in the permanent and temporary markets**

In sharp contrast to low turnover in the permanent transfer market, peasant migration as a process generates a high turnover in the permanent transfer market. The next section would describe peasant migration and their innovative role.

1.2 Peasant Migration:

In Andhra Pradesh, migration as a phenomenon has played a crucial role in increasing the turnover in the market and inducing changes and bringing in development[1]. Migration is always considered in terms of labour migration, but Andhra Pradesh has seen another important form of migration, namely, land based peasant migrations. In the land based peasant migrations, the migrants leave their village of origin and migrate to another village and introduce new crop or methods of cultivation in the village they have migrated into. The importance of this form of migration can be seen from the spread of these migrants who originate from four districts of Andhra Pradesh namely, East and West Godavari districts, Guntur, Krishna districts.

These peasants, who had the skill/knowledge to cultivate using assured water supply, migrated to new command areas where the peasants were cultivating dry crops. These migrants utilized the skill/knowledge that they had gained in their village of origin and migrated to areas where, firstly, there was a potential for assured water supply for cultivation, secondly, the land was available at cheaper price and thirdly, the villagers did not produce the crop on which the migrant had skill/knowledge. This stream of migration is seen from the 1930's onwards. In the 1930's, peasants migrated to Nizam Sagar Dam command areas of Karimnagar, Nizamabad. The farmers introduced paddy, tobacco and sugarcane in these areas. These migrations which started in the year 1930's continued to all the command areas of newly constructed

There are some instances of dynamic role played by an migrants in other third world countries as well. Hill(1970) in a ethnographic study of Ghana, shows mat migrant farmers introduced cocoa and had transformed the areas Mobagunje(1972) shows the innovative role played by migrants in Western Africa in terms of change in crops, techniques and institutions in bringing resource adjustment in the areas. Boyce(1978) shows that migrants introduced double cropping in place of single cropping system in Bangladesh.

Dams/canals like Cuddapah and Kurnool areas for cultivation under KC canal; Bargarh and Sambalpur areas of Orissa for cultivation under canals of Hirakud Dam, Bellary and Hospet areas for cultivation under Tungabhadra Dam, Nalgonda, and Prakasam areas to cultivate under Nagarjuna Sagar Dam.

The migrants are seen to migrate to dry backward areas in response to the release of waters in these backward areas These backward areas can be described as traditional villages where the migrant can be seen as a entrepreneur and agency of change of traditional economies.

M.S.A Rao(1986) identifies three different trends in land based peasant migration. The first is "State sponsored colonisation" where the State takes the initiative to settle people like nomads, tribals etc. as part of the rehabilitation programme. The second type of migration are "Voluntary migration", where peasants migrate voluntarily, buy land and establish their camp. The third type of migrants voluntarily migrate to areas reserved to tribals and buy land and set their camp which is also illegal. He maintained that the voluntary migrants brought about significant development in the region.

Peterson(1970) distinguishes between two types of migration as

> "some persons migrate as a means of achieving the new. Let us term such migration innovative. Others migrate in response to changes in condition, in order to retain what they have they move geographically in order to remain where they are in all other respects. Let us term such migration as conservative" [Peterson(1970),p:53].

Nagaraju(1990) distinguishes two types of migration on the basis of their relationship with the process of economic development. One form of migration is termed as development-initiating migration and the second form is development fostering migration. To quote from Nagaraju(1990)

> "The first type of migration is a case where migrants generally initiate development of unexploited resources at the destination or/and use their skill and techniques or information (generally not known to local population) to act as pioneers of development process. This sort of migration may also be called development leading migration Generally, the direction of movement in this case will be from developed/advanced regions to less developed/backward region.
>
> The second type of migration is a case where migrants get attracted towards an ongoing development process, usually to secure employment for themselves. The migrants would simply join the development process and thus they may foster the development process by participating in it. Here, unlike in the earlier case, migrants generally won't have anything to actively initiate, but their part is a much more passive one of simply adjusting themselves to the employment opportunities. Such migration may also be called development lead migration and commonly identified as labour migration. The direction of this type of migration will typically be opposite to that of the first type, i.e., from less developed/backward regions to developed/advanced region. [Nagaraju(1990), p: 4-5].

Nagaraju(1990) maintained that the existing literature is mostly concerned with conservative type of migration where labour migrate from rural to rural or rural to urban areas in search of employment opportunities. He says that, "... it is not surprising that much of the existing literature does not address itself to the question of the dynamic role and consequence of migration" [Nagaraju(1990), p: 5]. The phenomenon of development led migration would require a different framework to study the interaction and impact of migration on the village. Nagaraju[1990] defines peasant migration for land as development initiating migration or in the words of Petterson `Innovative migration'.

The second set of migrants i.e., land based migrants are agents who migrate to lease or purchase land. These migrants want property rights on land so as to be able to cultivate a crop using the skill that they have acquired in the village of origin. These

peasants migrants in Andhra Pradesh are from developed to underdeveloped villages. The basic difference between land and labour migration is that in case of land based migration the migrant has some skill which they have acquired in the village of origin and they migrate to areas where they can cultivate using the skill that they have acquired. While in case of labour migration, the skill that the labour has may not be of use in the migrated place. If in two villages/regions the price vector and/or the skill on the production process is different, it may lead to migrations, provided agents have the data on the differences in information. The above migrations can be of two types, in one case the agents respond to the price signal only, while in the second case agents respond to signals of differences in skill in agriculture.

Land based migrations is a less researched area. There are only a few detailed studies on land based migration for Andhra Pradesh. In the study of **Migration to Tungabhadra command area, Nagaraju(1990)** attempts to analyse the role of peasant migration in activation of agrarian markets using induced innovation hypothesis. The peasant migrants considered are migrants from coastal Andhra who had migrated to Raichur district in Karnataka. This area was a traditional dry land area and had got irrigation facility with the construction of a canal from Tunghadhadra dam. The author selected a migrant camp' for study. The peasants in the locality were differentiated into locals and migrants and fifty peasants in each group being interviewed. This study is more in the ethnographic tradition.

The Raichur district of Karnataka had a near stagnant agrarian economy with rainfed cultivation of dry crops like jowar, bajra, ragi etc. This region was characterized as a stagnant agrarian economy with extensive cultivation, low productivity of land and underdeveloped land and labour markets.[p-27] The farmers of Raichur "lacked enthusiasm for the wet cultivation."[p-29] It is this opportunity that was taken by the farmers of Coastal Andhra to migrate here. The author recognizes two dominant "pull factors" for the migration as small size of land holding as well as the high prices of land

at the village of origin. The dominant "pull factors" were the low prices of land and the availability of fertile land in the village of migration. The author maintained that the price of land was Rs. 100 per acre in the Tungabhadra region while it was Rs.3,500 to Rs.7,000 per acre in the coastal area in the 1950's.

The migrants faced some severe problems on migration - the local labour was in short supply as well as ill-equipped to carry operations of wet cultivation, bunds laid for demarcation, breached & control of water-inlets as well as drainage could not be maintained due to lack of familiarity with nature of soil, vagaries of nature, lack of fertilizers and the migrants had to use organic manure, lack of agents to advance credit, the physical, social and cultural isolation of the migrants, and other problems related to organization of production and society. So family labour became the constraining factor for expansion of operational area in early stage.

In an ethnographic study of Sriramnagar camp - a migrant village/camp, Nagaraju(1990) said that a first migrant, a small farmer in the village of origin, came to this village and leased-in land due to scarcity of capital. After a period of time, the surplus with the migrant increased leading to purchase of the land. This migrant was followed by a second migrant, who had come to this village with money he got from Rangoon and had a large capital and went straight to buy land. This second migrant came to know about the region from the first migrant. After a period of time the second migrant bifurcated from production to the provision of services for the migrant who came later, like, providing credit, acting as an intermediary for land exchanges, selling of bamboo for house building for migrants etc. This migrant also brought a washerman, barber, carpenter and priest-cum-teacher to the camp.

The inflow of the migrants activated the land market by generating alternate use for the land and the inflow of the migrants kept pushing up the land prices. The dominant purchases of land were by the middle level farmers excluding stray cases of

large farmers and landless labourers The landless labourers were sponsored and induced to migrate along with the large landholders The majority of the migrants sold their land at the village of origin.

In the first phase of migration, the native responded by selling land to the migrants In the second phase as the size of land holding decreased for the natives, the natives started to lease-out the land The dominant sellers of the land were large landowners followed by a meagre sale by medium farmers and no sale by the small farmers One form of exchange that culminated in the sale of land by the native was the outstanding advance of loans by migrants to the native. There was a steady increase in land holding by the migrants. The author maintained the migrants used shrewd' ways to alienate the natives. The main reason for sale was distance of land as well as need of cash to meet the luxurious living standards of the natives.

The study shows that in the early stage of release of water in the canal, permanent transactions were dominant while after a period of time temporary transfers are dominant. Crops-wise one sees that the migrants grow sugarcane and paddy while the natives grow sugarcane and jowar.

The study, however, does not address the question of the nature of lease market contracts, i.e., the form of contracts, the resource position of agents, differences between migrant and natives. Lastly, the study does not define activity of markets.

In the study of peasant migration to **Kurnool-Caddapah canal area, Maddulety(1989) study of Caddapah area** focuses on rural-rural migration as a process initiating change in agrarian economies. The sample in the study is 130 migrant households. This study analyses migration to the KC canal area These migrations started after 1960's when the KC canal system was renovated. Earlier, this area had traditional villages with subsistence crops and almost obscure land market activity.

The author recognizes three phases of in-migration. The first phase is from 1960-1966, the second from 1967-1974 and the last from 1975-1982 The first phase saw the in-migration of peasantry from assured water supply areas (referred to as developed areas) and the third phase saw the in-migration from rainfed areas (referred to as under-developed areas). The author maintained that migration from developed area was a result of "pull factor" with the peasantry attracted by the low land prices with the improved irrigation facility in the K-C canal area, while migration from under-developed pockets was a result of push factor' where the village of origin was not able to sustain the peasants. The author maintained that migration is always in the form of bunch migration of friends and relatives.

In terms of land market activity, the majority of medium and small farmers lease-in land and after a period of time purchase same the same land. The medium and large farmers purchase the land as soon as they come. The author brings out two very interesting features of the migrants. One is that the small and marginal farmers have settled in the command area and have taken up cultivation of paddy, while the medium and rich farmers have settled in "isolated dry areas" and have attempted to cultivate different crops like tobacco, oranges, mulberry etc. Now these migrant farmers have settled for the cultivation of mulberry. The second feature is that dominantly the small and medium farmers are from underdeveloped pockets while large farmers are from the developed pockets. The small and medium farmers have sold their land in the village of origin, while the large land owners have leased-out the land in the village of origin. The study shows that a maximum number of farmers are from small and medium households followed by large land owning households.

The sellers who are large land owners bought "agraharam" lands from the Brahmins, while the other farmers bought land from marginal, small and large land holding households who were willing to part with the land partly or wholly because of either their inability to adopt to wet cultivation or and the attraction of the land prices.

In the study of **Tripathy(1985) migration to command area of Hirakud dam** were analysed, based on analyses of secondary sources to capture the transformation of **Kumelsinga village** with the intervention of the migrant. This village got water from the Hirakud Dam in the mid-1960's. This village was a traditional rainfed village with absence of permanent transactions on land before the release of water in the land. It is **a** Goantia village where the Goantia - the revenue collector for the British State, has one-third of the land on rent free basis. The village got affected as a result of two interventions, first, land reform legislation which affected the role of the Goantia and secondly, as a result of release of assured water supply and in migration. However, since the study is based on secondary sources it lacks data on lease market. This village witnessed two streams of migrations one from Coastal Andhra and another from Coastal Orissa.

The village has witnessed a high turnover in permanent land exchange from the 1960's. In the 1950's the village witnessed many transactions but the quantum of land involved was small. In the period between 1964 to 1980, the village has witnessed significant internal transfers. The maximum sales are by the local residents and the minimum by Oriya immigrants. The main sellers of land have been the middle groups with low sales by low and top groups. The main purchasers of land are non-Oriya immigrants, which one of the main losers of land are the Goantia - a non-cultivator. The migrants to a large extent are placed in the medium and small landowners group with no one placed in the large group.

All the above studies attempt to capture migration-led agrarian transformation' in a village or a region. All the above studies are based in areas that have got assured water or are new command areas. Two of the studies are based on region as a unit of analyses. If one takes a region as the unit of analyses, there could be processes, other then migration, that might be responsible for the change. In case of a village as a unit of analyses there is a possibility that one may be able to capture the different instruments of

change. All the above studies attempt to study migration as a process for generation of market activity, but have not defined activity of market or the reason for activation of the market. In one case of land market, there is a detailed description of permanent transaction market to the exclusion of description of temporary transfer market In another case, the study does not explain if there exists any difference between migrants and natives in terms of resource position, forms of contract and terms of contracts. The nature of different markets are described without analysing the nature of market behaviour in any market. Maddulety's study brings out the difference between a large land owning migrant and a small land owning migrant in terms of the nature of intervention(crop choice) but does not explain the reason for the difference. Can one classify the migrants into groups? In the same vein can one classify the natives with an emphasis to capture forms of intervention in land market. One interesting observation made in the studies is that in the early stage of migrant intervention, one sees the dominance of permanent transaction followed by a fall in the in permanent transaction and dominance of temporary transfer.

1.3 : Information Difference as a Possible Explanation of Land Based Migration:

The above studies show that the village of origin of the peasant migrant is a village with wet lands. These migrants usually introduce these wet crops in the area to which they migrate. The crop cultivation skill is defined as the information set' of the agent. The migrant possesses information set' which is the skill/knowledge of cultivation of a new crop. One can describe the migrated village as a traditional village which has a stable crop/live stock/common property resource management, and where the motive for production is not trade. This stable crop combination has evolved over a period of time in the village. The villages have skill on the cultivation of the crop. As the villages produce for consumption needs and not for trade they may not have any incentive to have private information.

Here, an attempt is made to specify what is meant by information. Townsend(1994) considers information to be on timing of inputs, quantity of inputs and quantity of output. In the study by Townsend, the peasants are producing the same crop, if one introduces different crop combinations one can classify information into three groups. If one considers a production function

Y = F (K, L), where K =Capital L =Labour

We can consider three types of information sets with the agents.

(i) If the agents lack information on F(), i.e., the agents lack information on the technical combination of inputs. This includes the knowledge on **sequencing of operations** for the cultivation of a crop. In case of dry regions growing jowar and bajra, the agents would not be having information on F(.) or the sequence of inputs usage pertaining to irrigated crops. Migrants generally migrate to areas where the natives lack information on F().

(ii) The agents have incomplete information on the **timing of inputs.** The agents may have information on the sequence but may lack the information on the timing of input usage like period of transplantation, the distance between the saplings, the time of application of pesticides, herbicides, fertilizer, etc.

(iii) The agents have incomplete data on the **quantum and type of input usage.** In an interesting article (Vidyasagar(1995)) on fertilizer usage in India, the author maintained that lack of technical information is widely prevalent which adversely affects the output.

Jenson and Meckling (1992) in their study classify information in terms of cost of transfer of information[2]. They do not specify the nature of costs. One important cost is

2

Information considerations are one of the important explanatory variable to explain the existence of large FIRMS. In an interesting paper Jenson and Meckling (1992) attempt to explain the information problems of a firm from a manager's perspective. Finns are organisational structures

the cost of acquisition of information. They define two types of information in terms of restrictions on transfer of information. If an agent charges a price for the transfer of information, the information is personal and specific. While if no price is charged, the information is general and public.

General information: Any information is said to be general information, if all agents can use the information and can't exclude others from the use of the information.

Specific information: An information with an agent is specific information, if he can exclude others from using the information and can charge a price for the transfer of information.

There are two processes to acquire information. One way to acquire information is by actually taking part in the process, while the second process of learning is by viewing/reading the experiments done by others.

where the agents within a firm have decision Right (User Right in our terminology) but do not have the right *to* alienate the decision
Right The Manager of the firm needs vast set of information to organise the activities of the firm. But the manager faces the problem of limited capacity to collect and process information.

Large FIRMS' solve this problem of information constraint faced by the manager by partitioning the decision right to agents who have acquired SPECIFIC information. They define specific information as information that is costly to transfer between agents. In contrast to specific information they define general information as information that is costless to transfer between agents. The examples they cite for general information is information on prices and quantities and for specific information i.e., specialised information. For them transfer ".... means effective transfer and not merely communication". [Ibid., p.254]. They recognise that transfer of information is not an instantaneous process but may take time which would effect the cost of transfer. They maintain that, "... the cost of transferring information depends on factors such as nature of knowledge, the organisational environment and technology... the more costly knowledge is to transfer the more specific it is and the less costly the knowledge is to transfer, the more general it is" [Ibid., p.254]. The manager transfer the decision Right to an agent with specific information to solve the problem of information constraint faced by Manager. The transfer of decision Right does not have the contingent Right to trade the Right. This in the studies of FIRM leads to the control problem".

Romer (1992) in an article brings information (ideas) to the centre stage of economic analysis. He says that there are two ways for development of developing economies. One is by "using ideas" while the second is producing ideas' In the case of the first, the ideas are produced at some other place and are transferred to this place While in the second, the economies produce ideas' Romer felt that, most ideas with economic value are not controlled by charitable organizations willing to bear the cost of dissemination. Instead, they are controlled by people who will not incur the cost needed to share what they know unless they have monetary incentives to do so making the information a specific information. As a result, the gains from dissemination of ideas will not be realized if distortions, weak institutions and bad political structures prevent the holder of ideas from sharing in the gains that accrue when the ideas are brought to a new geographic area. [Romer (1992)]

In the first process, agents learn by taking part in the actual process of production. The agents make decisions which would generate information in the process as they face new problems. Any new problem, the agent has to face it and attempt to solve it This process of acquisition of information is called `learning by doing'. This information gets embodied in labour. For an agent to learn from doing, the agent must be having the user right on the land. If an agent does not have the user right, then he cannot learn by doing.

The second process of acquisition of information is by learning from the experiments done by others like the experiments done by Agricultural Universities, Research Organizations, etc The peasant views the experiments done by the others and then tries to repeat the process. This process is termed as learning by viewing'.

In case of `using ideas', one can say that migrants are agents who have ideas(specific information) and want to implement their ideas. In the process they want monetary gains, as information on production of a crop does not have a market, the migrants want contract on land which is advantageous to them. The success of the

intervention would depend on the Institutional structure of the area migrated to i.e., the forms of land tenure. The natives also learn in the process of viewing the cultivation process as implemented by the migrant A migrant can be seen as an agent who has specific information in the village of migration.

Agriculture has two features which create conditions for transmission of information between agents or to make transmission of information costless in a village.

(a) One of the features of agriculture is the "Open" system of production The operations done by a farmer can be seen by the neighbour and the farmer cannot exclude others from seeing what is being done on the farm In contrast, in industry, production is done in a closed factory, where other producers cannot see what are the operations done in the factory. The "open" system of agriculture results in "learning by viewing" by the agents. So if an agent has a changed input sequence or input usage, the neighbours can learn from it. So in agriculture there is a potential to learn by viewing'.

(b) The second feature of agriculture is the "perverse externality" problems [Hayami (1981)]. Given the small scale of operation of farms in South Asia, peasants may not be able to internalize externality. To cite a case , if a pest is found in an area, a peasant may not be able to find the menace eradicated if he applies pesticide in his farm only. The pest can be removed if all the farmers apply the pesticide, so if an agent has information on pesticide he would have to share the information with all. So in case of agriculture, where small farm size dominates agents may not be able to internalize the externality. So any gain in information would be shared by all agents.

If there exists another village with a different crop/live stock/common property resource management i.e., a village with a different information set with agents then there is always a potential for agents to migrate from one village to another. If one takes the case of migrants of the Coastal Andhra to the backward regions one sees the same

phenomenon. In Coastal Andhra, the peasants have been cultivating paddy, tobacco, cotton etc. (i.e., in the area of their origin) These peasants have in the process acquired information on the sequence of production This information on sequence of production is absent in the village that they have migrated into. Here another set of crops are grown as these areas are dry areas The potential to be irrigated by canal of newly constructed dams and the lack information of cultivation with canal water attracts the migrant The migrants want to trade on the information they have, as information is specific before the starting of production and would become general after the migrant starts production The change from specific to general information would change the nature of land market contracts.

Description of Land Based Migrant:

A *land* based peasant migrant is an agent who moves from his village of origin, where he has acquired an information set, to a village with a different information set in order to benefit from the difference in the information, contracting on land.

One can classify migrant peasants by their capacity or the level of information they have on the production process so as to internalize uncertainty Agent specific internalization would arise only when the risk are non-covariate. Agent would have two options, one is to experiment i.e., to change the sequence of production or change input usage etc., where the peasant would learn in a process of doing But in this case, the peasant always faces the risk that due to his experiment the output may fall and they would need a hedge against this risk. One form of hedge could be land ownership i.e., large land owners may have the capacity to "learn by doing" and can be risk-neutral. This may lead to the peasants gaining information on the production process. This type of peasant can be called a Non-Fuzzy agent, as they would experiment and thus are risk neutral and have the capacity to face new uncertainties. A cultivating large land owner

has the potential to be a Non-Fuzzy farmer.

The second option arises if an agent takes the information that he has as given and does not experiment. This information is gained either inter-generational or by "learning by viewing or derived information". These farmers do not experiment as they do not have a hedge against uncertainty as they own a small piece of land If the agent faces a new uncertainty, this agent would not experiment but only repeat the sequence leading to a fall in output. This type of agent is called an agent with a Fuzzy information set as he takes the information he has as given and is not ready to face new uncertainties.

As in the earlier discussion one has classified migrants in terms of information but information is a qualitative variable. So as a simplification one is taking land owned as a proxy for quality of information. A small farmer may not be able to internalise the risk as compared to the large farmer, so there is a scope for small farmer being fuzzy and large farmer being non-fuzzy.

The interaction of the above two agents with the native would be markedly different in the two cases. So it is necessary to classify the nature of the natives. Agents are classified into natives who are able to meet subsistence (N^1) and those above subsistence (N^2). Agents who have an alternate occupation where the opportunity cost is higher in non-agriculture than in agriculture are classified as N^3. In case of the migrants, the agents with small land ownership in the village of ongin are classified as (M^1) and with large land owners in the village of ongin are classified as (M). Land owned is taken as a proxy for information with large land owners being Non-Fuzzy agents with small land owner being fuzzy agents. In case of natives, non-agriculturist are taken as agents of N^3 variety while cultivating small farmers who produce for self consumption are taken as N^2 type agent and cultivating natives with large land ownership are taken as N^1 type agents. In the next section we would study the nature of contracts between agents.

CONTRACTS ON LANE

Contracts on land could be of three types, one a share tenancy, second a fixed lease and lastly a sale and/or purchase of land.

Share Tenancy(ST):

This is a form of temporary lease arrangement between two agents The land owner transfers the User Right on the land to the tenant for a temporary period The leasing-in household has User right on the land and temporary Exclusion right This agent may also have temporary Tradability Right on the land In this form of land tenure, the rent is paid in kind not in cash and as a share of output A whole spectrum of arrangements in this form of tenures exist At one extreme one has an proportionate sharing of all inputs and output while on the other hand one has an arrangement where all inputs are applied by one agent while output is shared between the agents.

Fixed rent contracts(FR):

In this form, the landowner transfers the Exclusion nght temporarily to the tenant. As in the case of Share-Tenancy, the leasing-in agent has temporary Exclusion right on land and also temporary Tradability right on the land Rent in this tenure is fixed and may be payable either in the form of cash or kind. The timing of payment of the rent could be different for cash and kind. In some cases of cash rent contracts, rent is paid before the production process begins. In some of these arrangements input sharing could also take place.

Sale/purchase of land(SP):

In case of sale - purchase of land, the seller transfers the User nght permanently to the buyer. This right also carries with it the Exclusion nght and Tradability right. A sale-purchase contract represents a case of permanent transfer of User nght on land.

The Migrant comes to this village with the expectation that output with the information that they have(referred to as Q_2) would be greater than output with the information with the native(referred to as Q_1)and his share of output would be greater than in the village of origin. The native would provide land only if he expect a higher returns. Now let us try to work out the calculus of contracts for the first year of entry of migrant.

Possible alternatives for M:

Any early Migrant would face two risks in the new village. The first risk is the quality of soil. The Migrant faces an uncertainty with reference to quality of soil and its response to the new crop or technique. If the crop yield is not responding to the soil quality the Migrant may lose the money. The second risk is the seasonality[1] effect. Agricultural operations are time bound and the Migrant faces uncertainty with reference to incomplete information on the seasonality A small variation would adversely effect the quantity of output. After a period of time migrants would understand these factors. The migrant has conversion cost of land for the shift to canal cultivation.(Here purchase of land for production is only considered and not land purchase for speculation, even though this is an important feature)

The Migrant is a small farmer in the village of origin This farmer has migrated out so that he can earn a higher income in the migrated village with the help of information he has. The nature of contracts acceptable to M^1 would depend on their risk taking capacity. As M^1 are small farmers, they would not be able to internalise the two important risks, and so are not the early migrator to the village. This is also expressed in the literature in the earlier section of this chapter. As M^1 are not the early migrator, the only constraining factor to the migrant is the cash restriction The preferred contract of M^1 would be to purchase land given the constraint of cash needs for conversion. If the migrant need more land they would lease in the market.

In case of M^2, as the literature shows are the early migrants, they face three forms of risk. As these farmers are large farmers and have a hedge against risk, they prefer land on permanent transaction and then would start experimenting On seeing the responsiveness of the soil and the seasonality affect, they would choose the nature of crop to be cultivated. If the difference between the Q_2 and Q_1 is small or marginal, the migrant would either not enter the village or, if they come will want a temporary contract.

Alternatives for N:

As has been described earlier, the native can be classified into N^1 (subsistence farmer), N^2 (farmer above subsistence any cultivating their land) and N^3 (land who has a higher opportunity income in non-agriculture than in agriculture).

In an agrarian economy, where there is low expansion of employment outside agriculture, the opportunity cost of labour for N^1 is higher in being land owner than being agricultural labour; where land ownership is a hedge against risk, N^1 would have no incentive to sell land(excluding the case of distress sales). If the migrant starts to cultivate the land in the village, the native would start to learn Then the difference between Q_2 of migrant and Q_2 of native would decrease, in which case the migrant may not purchase land but would lease land.

As has been defined earlier, N^2 is a farmer above subsistence but cultivating the land using the already existing information. This farmer may not be ready to give land on permanent transfer but may give a small piece of land so that he can gain the information of the migrant. This farmer would be ready to give land on temporary transfer, as he is interested in the information embodied in the farmer. So he is ready to take risk of effects of Migrant on soil.

But this agent is not one who would transfer land permanently on large scale but

on small scale. He may transfer the land temporarily but only to get information on F_2 Once he gets it this agent would not transfer land.

The N type of native has no information on cultivation This agent would transfer the land for any contract *if* he can earn a greater income. This agent may not prefer a temporary transfer as he has no information on soil and if the Migrant[1] degrades the soil it would adversely affect N^3. SO N^3 would be ready to give land on sale.

After a period of time the native would learn the process of cultivation. This would get expressed in an increase in the opportunity income for the native with an expectation of an increase over a period of time They would not prefer to give land on permanent transfer but may give on temporary transfer provided the migrant is ready to pay a higher rent. The nature of lease contract also would be different.

The nature of contracts between the migrant and the native would keep changing over a period of time as a result of learning by viewing' by the native. As has been specified earlier, at a early stage of entry of the migrant, the migrant would prefer a permanent contract and then a fixed rent contract but may not prefer a share contract. The preference of these contracts by the migrant is because they are able to appropriate all the gains in output due to information difference, while in case of share tenancy the migrant would have to share the gains in output with the native, provided the migrant does not influence the share rates The specific form of contract would depend on price difference expected by the migrant between the actual price, the price rise due to migrant intervention and risk involved by the migrant. As the native also learns the process of cultivation the price of land would increase. This period would witness a decrease in permanent transaction and an increase in temporary transaction. So one would witness a phase of high transaction in permanent transaction market followed by a phase of low transaction in permanent market

OBJECTIVE OF PRESENT STUDY

A migrant to be able to play an innovative role should have a contract on land, which would be either a permanent or a temporary contract. In a general context of inactive land market, the entry of the migrant would generate transactions in land So it would be interesting to study the nature of land market activity after the interaction of the migrant to know whether an innovative peasant migrant can change the nature of land market behaviour.

In a general context of low turnover in the permanent transfer market and a higher turnover in the temporary market, the present study would like to analyse the nature of land market activity in the context of peasant migration. Has the migrant generated conditions of active land market will be analysed. In this process, peasant migration is seen as a case of development initiating migration. The migrants introduce new crops, new techniques of production and also activate the land market by their interaction.

The objective of the study is to analyses (under condition of assured water supply) *migration* as **a** process initiating **land market** ***Activity.***

Based on the above discussion on the possible nature of temporary and permanent transaction, an attempt is made to study the nature of land market activity in the selected villages. Does migration with the provision of water, which generate high turnover in the market, have an active land market?

i) The dominant opinion on the land market is that there is low turnover in the permanent transfer market, while the empirical studies show a high turnover in the market in case of migration. Here an attempt is made to study the turnover in the land market. In this process one would document land market contracts in terms of land ownership, forms of contracts & by caste and study the nature of agents in the exchange.

ii) This study has emphasised one of the characteristics of agents in the market which is the migrant-native status. Here the difference between the migrant and native in terms of resource position, contract difference and performance is studied.

iii) To study the nature of activity of the land market we would analyse determinants influencing Price/Rent, the quantum of land transacted and then derive the nature of demand and supply of land.

iv) The institutional change introduced by the migrant in the village are also described.

Selection of Villages:

To conduct the above study a village ` Annasamudram' was selected, which is part of command area of Nagarjuna Sagar dam which irrigates lands in Prakasam, Guntur, Nalgonda districts. The reasons for selection of this village are as follows. Firstly, this village had witnessed four streams of migrants in the post 1960's phase; secondly this village has received assured water supply in the recent past enabling the villagers to explain the changes easily; and lastly, all the revenue department officials opine that Annasamudram is a conflict village' and the migrants are also responsible for the conflict.

Two more villages were selected near Annasamudram, with different geographic and institutional constraints. One is Lellapalli a dry village and the second is Medapi which is a village in the command area. We have studied these two villages with an emphasis to capture differences in the nature of activity of the land market vis-a-vis Annasamudram.

Sources of **Data:**

The analysis is broadly at two levels. At one level, we collected data on the

Taluka/Mandal, on the village from secondary sources like census of India, District Handbook etc. However the study depends heavily on primary' village survey, wherein qualitative as well as quantitative data were collected from both the migrants as well as native peasants. The emphasis in the primary data collection was on the nature of exchanges in the land market. Land market has two components, a temporary arrangement i.e., lease and secondly a permanent arrangement i.e., sales and purchase of land. A detailed questionnaire was canvassed to all the households who had lease contracts in the year 1995-96. In case of permanent transaction market, data was collected for the sales-purchases for the period 1990-95 In addition to qualitative and quantitative data on land market, more relevant data on initial conditions and problems faced before migrant interventions, and also after interaction was collected by interviewing migrants and natives.

Data for the work was collected at two levels, one is the qualitative changes taking place at the village over a period of time, and second is the quantitative data on the land market exchanges. The qualitative data on the nature of village, migrant interaction and a resulting changes was collected from the village elders. This information was cross-checked with other caste leaders. (This issues of price paid and rent paid by the first and second migrant were varying and so were not specified in the work.)

The second set of data was on the land market exchanges. The data was collected on two steps. The first step was a schedule for all the households in the village. The second schedule was on the land market exchanges. The causes schedule consisted of data on name of the head of the household, extent of wet and dry land. The second part of this schedule was on whether the household bought/sold land, the extend of land, the price paid, whether the buyer is a migrant or a native and the year of purchase. In case of lease market the data collected was on whether a household leased land in the year. (a problem faced during the field work was the hesitancy of households to reveal data land

owned and land exchanged. A friend of mine who had accompanied me was a resident of the village when his father was a teacher in the school An explanation by him that this was to write a report on the village and not a government report cleared some hesitation and they provided information.)

The next step was identification of households who sold or purchased land in the village. It was seen that there was a divergence between the figures given by the seller and the buyers of land in land exchanged, price as well as number of number of exchanges. The number of exchanges quoted by buyer was large then that of seller. So buyers schedule was taken for identification of households in exchanges. Then a separate questionnaire was canvassed for households in the two markets This questionnaire had questions on land owned by households, caste, migrant-native status of both the agents and the occupation of seller and the reason for sale of land by the sellers. They second part was on price of land , extent of land, quality of land and the year of exchanges. The price of land showed a difference in price quoted between buyers an sellers. If the difference between the prices quoted is small the buyers price is taken as the price of land while if the price difference is large the price quoted is large this was verified by other caste leaders a and neighbour in the village It was seen the price quoted by buyers is generally the price also quoted by villagers The use of buyers price may result in over reporting of price but here we assume the price is over reported by the same ratio by all households.

In case of lease market, the dominant feature was the lessor maintained that they do not lease land. Here, the response of the lessee was taken the identification of households in the lease market. This schedule also had two parts one was on the identification of characteristic of agents in the market while the second was on terms of exchange. The characteristic of agents were the land owned, caste migrant native status of both the agents. The second part was on form of contract, the rent paid, form of payment of rent. In addition to the above data, labour exchanges between both agents

was also collected and output produced on the farm as well as share of consumption in total output was also collected The data on the lease market may have under reporting at two levels one on he terms of exchanges and the output produced by households. As data was collected for lessee we assume the same bias for all households

Chapter Outline

The work is organised as follows:

Chapter II describes the interventions and impact of four streams of migrants in the village Annasamudram In this chapter an attempt is made to qualitatively describe the interaction of three streams of migrants with the village, while in case of the fourth migrant only the nature of intervention with the village[3] is specified The second section would be studying the interaction of the first migrants with the village While section three would take the case of the second migrants interaction The section four would study the third set of migrants interaction. The fifth section, would describe the nature of the fourth migrant. The last section would describe the economy at the end of the four streams of migrants which will be the basis of analyses of land market contracts.

In chapter HI and IV, we propose information differences as basis to study land market contracts and analyse the data on temporary and permanent transfer market in Annasamudrum. The chapters [chapter III is on permanent transaction while chapter IV is on analyses of temporary transaction] have four sections. The first section is on theoretical studies on the market, while the second and third section is on the analyses of nature of the market and a study of variability of rent/price, while the last section is on the analyses of variables influencing price(rent) & land transaction in the markets,

regression results. Here an attempt is made to study variables effecting land transaction & the price/rent variable-regression results.

[3] The fourth migrant had come a few month before the field work of the researcher The impact of this migrant would be a premature study at this stage.

In chapter V, analyses of the nature of land market in the other two villages as compared to Annasamudram are undertaken Here an attempt would be made to compare the temporary and permanent transaction market in the three villages and then to try to generate a model for land market where we try to study the demand and supply of land in the two markets and its implications Based on this model, we would study the nature of land market in three villages.

Lastly in chapter VII, we give the broad conclusions of the study.


INDEX MAP SHOWING
LOCATION OF RESEARCH AREA
IN ANDHRA PRADESH
N
Annasamudram
Kandleru
Medapi
Lellapalle
TRIPURANTAKAM MANDAL
Peddavagu
Gundlakamma
Study Villages
LOCATION OF
TRIPURANTAKAM MANDAL
PRAKASAM
Ongole
LOCATION OF
PRAKASAM DISTRICT
Hyderabad
ANDHRA PRADESH
Bay of Bengal

CHAPTER: 11

QUALITATIVE STUDY OF MIGRANT INTERACTION WITH ANNASAMUDRUM VILLAGE

2.0: Introduction:

The village Annasamudram has witnessed four streams of migrations after 1960s [see appendix-I for description of the region]. In this chapter an attempt is made to describe the nature of migrants and the impact of the migrants on the village in terms of changes in the institutional form of exchanges. (The descriptions of the migrants and the changes in the village are more at a qualitative level, and concentrate mostly on the exchanges associated with land in the village) The village, before the entry of the migrants, can be described as a traditional village. The specific form of property right on land at Annasamudram was Inam [See Appendix-II for a description of Inam form of tenure]. The crops grown were dry crops like jowar-bajra which were for self consumption. The level of technology was low with a dependence on plough drawn by bullocks. The village did not witness any permanent transactions in land market before the entry of the migrant. In case of labour exchanges, caste specific labour exchanges were dominant i.e., the village depended on Jajmani form of exchange The other input and output markets were underdeveloped. While inputs were internally generated the output was for self consumption. In this context an attempt is made to study the impact of migration on the traditional village. In this exercise, concentration is on the interaction of the migrant in the land market as the land contract is the first production based contract of the migrant with the native.

This village witnessed four streams of migrations from the 1960s onwards at different periods of time. Each stream of migrants wanted to introduce a different crop in the village. Some of the migrants were able to transform the village while some of the migrants were not able bring about changes in the village. In this chapter, an attempt is

made to qualitatively describe the interaction of three streams of migrants with the village, while in case of the fourth, only the nature of intervention with the village[4] is specified. Section 2.1 to 2.3 analyses the interaction pattern of the three stream of migrants with the native population with an emphasis on land market contracts Each of the sections deal with one stream of migrants Section 2.4 describes the nature of the fourth migrant. The last section describes the village in 1995 i.e, the period of study. This chapter has two appendix, one describes the region from which the village is taken while the second deals with the nature of land tenure [Inam].

2.1: First Stream of Migrants:

The first set of migrants came to the village from Guntur in the year 1967. These migrants [here after Migrant-1] consisted of 14 Kamma families who were small peasants in the village of their origin. Some of these families sold their land in the village of origin while some leased out land and migrated into this village. These 14 migrant families were related to each other and had migrated as one unit. The reason for migration could be the rise of a section of peasantry in coastal Andhra region of A.P. who acquired information on new crops and were looking for new avenues and opportunities for expansion of production. The increased inducement to migrate was due to the growing differences in the prices of the land in the regions of their origin and the new areas which had potential for faster growth in output.

Migrant-I had information on the organization of production of cotton on wet lands. These peasants were searching for wet cultivable lands where they could cultivate cotton. In the village, one can divide the land basically into two types, firstly the rainfed land which forms nearly 85% of the cultivable land in the village, and the second is the tankfed land which constituted nearly 15% of cultivable land in the village. The

[4] The fourth migrant had come a few month before the field work of the researcher. The impact of this migrant would be a premature study at this stage.

Migrants were interested only in the tankfed land as they wanted to grow **wet cotton** crop. The other type of lands in the village was of no interest to them Thus, for the first time, a demand for a specific type of land i.e., tankfed land came into existence in the village as a result of an alternative use of that piece of land The nature of land market contract taken by the migrant was a permanent lease contract ,i.e., a ninety year lease. The quantum of land transacted was 200 acres which constituted nearly the whole of tankfed irrigated land in the village (see table 2.1 for land owned (dry-wet) by migrant-native status in 1967). The Shotriamdar' could offer two types of contracts for the tankfed land to the Migrant-I. The first type is the lease arrangement where certain amount of land is leased for a specific period of time i.e., a temporary transfer of right of exclusion(ER) and user right (UR) while the second is the sale/purchase contract. The lease could be a temporary or a permanent lease arrangement The migrant would prefer to have a transaction only for the tank fed land but not for the complete Inam land as majority of land [85% of the village land] has no use for Migrant-I. In case of lease arrangement, the `shotriamdar' is indifferent to the two options available, namely, temporary or permanent lease. This is because the Inamdar is a non-cultivator with no interest in agricultural activity, but interested to enter non-agricultural sector. So their choice would depend on the expected income in the two options. But in the case of Migrant-1, they had to invest on the land, a sunk cost, to convert the Jowar-Bajra land to cotton cultivation. Hence, they liked to have a long term contract A short term temporary lease arrangement always had the threat' of non-renewal of contract which does not generate the climate' for investment for the Migrant-1. So the Migrant-1 preferred a permanent lease contract. As the shotriamdar can not provide a sale contract and is indifferent to the two types of lease contract, and Migrant-I does not prefer a temporary lease contract when compared to permanent contract, but is indifferent between purchase and permanent lease contract, the resultant contract was a permanent lease contract.

TABLE 2.1: LAND OWNED BY MIGRANT-NATIVE (1967)

	Migrant	Native
Dry land	nil	873 acres
Wet land	200 acres*	Nil

*as permanent tenants.
Source : Field Work.

The first stream of migrants came to the village to introduce cotton crop in the tankfed wet land but after the first year they found that the land was not responding to the cotton crop so they changed to tobacco crop This crop also did not give a good harvest, so the migrants wanted to grow vegetables on the land As the migrants did not have a good harvest they could not pay the rent The Inamdar had waived the rent for the first and the second year but with the failure of crop consecutively for the third year also, he asked the migrant to pay the rent or leave. Since the migrants had tested the land for three crops without any success, they did not have money to pay the rent and so left the village in the late 1960s. The first stream of migrants came to the village to introduce a new crop but left the village as natural conditions such as soil quality did not favour it. Though the migrant stayed only for three years in the village, it is interesting to examine the interventions made by the migrant in the various markets (see table 2.2 for migrant-native interactions in the market)

Exchanges in the labour market: The first stream of migrants depended to a large extent on family labour for the organization of production in the early years. They did not plan to convert all the land in the first year of production but had plans to slowly expand the scale of operation. So the family labour was sufficient in the early stage. In case of exchange relating to labour, these migrants had three options, namely, to use family labour, village labour or migrant labour. They needed labour with skills different from those needed for the cultivation of Jowar-Bajra crop In case of labour of the village, the Migrant-1 faced a problem in that this labour lacked the skill needed for the cultivation

of cotton In case of family labour, they faced the labour constraint for expansion but in early years of operation where only a part of the land was cultivated, family labour was enough. With the expansion of the cultivable land the migrants were expected to teach the native labour the skills needed for the cultivation of the new crop. The option of bringing labour from Guntur was costly which could not be aflbrded by the peasants, due to lack of sustained demand for labour and also the high wages of labour in Guntur area A longer stay of the Migrants would have generated a labour market by providing skills for the labour as well as a higher wage to attract the labour The only constraining factor was the limited land fit for cotton in the village

Exchanges in the product market: The output produced on the land were jowar-bajra by the natives, and cotton or tobacco by the migrants As this village was a food deficit village there was no trade on jowar-bajra crops. The output produced by the migrant was predominantly for the market. For the first time, the goods produced in the village was not for consumption by the people of the village but basically for trading purposes So a part of the goods produced at Annasamudram had no direct use for the people of Annasamudram but had the capacity to procure goods needed for trade. This had the potential to generate a product market at Annasamudram But migrants were not able to stay for a long time since land was not responding to the crop

TABLE 2.2: DOMINANT FORMS OF **EXCHANGES(IN** MARKETS) OF **MIGRANT- NATIVE FOR** THE **FIRST STREAM** OF MIGRANTS

	Migrant	**Native**
Crop	Cotton.	Jowar- bajra.
Land	permanent lease.	Permanent tenant
Labour	family labour	family and attached labour.
Credit	Pre-existing surplus	no monetary transaction
Output	for market	for self consumption

Source : Field Work

Exchanges in land market: In case of land market, the village did not witness any other transaction in the permanent market There were also no changes in the lease market contract as the crop introduced by the migrants could not be cultivated on the rainfed land.

The impact on the other markets was nearly absent as the migrants left the village in three years. With the entry of the migrant into the village, the village got segmented into two forms of organization of production One of the segments i.e. the migrants produce a commodity for the market while another segment produces jowar/bajrar for consumption and self-subsistence The forms of organization of production was also different between these two segments.

It is this peculiar kind of interaction of the migrant with the village that led to a land related conflict within three years of coming of the migrant By this time the Inam Abolition Act was passed and the Inamdar had gone to the court. The Inamdar maintained that he was leasing a part of his land i.e., his one third share on which he had a right which even the Inam abolition Act recognised So the native cultivators of the tankfed land, who were cultivating the land before the entry of migrant-l, gave up cultivation on this land and started to cultivate other uncultivated lands in the village. The first stream of migrants on the other hand were experimenting on the tankfed land. In first year they tried cotton crop and failed to get a good harvest. So they could not pay the rent. The Inamdar accepted the no rent situation. The same situation continued for the second year also. The failure of the second expenment brought the villagers against the migrants. They typecasted the migrants as those who would use the land and make the land loose its fertility and then leave the village. They argued that this practice would affect them in the long run as they have to stay there This rallied the support of the villagers and the fanners who were displaced by the migrants. The villagers saw to it that the outlets of the tanks were closed which resulted in accumulation of water in

the tank. This obstructed the cultivation in the tankfed land by the migrants The shotnamdar', the lonely potential gainer of the interaction of Migrant with the village was helpless to protect his interest as he had not received any rent

The first stream of migrants took their case to the court They maintained that they had a lease contract on the tankfed land They asked the court to pass an order to release the water for cultivation. The villagers maintained that the tank water is for drinking purpose and the water should not be released But in the village, the tussle continued, with the villagers closing the outlets of the tank while the migrants opening the outlet and draining the water so that water is available for cultivation to the migrants After a year of tussle, the migrants left the village since no quick settlement was possible in the court of law and they would stand to lose. in the mean time The migrant-I left Annasamudram in late 1960s.

2.2 : Second Stream of Migrations:

The second influx of migration was in the early 1970s These migrants were small peasantry from the coastal belt of Prakasam district By 1970s, green revolution technology was introduced in the coastal villages and these peasantry faced a constraint of being not able to reap the scale advantage due to their small size of holding in the village of their origin. So these peasantry were in search of areas where land prices are low and water is available for cultivation. It was in this context that a set of 12 families migrated to Annasamudram, where the land was cheap and they bought land in this village. These migrant families sold a part of their land in the village of their origin and leased out the rest of the land. Castewise, all these farmers belonged to Kamma community. These Migrant-II families had built their houses near their fields in a cluster and this was called a camp' in common parlance as was the case of all migrant peasant settlers in other parts of Andhra Pradesh and Karnataka.

Migrant-II had information on organization of production of paddy crop As paddy needs regular supply of water, the Migrant-II were also interested only in the Tankfed land in Annasamudram. So the Migrant-II negotiated for a contract only on the tankfed land with the Inamdar (see table 2.3 for land owned(dry-wet) by migrant-native status). The nature of land market contract between Migrant-II and Inamdar was a permanent contract i.e., a purchase of land

TABLE 2.3: LAND OWNED BY MIGRANT-NATIVE (1972-73)

	Migrant	Native
Dry land	Nil	954 acres
Tankfed land	150 acTes	50 acres

Source : Field Work

Legally the Inamdar was the owner of lands in the village untill the court judgment. But the Inam Abolition Act as well as the position of Migrant-I created more confusion on the land rights of Inamdar on the tankfed land The Migrant-I had permanent lease arrangement on the tankfed land but they had stopped payment of rent.

The Migrant-II wanted to have a contract for the tankfed land. So they approached the Inamdar as he was the legal owner of the land. Migrant-II started negotiating for a contract on tankfed land The Migrant-II were brought to the village by the native Kamma cultivators. This contact was established during the seasonal out migration of the native Kamma with their goats to the coastal area where they used to earn an income by folding goats in the fields of coastal farmers. The 'shotriamdar' by this time was socially, and economically weak and also diversified into non-agriculture activities outside the village. The family members of the Inamdar were entering into the teaching profession. So the Inamdar family was ready to give any

contract of land to Migrant-II provided the Migrant-II had information on the contracts of Migrant-I and would not ask the shotriamdar' to mediate in case a conflict arises The Migrant-II had two options, either to lease the land or to purchase the land In case of lease, he could either go for a temporary or a permanent lease. The Migrant-II had a sunk cost for conversion of the lands to suit paddy cultivation and did not want a temporary lease contract as there was always a threat of non-repetitive temporary i.e., after they invest all their inputs they might not be given the temporary contract or the possibility that the rent may be raised on the land thus not being able to earn the dividends from their investment. This could take the form of either increasing the rent or giving the land to some other agent to cultivate. A permanent lease contract was not acceptable to Migrant-II as Migrant-I also had the same contract. The Migrant-II would only prefer a purchase contract even after the Inam abolition Act as it can be shown that the shotriamdar had sold his share of land. As it was specified earlier, the `shotriamdar' was indifferent towards these three contracts The resultant contract between Migrant-II and the shotriamdar was a purchase-sale contract. That is to say, in this context, the same piece of land had two contradictory contracts, the Migrant-I had a permanent contract while Migrant-II had a purchase contract.

The Migrant-II who had purchased the land started to produce paddy for market in the tankfed land, while in the other lands the villagers cultivated jowar-bajra for their self consumption. The staple food of all the people continued to be jowar-bajra with paddy being sold in the market. So again one sees segmentation of the village according to the form of organization between migrant and natives, migrant producing rice for market while natives produce jowar and bajra for self consumption. The following is an attempt to describe the exchanges of migrant-native in the different markets (see table 2.4).

Exchanges in the land market: In case of land contracts, alternative types of structures were generated. For the native segment, a two tier structure existed The `shotriamdar' was the owner of land, the permanent tenant had cultivation rights(enjoyment right) while production was actively done by paleru'(attached labour) In case of migrants, they were both the owners as well as cultivators. The Inam form of tenure recognised the Inamdar as the owner of land, while the Inamdar leased the land to a set of permanent tenants. These permanent tenants would may either cultivate the land themselves or use attached labour. While in case of migrants the Inamdar had sold the land to them, so one could see a one tier structure. In other words, the difference in the land contracts was a response to legal constraint on land holding. The nature of crops cultivated in the two structures was also different, while the natives cultivated dry crops the migrant cultivated paddy. Excluding the 150 acres of land sold to the migrant, the village did not witness any other permanent transaction of land in the village dunng this period.

Exchanges in the labour market: In case of labour contracts, thc native cultivator used mainly family labour, while large land owners used attached labour The migrants used exchange labour among themselves with minimum dependence on village labour These migrants also had planned to slowly expand their operation to 150 acres over a period of time. In the early stages, family labour was sufficient for their operations The village labour lacked the skills for cultivation of paddy, while labour from coastal areas was costly and also the migrant had doubts on the responsiveness of land to paddy crop.

Exchanges in the product market: The inputs for the crops of the natives were internally generated while the inputs for the crops of migrants like fertilizer, HYV seeds, were bought in the market The product of the migrants was for the market and that of the natives was for self-consumption'. The natives were not able to diversify into paddy as land irrigated by the tank was limited and was occupied by the migrants excluding 30 acres of land which was with three individuals who were politically powerful in the village These individuals had asked for the help of the migrants to

cultivate their lands. But the migrants left before the natives could learn the cultivation of paddy. The surplus produced in production was used by the migrants for the expansion of area of operation, while a part of the surplus with the native land owners was ploughed back into land for the first time.[5]

TABLE 2.4: DOMINANT FORMS OF EXCHANGES(IN MARKETS) OF MIGRANT-NATIVE IN THE SECOND PHASE

	Migrant	Native
Crop	Paddy.	Jowar- bajra
Land	purchase.	permanent tenant
Labour	family labour	family and attached labour.
Credit	Pre-existing surplus.	No monetary transaction
Output	for market	for self consumption

Source : Field Work

One of the changes was the introduction of Borewells into the village by a post-graduate student, Vaishya by caste in 1976. In a period of two years the village had 7 bore-wells - where chilli a crop grown for home consumption was experimented at a large scale nearly 100 acres. But before the effect of this change could be internalised the village was said to receive water *in* the Nagarguna Sagar canal. Another change is in relation to the large fleet of goat owned predominantly by Kamma caste group After the harvest of the jowar, bajra crops these *peasants* used to migrate to Guntur *or* Godavari districts with their goats. These villages after getting information on the marketable potential of animal manure or folding of goats *used to migrate out to* sell the manure They were folding their goats in the farmers land for some payment and the facility of grazing. This arrangement helped both the agents. The Annasamudram peasant families used *to earn* an income as well as protect their fleet of goats during summer when common property resources like grazing lands are dry. The farmers of Guntur and Godavari districts also welcomed the peasants as they cannot rear goats due to lack of grazing lands and animal manure is a good fertilizer. At this phase of transition, the village got a primary school. The teacher was a madiga' by caste and Christian' by religion. Untill that time, Christianity was not popular in this village. This teacher, taking education seriously, *forced'* children *to come to* school to read and *to create* condition for the students to go to secondary school. For the first time caste rules of hierarchy and position was loosened in the school. Given the position as a teacher in a village in transition, a madiga' teacher was a shock to the village setup. One important effect of the school and the teacher in Annasamudrum was that child labour in agricultural production was withdrawn though temporarily. It was the education that helped some segments in the village to reap the benefits of canal irrigation.

But the Migrant-II had to face problems due to the contradictory land nghts of the tankfed land. Some of the villagers on seeing the expanded operation of Migrant-II went and recalled Migrant-I to Annasamudram' This led to a conflict of land rights between Migrant-I with permanent lease and Migrant-II with purchase contract for the tankfed land. The Migrant-I maintained that the shotriamdar' had given the land on permanent lease and that he had no right to sell land. While Migrant-II maintained that as the first stream of migrants had not paid the rent they had no right on the land. The agents went to court resulting in a stalemate The problem took an acute form resulting in the murder of some of the Migrant-II farmers in the early phase This led to the entry of police in Annasamudram' and the booking of F.I.R This also led to a series of conflicts related to land by which the village acquired an image of notoriety in the whole area. In 1995, when the researcher was in the village, the Mandal Revenue Officer announced that crops in the survey numbers related to tankfed land should not be harvested as ownership rights are contested and only the agents who had evidence that they have themselves cultivated the land would get the right to harvest the standing crop.

2.3 : Third Steam of Migration:

The release of water in the right bank canal [RBC] of Nagarjuna Sagar dam attracted the third phase of migrants between 1984 and 1994[6]. The irrigation facility created by the RBC of Nagarjuna Sagar and the relatively lower prices[7] at the

[6]Water was released in the right bank canal on Nagarjuna Sagar dam in the late 1970's to this region. The areas in Thriparanthakum got the water in 1978. This village got the water in the 1 978. But the construction of canal had not been completed uptill early 1980's and then onJy water was used regularly for cultivation. The late 1980's also saw regular problems in water release to this area as was specified in the Mandal agricultural statistics 1987, 1992. The construction of canal provided regular employment to the villagers. In this village nearly 30 members worked in the canal construction, while one individual got regular employment as a clerk in the Nagarjuna dam project office at Thriparanthakum office.

[7] A migrant reflecting on the reasons for in-migration said that farmers who were not able' to develop' in the village of origin, and are in search of places where land prices are low so that they can buy more land and can reap the scale advantages. So these peasants either sell the

command areas also attracted the migrants. (see table 2 5 for land owned(dry-wet)by migrant-native status).

TABLE 2.5: LAND OWNED BY THIRD STREAM MIGRANT AND NATIVE(1994)

	migrant	Native
Dry land	nil	463 acres
canal irrigated	161.50	840 acres

Source : Field Work

A difference of this phase of migration was that they came from different regions of A.P. These migrants were not related to each other and had migrated to Annasamudram at different points of time.

Broadly this set of migrants can be divided into two groups. One set came from Guntur and Godavari districts, and castewise, belong to Kamma community The second set were from Nellore district and Reddies by caste.

The basic problem/constraint faced by migrants on entenng into the village was the lack of markets for goods/services. The market for land was absent excluding the migrant induced activity of the Tankfed land. The village had caste specific occupation with absence of skilled labour to reap the opportunities resulting out of assured water supply. The main crop continued to be jowar-bajra excluding the tankfed land and land under bore-well. Well formed credit markets were absent. In case of product market,

land or lease out land in their original village move to specific backward region where better irrigation facilities are developing and the natives lack information to reap the benefits The migrant sells a part of land and/or leased out the land The leased part of the land in the village of originwhich acts as a hedge against risk in production *in* the newly camped areas. One of the fanners said that if they sell one acre in the coastal belt, they can buy 5-7 acres in backward regions.

excluding a small segment producing for markets, the dominant motive for production was self consumption.

The third phase of migration saw the entry of 30 migrant households. These migrants were interested only in the land that was irrigated by the R.B.C of dam They were not interested in the tankfed land as these were potentially waterlogged lands. These migrants owned 161.50 acres of land, i.e., 11.13%of total cultivable land (see table 2.6 for land owned by migrant during this phase). The sellers were the Inamdar(transferring ownership right) and Permanent Tenant(transferring user right). These migrants were not active participants in the lease market. The land leased by the migrant was 24.75 acres or 1.70% of total cultivable land for the production of 1995.

TABLE 2.6: SIZE-WISE LAND DISTRIBUTION OF THIRD MIGRANT

(1995)(in acres)

size dist	Households	land owned
landless labour	2	—
Marginal farmers	2	2.50
Small farmers	3	8.00
Medium farmer	19	111.00
Large fanner	4	50.00
total	30	161.50

Source : Field Survey.

The land owned by the migrants is shown in table 2.6. There were two migrants who were landless households brought to the village by the large landed households. The number of land owners in the marginal farmers category were 2 who owned 2.50 acres of land, while small farmers were 3 owning 8.00 acres of land. The maximum number of migrants are medium farmers who were 19 households who owned 111.00 acres of land There are four migrants who own above ten acres and upto 50 acres of land.

TABLE 2.7: DESCRIPTION OF THIRD PHASE OF MIGRANTS

Migrant families:	Thirty households
Area of origin:	Guntur & Nellore
Crop introduced:	Paddy
Nature of land:	Canal irrigated land
Transactor of land:	Inamdar & permanent tenants
Land contract:	Purchase & lease
Land purchased:	161.50 acres
leased:	24.75 acres
Period of arrival:	1980's early 1990's
Caste:	Kamma & Reddy

Source : Field Survey

In case of land rights, they continued to be ill defined and the legal process had not as yet clearly defined them. It was in this context, due to the land gradation in the region, the village got assured water supply from the RBC of the dam. The release of water in the canal, has to wit, an equity effect i.e all farms in the command area have equal potential to get water, unlike the case of tube-well where purchasing power would define whether an agent can dig a bore-well. But the conversion of land to canal irrigated system would depend on the quantum of surplus available with the agents or access to credit in the command area development programme. But in the village, credit was not available from formal sources as land rights were ill-defined. This generated interesting land market contract for the conversion of land To cite an example, during the field survey period it was observed that three dalit households had taken land on lease from a land owner. The contract was a no rent contract for a period of three years. The lessee had to convert the land for the cultivation of paddy crop. At the end of the period the land owner would take over the land and start self cultivation.

The first important change introduced by the canal water was to transform dry lands in the village into wet cultivable land The land in the village can be divided into three kinds. One is the tankfed land, the second is the land that has potential for irrigation by the RBC of Nagarjuna Sagar Dam while the third is the land that can't be irrigated by the canal waters due to its gradient or the dry land The Migrant-Ill was interested only in the second type of land i.e., the land that had the potential to be irrigated by the canal. The Migrants knew that the tankfed land would be waterlogged and unfit for cultivation.

The crops grown were paddy, redgram and chillies Paddy was grown in late September when water was released in the canal and the harvest reaped in early March Redgram was sown in late June i.e., before the paddy crop and in late February i.e , after the paddy crop. The basis of rainfed cultivation of grams was to generate capital for the cultivation of the paddy crop. While redgram was broadcasted even before the harvesting so as to earn some income. Chilli was the crop grown in the dry regions The cultivation of redgram was introduced by the second set of Migrants in this phase. They also introduced efficient ways of harvesting and threshing into Annasamudram.

Exchanges **in the land market:** Two sets of agents started to sell the lands, one was the Inamdar and the second was the permanent tenants The Inamdar being a non-cultivator, wanted to sell off the land . He was selling large tracts of land So if a migrant wanted a large piece of land at one place he had to buy it from the Inamdar. The permanent tenants used to sell small pieces of land. The reason for sale being that as the lands of the migrants were near, the native cultivator can learn from the migrant as well as take some advise. So one can observe an interesting feature, the Inamdar is the seller of land for large pieces of land while permanent tenants are sellers of small

[8] The *children of the* Inamdar had migrated out of the village and had no *interest* on the land. The Inamdar wanted to sell off the land and earn and earn money.

tracts of land, where they are recognised as permanent tenants on the land, to migrants. Though this village is an Inam village, it has the characteristics of a ryotwari village

At present, the land rights continue to be in a state of confusion. The permanent tenants who know about the Inam Abolition Act are waiting for the judgment, expecting that they would be given the land rights If the Act is implemented, permanent tenants would be provided the patta for that piece of land they are cultivating. This expectation had led the permanent tenants to pay the water cess (Rs. 40/- per acre) regularly and register their names as permanent tenants in the Adangal maintained by the VAO as evidence of their permanent status This has been an important effect of alternative use of the land as well as the Inam Abolition Act Another feature seen in the village was the sale of permanent tenant's rights to either the migrants or to the natives. Legally, the permanent tenant has no right to sell ownership rights but what is traded is cultivation rights, but this gets registered in the sub-registrar's office as ownership rights.

Here, an attempt is made to study the different land market contracts after the entry of the third set of migrants namely permanent contracts and the temporary contracts. Both the transactions are described based on nature of the cultivator like migrant/native status, caste, and land holding.

The figure 2.1 is on the total land turnover in the period 1978-95. This period is sub-divided into three phases. The first phase is from 1978-84, the phase of low turnover in the land market. This is followed by a second phase of high turnover in the market. This phase is from 1984-89 The third phase starts from 1989-95, phase of low turnover in the market, excluding the year 1995 and the year 1994

Is the average land exchanged different in the three phases is seen in Figure 2.2.

The land exchanged is low in the first phase, with some years of no exchanges The average area exchanged is larger in the second phases as compared to the third phase excluding 1995.

In the figures 2.3 and 2.4 the land exchanged per transaction, in each transaction in the second and third phase are plotted The land transaction has a larger fluctuation in the second phase as compared to the third phase In the second phase the area exchanged is between 10 acres and 1 acres with a average around 5 acres, while in the third phase the fluctuations are low and the average acres is around 2 acres.

In the figure 2.5 an attempt was made to see the trend in the total land exchanged by the migrant in the three phases. The second phase has an higher total land exchanged in the market as compared to the third phase excluding the year 1995 the year of entry of the fourth migrant.

The trend in the total land exchanged by natives is analysed in figure 2.6. Maintaining the same scaling for both the graph, it can be seen the total land exchanged is marginal higher in the second phase for the native also and this ratio decreases in the third phases, excluding the year 1994 which witnessed sale of land as 1993 was a bad harvest year due to lack of release of canal water.

Lastly, an attempt was made to plot the price and the S.D in the three phases. In the figure 2.7 the nominal prices is plotted over time The first phase has witnessed a low price as compared to the three phases. In the second phase are also constant in the first three years of the II phase after which there is an increase in price. The III phase witnessed a gradual increase in price with reaching the peak in the year 1993.

TOTAL LAND TRANSACTION (1978-95)

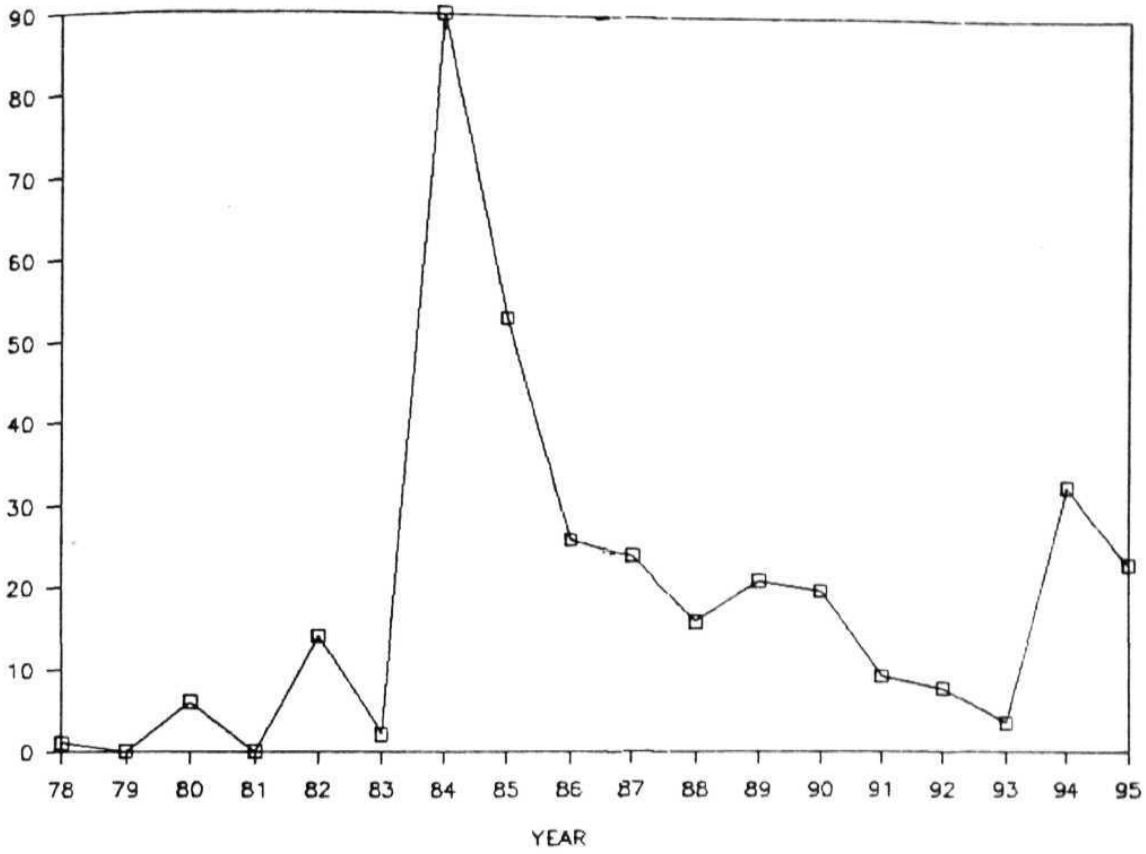

FIG: 2·1

AVERAGE LAND TRANSACTION (1978-95)

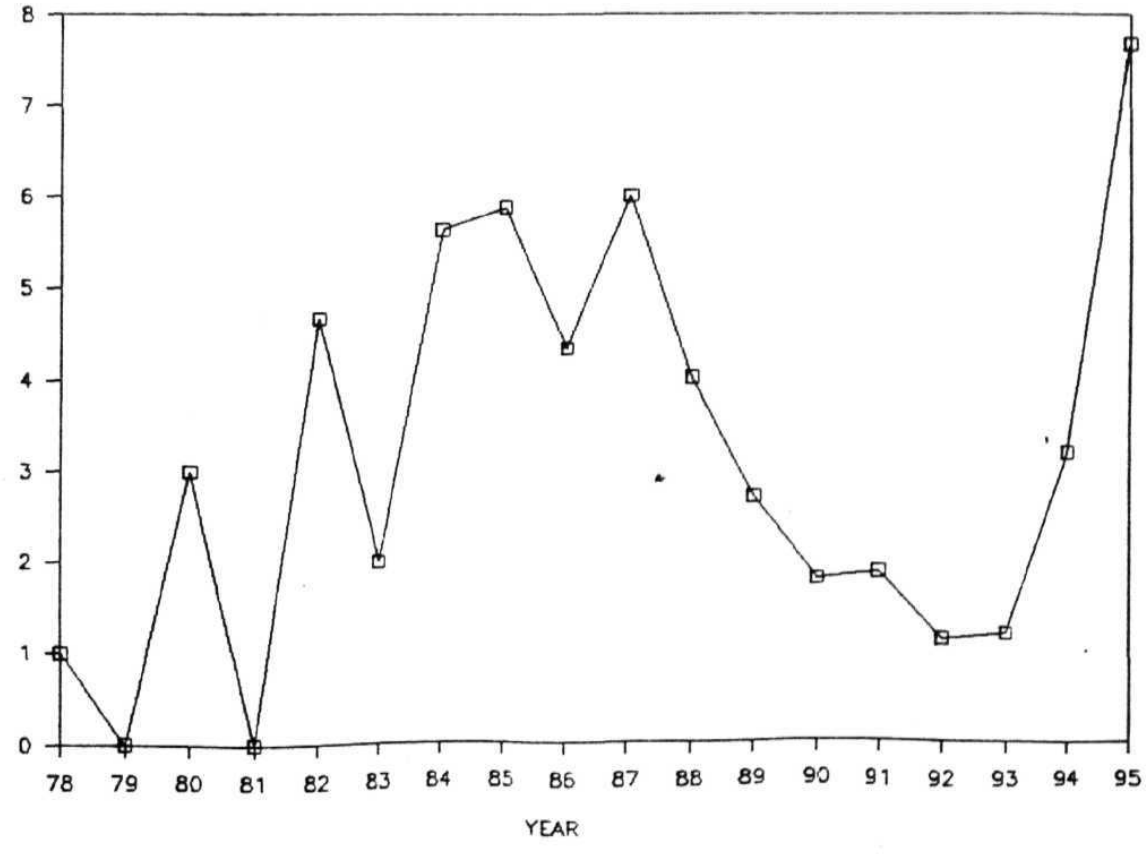

FIG: 2:2

LAND EXCHANGED IN EACH TRANSACTION

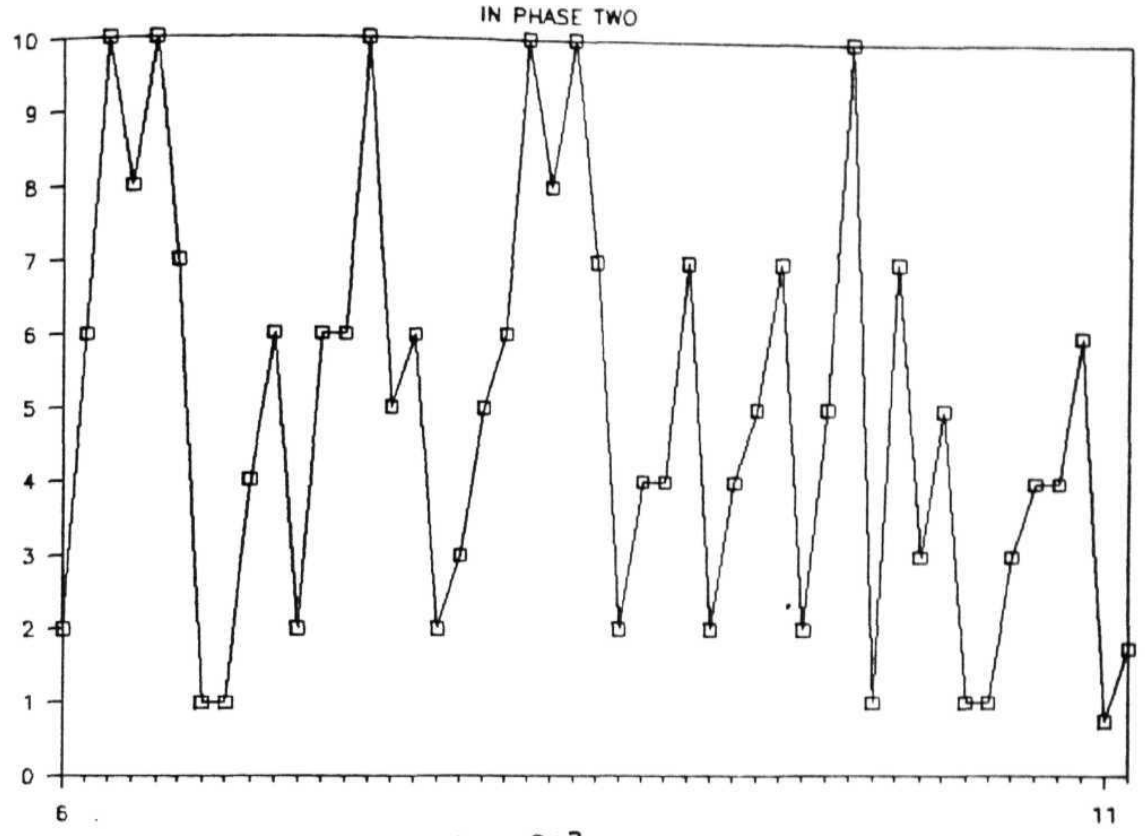

FIG: 2:3

LAND EXCHANGED IN EACH TRANSACTION

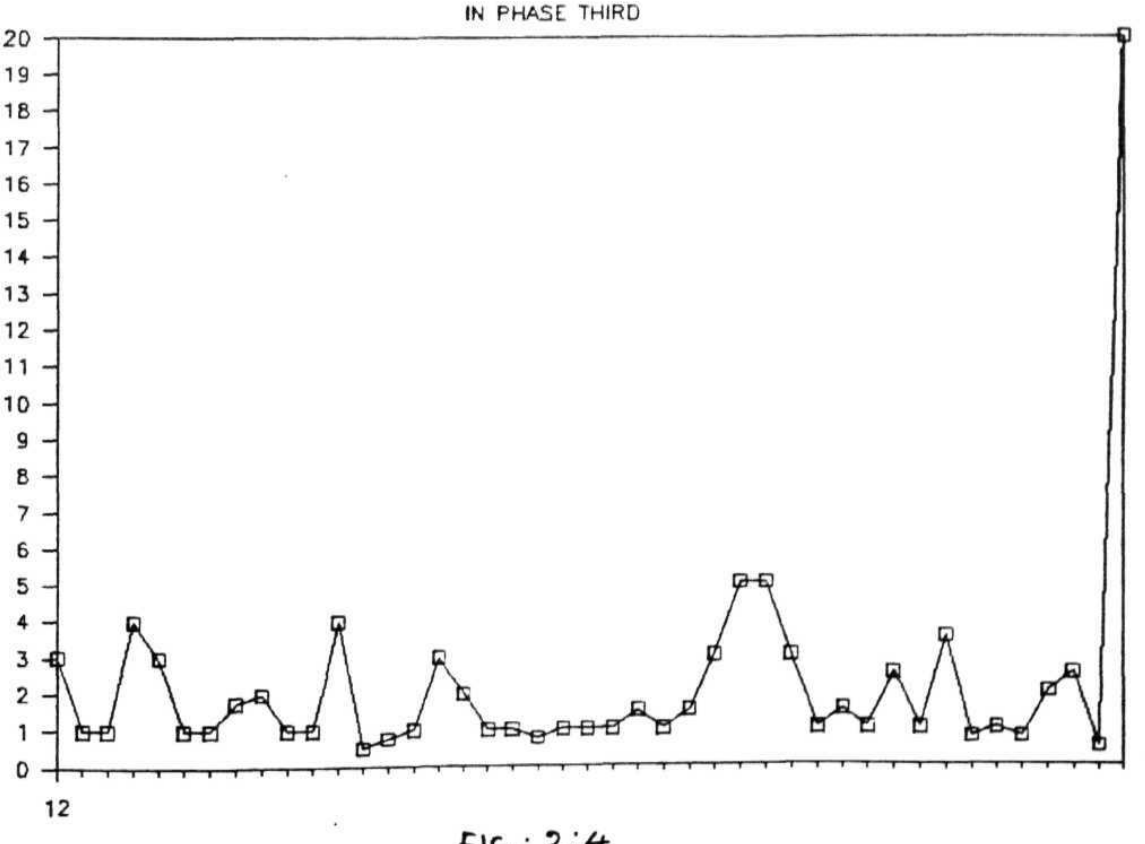

FIG : 2:4

Land purchased(migrant):1978–1995

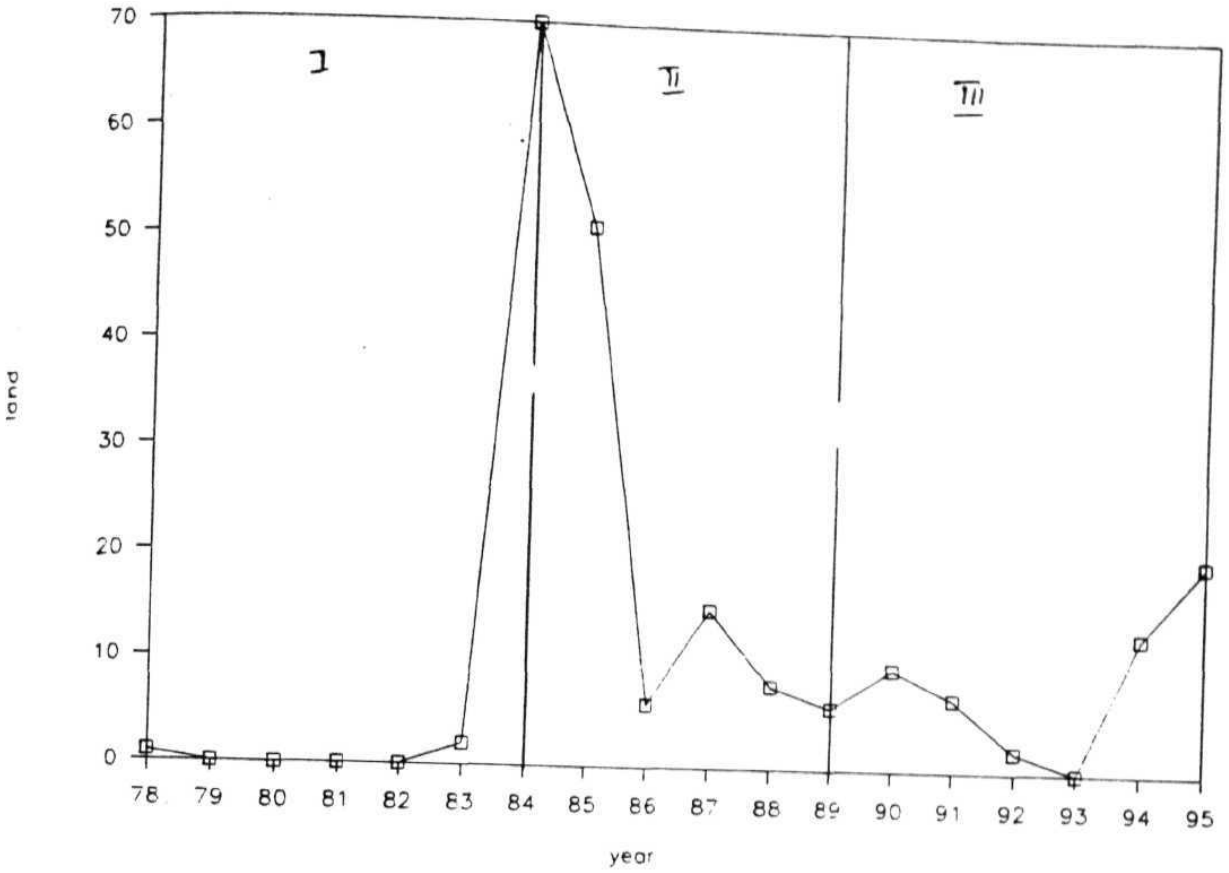

FIG. 2:5

Landpurchased(native):1978—1995

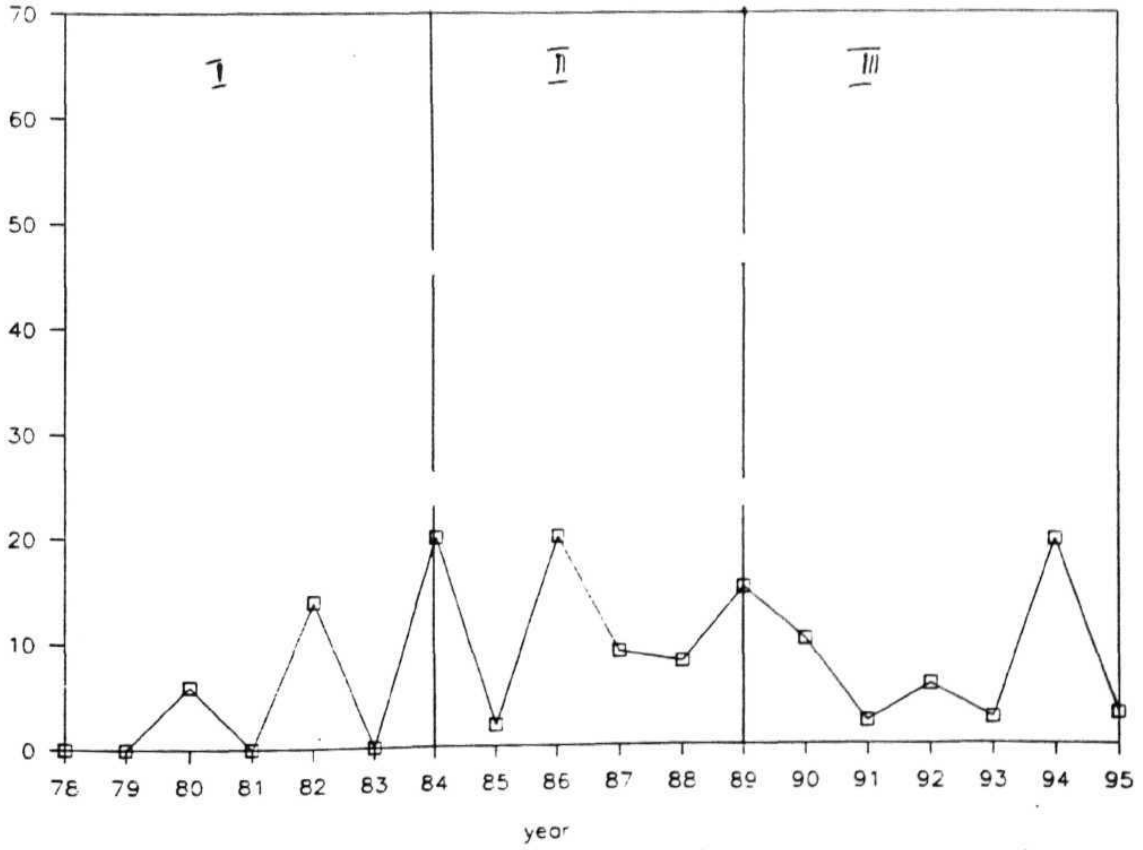

FIG. 2:6

REAL PRICE OF LAND(1978-95)

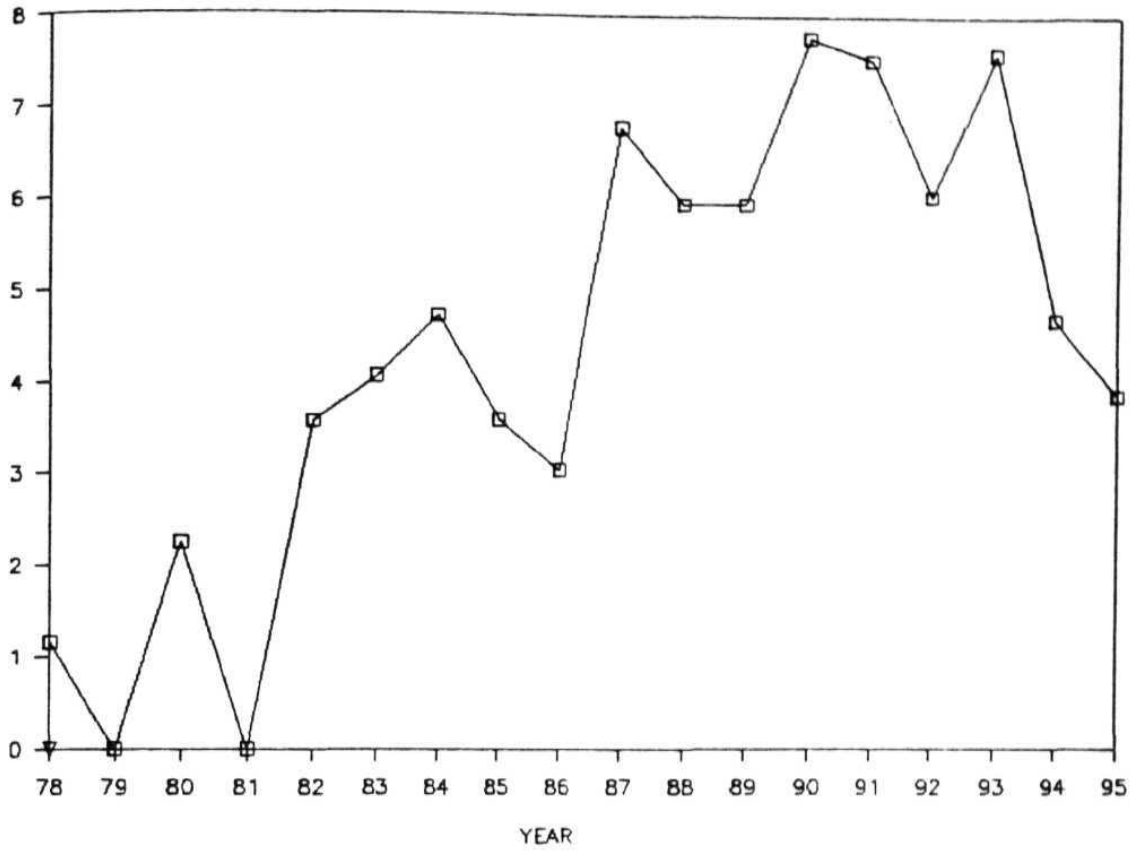

FIG: 2:7

S.D OF PRICE (1978-95)

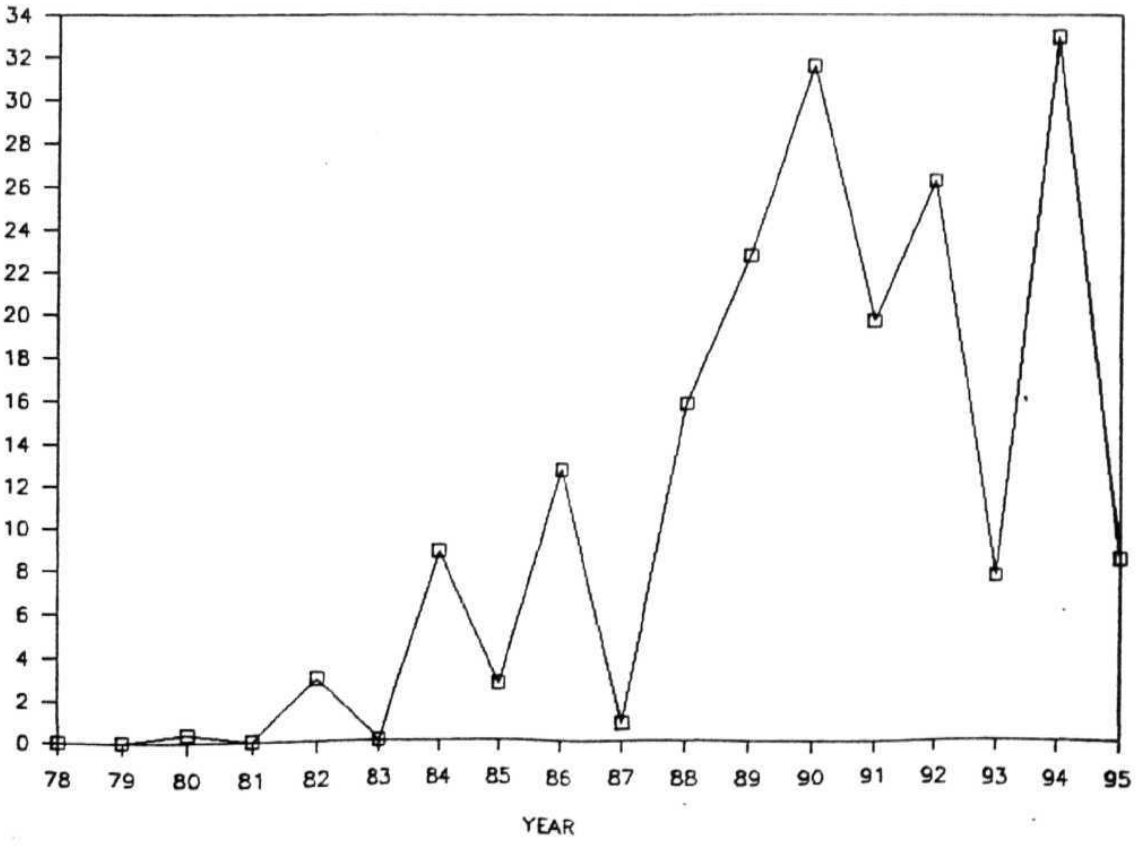

FIG: 2:8

The figure 2.8 plots the S,D over time. The S.D has a highly fluctuating character in the second and third phases. The first phase has a lower S.D as compared to the other phases. Compared to the second phase the fluctuation of S.D are higher in the third phase.

The purchase of land by the migrant in the village is from the year 1984 i.e., the starting of the second phase, and the migrant was a dominant player in the land market till 1989. The migrant had the maximum number of transactions as well as the land transacted. The activity of the land market in the second phase can be viewed as a result of the interaction of migrant. In the third phase, the migrant is no longer the dominant actor, the natives are also involved in more transactions excluding 1995 which was the period of entry of the fourth migrant (see table 2.19), at end of this chapter].

A detailed questionnaire was canvassed to collect data on the permanent transactions for five years and one year for temporary transaction, and the information is presented below. In case of permanent land contracts, the village witnessed 44 contracts involving an area of 94.75 acres which formed nearly 6 52% of total cultivated area. The majority of the contracts were in the range of 1-2 acres(which forms nearly 50%of the transactions). The small transactions dominated the market with only one transaction above six acres in the period.

The predominant buyers, in terms of caste, are the Kammas. Out of 44 transactions, Kammas were the buyers in 31 cases. All the land in the large size group were bought by Kammas. There was a single Reddy buyer in the size group of 3-4 acres. He was a migrant to this place. The second dominant players were the Mala community, which had 8 transactions in the last five years The Mala community have been the buyers in the small size groups The other caste groups like Madiga, Balija, Vaishya have been insignificant players in the land market with one or two transactions (table 2.8).

TABLE 2.8 BUYER'S CASTE AND SIZE OF LAND TRANSACTION (LAND: ACRES)

Land	Mala	Madiga	Kamma	Reddy	Vaishya	Total
0-1	4	—	1	—	1	6
1-2	3	1	17		1	22
2-3	1	—	5	—	~	6
3-4	—	—	4	1	—	5
4-5	—	—	2 •	—	—	2
5-6	—	—	2	—		2
above 6	—	--	1	--	—	1
Total	8	1	32	1	2	44

Source : Field Survey

The main seller in the market had been the Vaishyas, a non-cultivator caste group who had 17 transactions out of the 44, followed by Malas and then Kammas Interestingly, Mala community were the sellers in the size group 1-3 acres while they were buyers in the group of 0-2 acres In a different vein, Kammas were sellers in the range 0-2 acres but buyers in the range of above one acre.(table 2.9).

TABLE 2.9: SELLER'S CASTE AND SIZE OF **LAND SOLD** (land : acres)

land	Mala	Madiga	Kamma	Brahmin	Vaishya	Other	Total
0-1	1	—	2	—	2	1	6
1-2	5	1	4	1	10	1	22
2-3	2	1	1	1	1	—	6
3-4	~	—	1	—	4	—	5
4-5	1	—	—	~	—	1	2
5-6	—	--		1	—	1	2
Above 6	—	—	—	1	—	—	1
Total	9	2	8	4	17	4	44

Source : Field Survey

It is interesting to study the exchanges between caste groups The Malas were buyers from fellow caste members or from Kammas The Madigas had sold land to their own caste members. The Kammas were buying from all caste groups The Malas, as sellers, were selling to their own caste members or the Kammas, while the Kammas sell to their own caste members or to the Malas. The Vaishyas were selling predominantly to Kammas. So the main transactions in permanent market are from Malas to Malas, Malas to Kammas and Vaishya to Kammas with the exchange between Vaishya and Kammas dominating the market.

The village had 43 lease contracts involving 75.5 acres of land. The leased land formed nearly 5% of the total cultivated land in the village In terms of contracts, the village had four types of contracts. One of the contracts was the fixed rental cash contract. The village had five contracts of this type. The rent was paid at the end of production cycle. The second type of contract was the Fixed Rental kind type of contract. In this form of contract the rent was paid at the end of the production cycle. The village had 28 contracts of this category. The third type of contracts were the share-tenancy contract with equal sharing of inputs as well as outputs. The last form of contract can be broadly classified as rent free contract. One could identify broadly two types of trends in the case of rent free contracts One of the contracts was the interlinking of land and labour market. To cite a specific case, a large land owner, with 13 acres of land, leased out 0.75 acres of land to a landless (castewise a dalit) labourer. The labourer had the right to appropriate all the output on the 0 75 acres of land but had to provide free labour services for the cultivation of crops on the landowner's land. The second form of contracts were cases where a land owner gives a piece of land on lease for three years to a landless labourer. Here, the labourer does not have to provide either free labour service or rent to the land owner but has to convert non-paddy cultivated land into land fit for cultivation of paddy using canal water. In a specific case, the leasing-in agent, a dalit, converted the land and made it fit for cultivation after which the landowner took over the land for cultivation and gave the lessee another piece of land for

conversion. In the study of lease contracts, Fixed rental contract (cash and kind) and share-tenancy will be elaborated Out of the 43 lease contracts, there were 12 contracts where the leased out agent leases all the land. These lessor were non cultivators The migrants had 12 lease contracts while the natives had 29 lease contracts All the lease contracts of the migrants were for Paddy crop, while 25 of the native contracts were for paddy crop, one for chilli crop and four were for groundnut crop The migrant took only fixed rent in kind and share tenancy contracts.

The above no rent land exchanges represents interlinked deals in the land and labour market. The first is a contract where an agriculturist labourer needs a consumption loan. This household enters into a contract with a large land owner to be attached labourer untill the repayment of debt. The large land owner leases 75 cents of land agriculturist labour household, in addition of providing loan, so that the labour can meet their subsistence. The agriculturist labour household faces a subsistence crisis on the one hand and the need for consumption loan on the other hand. The large farmer(who own 13 acres) of land need an agent to assist in the sense of organisation of labour, supervision etc in the organisation of production on the land The contract that evolved was a lease contract The lessor provides credit to the agriculturist labour household and also provides 75 cents of land. The output of the 75 cents of is taken by the labour to meet subsistence of the farmer. The lessee, in addition, cultivates the leased land and also organises the agriculturist operation in the village.

The second form is a lease for land development This village has lands which can be converted to wet land. One interesting form generated for the conversion of land was lease land. The land improvement would need investment by the farmer. With the entry of gang labour and tractorisation the employment potential decreased. To meet the subsistence need, the households lease land, which is to be converted on a three year lease. During this phase the lessee does not pay rent on the land. The lessee on an average produce no output on the first year. In the second year is around 5 bags. While

in the third year the output increases to 10-15 bag. If the average rent is taken to be 21% of output, the average rent which the land owner forgoes is, with 15 bags output in third year, would be 4.5 bags of output While the lessee earns an output of 20 bags of output which is nearly equal to rent of land for three years in normal land This form of contract, the lessee earns a rent equal to rent in three years for normal land, while the lessor gets his land converted.

Observing the castewise lease pattern in the village, the main lessee were Kammas followed by Madigas. The Malas did not lease in land The main lessor were Vaishya followed by Kammas and then by Malas. The Madigas did not lease out land (table 2.10).

TABLE 2.10: CASTE CHARACTER OF AGENTS AND NUMBER OF CONTRACTS IN LEASE MARKET

		LESSOR CASTE					
		Mala	**Madiga**	**Kamma**	**Vaishya**	**Others**	**Total**
L	**Mala**	**1**		**1**	**1**	**1**	4
E	**Madiga**	--	—	**6**	**3**	**2**	**11**
S	**Kamma**	**8**	**1**	**5**	**12**	—	26
S	Vaishya	—	~	~	--	—	--
E	**Brahmin**				--	—	--
E	**Kamsali**	—	—	**1**	~		1
	Golla	—		~	**1**	—	1
	Total	**9**	**1**	**13**	**17**	**3**	43

Source : Field Survey

If one see the caste identity of both the agents one observes that Malas lease out to Kammas, while Kammas lease out to Kammas and Madigas. The Vaishya lease out to Kammas dominantly. In case of share tenancy, out of the 9 contracts, in case of 8 the lessor was a Vaishya. In 6 of these contracts the lessee was a kamma, and the crop grown is paddy. In case of 5 fixed rent contracts in cash, the lessor were Vaishya's and the lessee Kammas. In 4 contracts the crop is chilli or groundnut The sixth contract was from a Balija (lessor) to a Madiga (lessee). This was the first contract between the agents. In

case of fixed rent in kind contract, the main lessor were Kammas followed by Malas and then Vaishyas. The Vaishya community prefers a share tenancy or fixed rent in kind contract while Kammas prefer a fixed rent in kind contract.

The coming of assured water in canals made what used to be the most fertile land water logged and the dry lands of earlier times the most fertile land The elite' used to own the most fertile land which became water logged. This elite' on their part started buying the uplands owned by attached labour or service caste groups and Malas and Madigas. As these people did not have money to convert their lands they sold a large part of the land and kept the tail end land for personal cultivation One finds at present a situation where the peasant caste such as Kammas buying the best land and pushing the small farmers (castewise Malas and Madigas, Chakalis etc) to the tail end of the canal. This has lead to water scarcity as water is allocated in such a way by the large farmer that water does not reach the tail end This has resulted in farmers owning land in command areas being forced' to enter the labour market as wage labour.

TABLE 2.11: SIZE OF LAND OWNED BY LESSOR AND NUMBER OF TRANSACTION BY MIGRANT/NATIVE CHARACTER AS LESSEE (for 1995)

Land Size	Migrant	Native
0-1 acres	—	—
1-2 acres	1	2
2-4 acres	--	2
4-6 acres	4	8
6-8 acres	3	9
8-10 acres	—	1
above 10 acres	1	11

Source : Field Work

In case of migrant/native leasing behaviour it is observed that migrants are predominantly lessee and they lease land from farmers in the range of 4-8 acres, while the natives lease from all size groups (table 2.11) A dominant lessor for the native are fanners who own above 10 acres.

There is a diversity in the nature of lessee in the village There are landless labour who are leasing land as well as large farmers who are leasing land. Maybe in the village one has leasing for market as well as for self subsistence.

Exchange in the labour market: Some of the broad changes in other markets as well as in the village after the release of water in the canal and the entry of the migrant are enumerated. One of the important change brought by the migrant was in the credit market, where some form of homogenisation was introduced The labour market witnessed some changes after the release of water. The cultivators had an acute need for labour during the peak season and the labour lacked the skills for the cultivation of the paddy crop. To overcome this problem the migrant started to organize contract labour from the coastal areas in the early years. As the production period was in the month of late September in the village and by this time the labour was free in the coastal areas, they organized for migration of labour from the coastal area to the village for the peak agricultural operations like transplanting (Rs 350 per acre) as well as harvesting. For the other operations one witnessed some form of exchange labour and linked deals. The wage rate for weeding was Rs 25 per women per day if wage labour was used. The migrants who had nearly equal land used to go for exchange labour between themselves as was the case with the native small and medium fanners. One trend seen in the village was the large farmers leasing land of less than one acre to the poor peasantry on no rent basis and in return the lessee used to provide family labour to the lessor (see table 2.12 for migrant-native interaction in markets).

Tractor market: The migrants also did not come with a plough and wanted to use the facility available in the village but the village was not responding to their needs So one sees tractor owners from coastal areas coming to the village after the end of operations in the coastal areas to sell their tractor services. This arrangement was also organized by the migrants. The rate for first tillage was Rs 100 and for the second was Rs 75 per acre and presently the villagers have also brought tractors and are selling the tractor services At present the village has nine tractors.

Credit market: Formal credit market operations ware absent at `Annasamudram' as the land rights were ill-defined and banks need definite ownership rights (patta) to provide credit. This role has been taken over by a group of four money lenders of `Vaishya' caste. Each of the money lenders has a turnover of over 5 lakhs per year. They provide loans to farmers and in return take in the output of paddy In case of loan for paddy crop, they give the peasant a cash loan while for red grams they provide inputs like seeds The reason for this difference is that for paddy the farmers want to experiment with different types of HYV saplings while for redgrams a homogeneity with reference to seeds exists. The vaishya' money lender lends only to the Kamma farmers and any needs of other section has to be channelized through these fanners. This has resulted in a peculiar type of labour exchange. In return for credit the farmers of Mala, Madiga caste, have to work on the fields of Kamma farmer. This has resulted in assured supply of labour for the Kamma peasantry who would otherwise have had to face uncertainty of labour market.

TABLE2.12: DOMINANT FORM OF EXCHANGES(IN MARKETS) FOR MIGRANT-NATIVE.

	Migrant	**Native**
Crop	paddy, redgram.	paddy, Chilli, red gram, groundnut
land	purchase. lease.	permanent tenant.
labour	gang labour, exchange labour, family labour.	gang labour, exchange labour, family labour
Credit	Moneylender.	moneylender.
Output	market.	self consumption and market.

Source : Field Work

Input-output exchanges: All inputs for cultivation are purchased and some of the output is sold. This period witnessed a change of stable food from jowar to rice. Inputs like animal manure which was non-marketed are now bought at ` Annasamudram' The output transactions depend on the credit-compulsions and storage facility Small farmers sell the standing crop to traders who come from outside. The chilli crop is sold in the regulated market at Guntur. The regular cultivator/sellers of chilli receive information through the postal service quoting the latest price of chilli[9].

Other services: The migrants also brought their culture to the village At present one can get nearly all the latest goods in the village The village has three provisional cum fancy stores, two tea shops, a tiffen centre and a tailor shop.

Some broad trends seen in the village after the coming of the water are described below. Here an attempt is not made to document the change but to describe the trends As the migrants were interested in lands which would get water, all the grazing lands of `Annasamudram' had demand and was potential cultivable land These lands were either converted by the migrants, or the peasants of the village This led to two important effects, firstly the livestock in the village especially goats were reduced, at present one does not find goats in the village There has been a change of livestock from goats to cows in a large scale The Kamma peasantry who used to migrate to Guntur and Godavari districts to earn some income stopped migrating and started to cultivate the lands in the village itself. These farmers shifted from goat rearing to cow rearing using the hay from paddy cultivation. It is an important change in the livestock in the village. This led to a flourishing ghee trade' in addition to selling of milk to state dairy in the morning and evening. One also sees the generation of market for animal manure. Farmers are selling animal manure at the rate of Rs 500 per cart load.

[9] The regular cultivator/sellers of chillies receive information through the postal service quoting the latest price of chilli. Radios are also common at the village and peasants are inquisitive to know latest market prices.

A second change, was the loss of livelihood for the Yanadis This was a result of two processes. Firstly, the conversion of land for cultivation led to the felling of trees in the whole belt of command areas So the Yanadis who used to burn trees to get coal found no trees available to them and thus were forced either to go to the non-command areas, or start cultivation of land or join the labour force The second process was the introduction of `modern orchestras' as a replacement to the folk programmes which was provided by the Yanadi until late 1970's. The Yanadis who own some land but lack surplus and information on cultivation joined the agricultural labour force. A third group that got affected were the service castes like Vadrangi, and Chakali etc. In case of Vadrangi the tractors replaced the plough, the increased surplus made the peasants to use iron in place of wooden rods, iron rods in place of wood pillar for houses etc which resulted in decrease in dependence on Vadrangi leading to their migration. One Vadrangi migrated to a backward region, one diversified and established a tiffin centre in the village and also leased some land for cultivation. To cite another example, earlier each Chakali was related to a set of houses and used to wash their clothes but now these houses use detergents like (Surf, Nirma) to wash their clothes. This led to a decrease in dependence on Chakali[1] and thus to a decrease in output allocated to the Chakali' in the Jajmani system This led to the migration of the Chakali' to the nearby towns, opening shops in the new towns or diversify, like a chakali-- who has become the postman of the village. The different service caste groups have been displaced by the coming of canal water and have diversified and moved out of the village. Today, the village does not have Jajmani type of labour contracts, in other words, caste specific division of labour is not followed. In case of Mala and Madiga caste groups, some of them got employment during the construction of the canal and at present one Mala community person is a clerk in the RBC office at Thiparanthakam who owns a TV, one of the four TV's in the village. The Mala's and Madiga's own land but they lack surplus to convert the land for cultivation and so enter the labour market. A Vaishya had started a rice mill in the village in 1989. After three years the mill owner has sold the rice mill to a migrant. The bore-wells that were used for

cultivation before the coming of canal water are now an antique' piece in the village. The land around the borewells is used for growing dry crops like chilli. This village also has a fertilizer dealer who is a Vaishya by caste Now the school is a place to send children when they have no work or are a disturbance to the parents It is common to see 10 year old children coming to school bringing their younger ones who may be of the age of one or two years The education given by the earlier teacher was consolidated by two segments. One segment were the Vaishyas who could maintain accounts in the credit exchange and the Kammas who learnt about law.

These changes have resulted in a complete transformation in the village structure. Avenue for surplus investment depend on the social position of the agent. The surplus coming to ` shotri am dar' has completely dried-up All the permanent tenants have stopped payment of rent The Vaishyas have diversified into credit and general/kirana stores. The surplus of the viashya have gone either into the construction of houses or to start business in nearby mushrooming towns The Kammas have spent on house construction or land development. Some Kamma farmers have bought tractors and are selling the tractor services The surplus of the Mala -Madiga has gone into construction of houses in the newly allotted land and building of churches. The village has two churches, one for the Mala and the other for Madiga community.

2.4 : The Fourth Migrant:

The fourth migrant was a single migrant who had come in the year 1995. He was fifty year old man, who had come from a village near Tenali in Guntur district. This migrant was moving in this area in 1994 looking for land at low price. At Annasamudram he found that the land prices were low and bought 20 acres of land. This farmer was well versed in tubewell irrigation This migrant started to experiment with different crops like chilli, banana, sugarcane, sunflower, lemon, bringal, etc. The migrant had not applied fertiliser to the land or any other inputs After a year he found that this land was responding to banana crop so he converted all the land to banana crop. After the experimentation the migrant had six tubewells for the cultivation of the crop.

This migrant is facing a few problems while cultivating banana The first problem was scarcity of labour for the cultivation of the crop. As a solution brought three labourers from Tenali to do the work. The second problem was transportation of the crop. Here it was necessary for the migrant to develop relations with farmers from a nearby village who were migrants and also cultivating banana

The possible process of change for the village if the banana crop is profitable are

a) As banana crop is profitable there could be a shift from food to non-food crop in the village.

b) Banana crop has a long gestation period and investment by farmers on irrigation is essential, a tendency may exist for larger fanners to shift to banana while small farmers may enter with a lag if they find the price to be stable.

c) In case of land market, it may be seen that there is a reduced turnover in the temporary transfer as banana crop has a feature where plants grow from the roots also If the crop has a favourable price the lessee may lose if the contract is not renewed while if the price is unfavourable then the lessor cannot cultivate another crop as the lessor has to deep plough to remove the roots.

d) While in case of permanent transaction also there would exist potential demand land but actual demand is constrained by financial crunch

e) In case of labour exchanges, banana crop has a relatively low need for labour throughout the year. The migrant has attached labour for cultivation which may lead to attached labour as a new form of labour arrangement. This form meets the subsistence crisis of farmer as well as the demand of assured labour of land owner.

2.6 : Description of the Village Annasamudram during 1995:

The village had 319 households as on 1995. Out of the 319 households, 36 households were migrant households while 283 households were natives households. The village had a total cultivable area of 1451 acres out of which migrants owned 225 acres (15.9% of total cultivated land) while the natives owned 1226 acres of cultivable

land The average size of cultivable land owned by migrant was 7 00 acres which was greater than the average size of land owned by the natives which was 5 19 acres. The average size of family was also different for the native and the migrant households. The average size of family (above the age of 14 years) for the migrant household was 2.75 while for the native the average size of family was 4.70 The crops cultivated by the migrant were dominantly paddy and grains with an exception of a single migrant growing Banana, while the natives cultivated paddy, grams, chilli as well as groundnut The migrant cultivated only wet crops while natives cultivated dry crops in addition to the wet crops (table 2.13).

TABLE 2.13 : DESCRIPTION OF THE VILLAGE (1995)

I Name of the village	Annasamudram
II. Number of Households	319
Migrant	36
Native	283
III Cultivated Area	1438 Acres
IV. Land Owned (acres)	
Migrant	225
Native	1208
V. Average size of farm owned (acres)	
Migrant	7.44
Native	5.56
VI. Average size of family"	4.10
Migrant	2.75
Native	4.70
VII Crops grown	2-3
VIII. Crops grown by	
Migrants	Paddy, grams, Banana
Native	Paddy, grams, chilli, groundnut.
IX. Crops grown al	
Canal irrigated area	Paddy, grams
Tubewell irrigated area	Banana
Rainfed areas	Chilli, groundnut
X. Year of Tractori sation	1989

*(Members above 14 years)
Source- field work

The aggregate data collected in Mandal revenue office gives data on the crops grown. In case of 1994-95 kharif season, the dominant crop in the village was paddy, while the dry crops were relegated to a small area These areas must have been the areas that may not be getting water due to their land gradation This village witnessed a change in the crops cultivated from Jowar-korra to paddy after the coming of assured water supply.(table 2.14).

TABLE **2.14:** AREA AND CROP GROWN IN **ANNASAMUDRAM(1994-95 KHARIF)**

Crop	paddy	jowar	bajra	korra	ragi	pulses	chillies	castor	cotton
Area	2020	95	24	-		243	335	94	4

Source : Mandal Agricultural Reports

The village had 54 household which own less than one acre of land and a total land in this size group was 16.5 acres of land owned The number of households owning between one and two acres were 21 households owning 33.0 acres while 46 households who own land between two to three acres with 205.5 acres of land There are 109 households with land in between three to six acres with second largest amount of land in the size group, i.e., 509.5 acres. This group had the largest number of households and second largest landownership. There were 34 households in the nodal size group of six to eight acres with 157 acres of land. The least number of households were in the nodal size group of eight to ten acres owning 158 acres. The maximum land was held by peasants above ten acres i.e., 514 acres with only 34 household in this nodal size group. (see table 2.15).

TABLE2.15 LAND DISTRIBITION IN THE VILLAGE(1994-95)

Size Dist	No of Households	Land Owned
landless	54	—
0-1 acres	21	16.50
1-2 acres	46	33.00
2-4 acres	54	205.50
4-6 acres	52	304.00
6-8 acres	32	202.00
8-10 acres	16	158.00
10 & above	35	519.00
total	313	1438.00

Source : Field Work

TABLE 2.16 CASTE WISE LAND **DISTRIBUTION-1994-95**

(land : acres, castewise number of household)

Land	Mala	Madiga	Kamma	Balija	Vaishya	Others
0-1	24	5	17	8	—	—
1-2	3	2	6	1	—	9
2-3	12	10	13	1	2	9
3-4	10	9	32	4	2	2
4-6	5	2	35	5	2	4
6-8	1	1	25	1	2	4
8-10	—	—	12	1	4	-
above 10			20	3	5	6

Source : Field Work

Castewise this village is a multi caste village The numerical dominance is by Kamma caste group with 158 households In terms of land ownership also they are a dominant group with a large number of households owning land The second numerically dominant group is Mala caste group There are 55 households with a majonty of them owning land below one acre. The third numerically dominant group is the Madigas, who are small land owners in the village There are 24 Balijas households in the village There are 17 Vaishya households with large landownership The other castes were Brahmin, Reddys [who are all migrants], Chakali, and other single household caste groups (table 2.16). Based on the interaction with the four streams of migrants, an attempt is made to analyse the nature of land market in the third phase of migration and study the 'activisation' of the land market TABLE 2.19 : NUMBER OF EXCHANGES, AREA EXCHANGED BY MIGRANT-NATIVE AND AVERAGE PRICE AND S.D OF PRICE 1978-95

Year	No. of exchange	Total Area	Average Area	No. of Exchange MG	No. of Exchange NT	Area Bought MG	Area Bought NT	Mean Price	S.D of Price
1978	1	1000	10.00	1	0	1000	000	1000	000
1979	0	0.00	000	0	0	0 00	0 00	000	000
1980	2	6.00	3.00	0	2	000	600	225	035
1981	0	0 00	0 00	0	0	0 00	0 00	000	000
1982	3	1400	466	0	3	0 00	14 00	3 93	291
1983	1	2,00	200	1	0	2 00	000	5 00	0 00
1984	16	90 00	5.64	10	6	7000	20 00	6 14	8 95
1985	9	5300	5 88	8	1	51 00	200	478	264
1986	6	26.00	433	2	5	6 00	200	6 70	1266
1987	4	24.00	6.00	2	2	15 00	900	4.75	086
1988	4	16.00	4.00	2	2	800	800	12 15	1579
1989	8	21.50	2.69	1	7	600	15 00	1065	22 66
1990	4	19.75	1,80	5	6	975	1000	1483	31.57
1991	5	9.75	1.85	2	3	7.00	2 25	1730	19 61
1992	7	7,75	1.11	2	5	200	575	1607	2621
1993	3	3.50	1.17	0	2	0 00	2 50	21.33	778
1994	15	3250	3.17	3	12	13 00	19.50	1458	32.97
1995	3	23,00	7,67	1	2	20 00	3 00	1306	8.57
Total	98	358.00	366						

source- field survey

Appendix I: The Region:

The village selected for study, Annasamudram, lies at the northern tip of Prakasam district of coastal Andhra Pradesh Even though the village is a part of Prakasam district, it is that part of the district which has more features in common with the dry Rayalaseema region[10] The nearest rainfall station to the village is Yerragondapalem which is in the Markapur Taluk of Kurnool district. Though Yerragondapalem recorded a rainfall of 659.60 millimetres on an average in a year, it is still the highest average rainfall in Kurnool district [Gazetteer of Kurnool (1974)] The rainfall is concentrated in the months of June-October. The Gazetteer maintained that "... the variation in the annual rainfall from year to year is large. Added to this the district on an average had 41 rainy days in a year". [ibid., p: 27]

This dry climatic condition and concentration of rainfall in 41 days has created the need for large number of wells and tanks as a hedge against drought/water uncertainty. In Kurnool district, Markapur has the largest number of Tanks. [Gazetteer Kurnool (1974)] This has also led to largest quantity of land being brought under tank and well irrigation. In this Taluk, 78 41% of the net irrigated area is by wells and Tanks, while rainfed irrigation forms major portion of the net cultivated area (table 2.17). It is observed that the Markapur area has a dominance of dry cultivated area. Another interesting feature is that very low quantum of land is cultivated more than once and it is about 6% of net cultivated area (table 2.17). Markapur region could be called a dry

[10] This region and *the* village were part of Cuddapah district before 1909. During the fonnation of Kurnool district in 1909, this region was made part of Kurnool district Again during the *formation of Prakasam* district in 1970's this region was *shifted to Prakasam* district In terms of Taluks also, these villages have been shifted from one Taluk to another. Before 1980's this village was part of Markapur Taluk. In 1981 this village was shifted *to* Yerragondapalem Taluk and in the 1991 census, this village were part of ThTipuranthakam Mandal of Prakasam *district.* Two important towns nearby are Veenikonda and Thripuranthakam town Veenikonda is a business town with a regulated market and Thriparanthakam is a temple town with a Saivite Shrine.

region with a dominance of rainfed land for cultivation Famine conditions were a "... recurring nightmare almost till the beginning of this twentieth century in the district The last famine was in 1937-38. . . . .The district, however suffered periodic distress from drought conditions during the year 1942-43, 1945-46, 1952-53, 1960-61, 1963-64 and 1965-66" (Ibid, p: 97).

TABLE 2.17 NET IRRIGATED AREA ACCORDING TO SOURCE OF IRRIGATION - MARKAPUR 1964-65 (land : hectors)

Govt canal	private canal	tanks	wells	others	total
457	6	4809	6183	784	12,239
(0.57)	(0.007)	(6.07)	(7.80)	(0.98)	(15.44)

Source : District Gazetteer Kurnool(1974)
figures in brackets are percentages of land irrigated by source to total land cultivated.

Out of the total cultivated area of 79,261 hectares, the net irrigated area forms 15.44% or 12,239 hectares. The area cultivated more than once a year is 5,461 hectares, while the area irrigated more than once is 3,651 hectares implying that this region could be designed as a dry region.

The district has a dominance of regar and red ferruginous soil while Markapur region has a dominance of red soil. The red soil is of poor fertility but yields a higher output with a minimum of rainfall. The dominance of rainfed land for cultivation as well as low quantity of land for irrigation has an impact on the nature of crops being cultivated. The crops grown here are jowar, cotton and pulses.

The nature of rainfall, soil and the survival instinct has led to a particular type of cropping pattern in the region as in 1964-65 The region has a dominance of dry crops like jowar and korra. These two crops occupy nearly 45.29% of total land cultivated. If one adds bajra to the above dry crops then 52.84% of land cultivated is occupied by the

dry crops While paddy forms only 8 99% of total land cultivated (table 2 18)

TABLE 2.18: AREA AND CROPS GROWN IN MARKAPUR TALUKA 1964-65 (land : hectors)

Crop	Paddy	Jowar	Bajra	Ragi	Korra
Area	7,619	17,026	6,401	5,070	21,333
Crop	**Varagu**	**Pulses**	**Chilli**	**Caster**	**Others**
Area	4,728	7,750	748	4,118	9,902

Source : District Gazetteer Kurnool(1974)

Appendix II : Annasamudrum : an Inam Village

Before 1947 the Indian rural sector had a variety of tenurial arrangements. One of the tenurial arrangements was the Inam form of land tenure. This tenure is called by different names in different areas. The Muslims called it Waqt or Mu'sfs, Hindus called it Agraharams, Shrotriam, Devastahanam, Inams, Devadasi-Inam etc. British tried to standardize the name Inams. In this form of tenure, land is given to an individual or a institution as Inam[11]. The amount of land under any such tenure could be a reward of a few villages or one village or even some land in a village

The distinguishing character of Inam tenure is the revenue free basis of land ownership by Inamdar. Frykenberg(1984) maintain that the rise of the Company Raj in South India can't be appreciated without a study of Inam. "(S)ubstantial base of power beneath the authority of the new system was formed by an accommodation to those individuals with hereditary "landed privileges" with important tax free concession to individuals and institutions having highest claim to social and ritual status and influence" [Frykenberg(1984), p 37]. The author calls the Inam tenures as silent secret settlement of land, and were symbols of status and power in the society. Strokes, Eric (1984) maintains that Inams were a device to encourage colonization rather than to escape the revenue demand The holders of such land were entrusted at the time with necessary powers enabling them to collect and appropriate the revenue and to administer the general management of the land. The inam could be given to an individual or an institution for the services rendered by the individual or institution to the state. The nature of services could be revenue collection or maintaining military or religious purpose etc.

[11] Inam is a Persian word, this word implies a gift to someone.

Historically, in the Inam tenure the stale is passing the right to produce and appropriate the produce to the Inamdar. In other words the state is passing the user right(UR) to the agent. This right of Inamdar in case of large Inams also has the contingent right to exclude others from the use of the land The state has passed the right of exclusion (ER) on the land to the Inamdar In other words state has passed UR and ER to the Inamdar. But one sees a variety of restrictions on the tradability right(TR) of the agent with user right like restriction on inter generational transfers or restriction on tradability of land

Annasamudram is an Inam village. The type of tenure is called *shrotriam* type of Inam. This type of tenure is given to a Brahmin for the service provided by him. Here the Inamdar is called shotriamdar and the extent of inam is around 6400 acres. This inam is a personal inam. There are conflicting stories about the genesis of the inam. One story maintains that the inam was given to the Brahmin for medical services provided by shotrimdar to the Muslim rulers of Golconda. A second story maintains that the Nizam gave this land to a court dancer. This dancer transferred this land to the forefathers of the present shotrimdar as the dancer was in debts As this study is not on history of the village or the genesis of the inam the researcher has not attempted to substantiate on either of the claims.

This village was resettled by the forefather of the present Inamdar at the present location. Earlier, the village was located at another place and the villagers migrated to this place. This village has a tank that was built by the Inamdar.

Let us study the rights that were passed to the Inamdar by the Nizam. The Nizam has given this piece of land as a gift to the Inamdar and the Inamdar can appropriate the revenue from the land, i.e., the Nizam has passed the user right(UR) on the land to the Inamdar with the right to appropriate the produce from the land This right had the contingency right to include/exclude others from using the land So the Inamdar had

the right of exclusion(ER) on the land As this is a large Inam and the Inamdar can not cultivate the land themselves the Inamdar had settled people on the land[1]*. The Inamdar could transfer the inam inter generational ,i.e., the Inamdar can pass the inam to his heir. In this case, the inam passed to the eldest son of the Inamdar. Sub-division of the inam is not possible on the land legally. The Inamdar doesn't have the right to alienate a part of the inam permanently The Inamdar can however, transfer the user right(UR) on any piece of land to another agent temporarily.

The state passed the Inam abolition Act for the Andhra region in 1956 while for the Telangana area the Act was passed in 1955. The Telangana region has another Act which abolished a particular Inam land - Jaghir in 1949. The basis of passing for these Act's were protracted peasant struggles in both the regions. The Telangana region witnessed peasant struggles led by the communist party for the re-distribution of land. The lands that witnessed struggle where the common property lands in the villages. The Andhra region witnessed struggles from the 1930's onwards led by the Nationalist like N.G. Ranga as well as by the communists. These struggles were against the oppressive practices of the Zamindars, Inamdars and other intermediaries. These struggles wanted that ".. there should be no intermediary between government.. and the actual tiller of soil and that all right vests in such people as Inamdars, Shotriamdars, absentee landlords and the Inamdars who do not actually cultivate the land should be abolished..." [A. Satyanarayana (1983), p: 33] In other words, these peasant struggles wanted all rights on the resource land to rest with the actual tiller or to provide all the rights to the user of land i.e., the generation of well defined property right on the land. The rallying point of the struggle were the very high rents, unfair as

[12] This represents a case of Ill-defined land rights The Inamdar has Permanent right on the land and restricted tradabiliry right(TR) on the land *The Inamdar has* passed the *user right(VR)* on the land on a temporary basis to a set of cultivators. This represents a case of bifurcation of right on the land with residual Rights with the Inamdar Any *decision to increase* production has to be taken by the Inamdar but all the proceeds of increased production may not pass on to the Inamdar.

other ryotwari areas had lower rents The struggles also wanted the abolition of rights of the intermediaries over forest lands, waste lands, community lands, irrigation sources, etc. within the area of the Inamdars control. [T.S.R Krishnayya(1980)]. The struggle was started on the common property resources like access to forests, grazing lands etc.

It was in this context of agrarian unrest that the state passed the Estate abolition Act 1948, Inam Abolition Act 1956 etc. The emphasis of the Inam Abolition Act was the generation of well-defined property rights on the land i.e., to provide the user of the land with all the other contingent rights The form of ownership that was to be generated was the ryotwari form of tenure with all tradability rights with the user of the land. This Act had two forms, one is to provide ryotwari patta on the land and the second is to abolish the Inamdars access to common property resources

The Inam Abolition Act 1956 has bypassed the village. Until 1995 this village was a Inam village without having witnessed any property struggles. The Inamdars went to court questioning the applicability of the act to shotriam type of tenure. The government plans to undertake the first land Survey and Settlement in 1996.

CHAPTER-III

ANALYSIS OF PERMANENT LAND TRANSFERS: CASE OF ANNASAMUDRUM

3.0: Introduction

A much debated issue about Indian agriculture is the distribution of land resource with the production unit and the resulting efficiency losses in production Part of the debate centred around the State policy of land reforms, in terms of redistribution of surplus land, sometimes argued on the basis of inverse relationship observed in many states across the country, between size of land holding and land productivity. Another part of the debate on land resource centres around the activity of land market. A theoretical opinion on the land market is that the market is inactive, and whatever activity witnessed in the market is in the forms of "distress sales" [Bhaduri(1986), Guhan(1983)]. Another opinion held is that land market is not inactive but has a low turnover in the market [Bliss and Stern(1982), Walker and Ryn(1989) Dreze(1997)]. The consequence of "distress sale" or "low activity" of land market has implication on the concentration of land A few scholars hold the view that concentration has declined, Rao(1972), Nancharaiah(1988), Rajsekhar(1988), Athreya et.al(1990), while some hold the view that concentration has increased but moderately, Bhaduri et.al(1986). What is also importance is the increase or decrease of concentration and the process of land transfer, in the sense whether market are helping transfer of land from say, non-agriculturist to agriculturist or vice versa, from large to small farmers or vice versa. In other words, the nature of underlying factors that are operating in the economy merit a study.

Land market has two components, namely, permanent transaction market or the sales and purchase market and the temporary market or the lease market In this chapter an attempt is made to study the structure of permanent transaction market and determinants of price & land transacted in the market, secondly, whether migrant has an influence on these factors or not.

The debate existing on permanent transfer market attempts to understand and explain the low turnover in the land market[13]. Empirically this has been shown by Bliss and Stern(1982), Bhaduri et al(1986), Walker and Ryn (1989), Guhan(1983), Athreya(1985) Dreze(1997) etc.

There are two explanations for the low land market turnover One of the explanations is by Bhaduri and the other by Basu(1986). Bhaduri et al(1986) maintain that land ownership has been relatively stable, and any transaction in the market is a result of distress conditions and is involuntary in nature. The reason for sales given by Bhaduri for the exchange are non-economic rather than economic He maintains that these exchanges are best understood as mechanisms of surplus extractions [Bhaduri(1986)].

The second set of explanation is given by K. Basu(1986). He defines two types of exchanges, one where agents sell land without any interest in buying back land called as regular transactions, while the second form of exchange is one where the agents sell land with an idea to buy back land at a later date called interim transfers. Basu attempts to study the interim market. He models the low transaction in this land market. The basic assumption of the model is that agents perceive the agrarian economy to have a low

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Broadly the reason for sales as seen in the literature are debt compulsions or distress sales (Bliss and Stern(1982), Guhan(1983), Athreya(1984), Guhan and Mencher(1984), Sarap (1996) etc. While the second reason for sale is the transfer from non-cultivator owner to cultivators when the non-cultivators have migrated to non-agricultural sector (Rajasekhar(1986), A. Reddy(1987), P. Radhakrishnan(1983) etc. The second type of studies are historical in nature.

turnover or the sales are scarce. In such an economy any agent selling land does not have an assurance that they can buy back land later which acts as a hindrance to sell land given a preference of owning land in an agrarian economy In other words, agents do not want to become an interim seller as they have no assurance that they can buy back the land at a later date. Basu(1986) explains the individual rationality not to sell as a reflection of low turnover of land market

An interesting debate in the context of land transfer is whether land transfers are leading to increase in concentration of land or is the trend towards decreasing concentration. Rao(1972) in a study of land transfer in a group of villages in ryotwari region of Maharastra comes to the conclusion of decrease in land concentration. Nancharaiah(1988) studies the changing land distribution caste wise, in a village, namely, "kanchakoduru' village in Krishna district of Andhra Pradesh In the year 1982, "the Gini concentration ratio was found to be 0.56." [ibid, P: 38]. The Gini coefficient was 0.54 for non-brahmins, 0.44 for brahmins and 0.40 for Scheduled Castes. Rajasekhar(1989) studies land transfer in a village in Kurnool district of Andhra Pradesh. He studies a period from 1891 to 1984. This phase is divided into two phases, the first from 1881 to 1948 and the second is from 1948 to 1984. In the first phase Lorenz ratio has increased from 0.51 to 0.58, while in the second phase, the Lorenz ratio has remained constant. In case of the first phase land transfers were from non-cultivating families to large cultivating families. While after the tenancy reforms, the 'rich farmers' ceased to acquire land, while the excess land was passed to landless labour. Athreya et al(1990) studies six village in Tirichy District of Tamilnadu. Three of the villages are dry villages, while three are wet villages. The wet villages witnessed a pronounced deconcentration of land, while the dry areas witnessed a less pronounced deconcentration. The sample of Athreya et al does not contain absentee land owners. Singh Harpal (1976) in case of data on operational holding, one sees a fall in Lorenz ratio from 0.62 to in 1970-71 to 0.60 in 1976-77 to 0.56 in 1980-81.

Rao(1972) says,

> "(A) little reflection would show that, as concentration in land ownership increases over time, the policy makers should be concerned, if not more, about the process behind that increase. For example if the concentration is growing because increased ownership of land by large farmers facilitates expansion of their cultivating holding, and the consequence of the process and its implication for policy makers would be very different from those attended to a process of mass of cultivators to a small number of non-cultivators. Very possibly, the former would be a lesser evil, since it may not result in the growth of tenancy also, the extent of concentration in those circumstances would be limited by the fact that a cultivator does not have the tendency to expand his ownership beyond the size which he himself can cultivate. Neither of these processes would be true of the second process of concentration. "[Rao(1972), p: A.133].

In the above context, the nature of land concentration in the two time periods i.e., 1987 and 1994 are studied. Is the concentration increasing or decreasing? At a second level to see the nature of agents enrolled in the market, specifically, the nature of land holding by sellers and buyers in the market, the occupation of seller, etc,. And thirdly the functioning of market, as reflected in price of land and quantity transacted

Rao(1972) identifies two important processes of land transfers One of the processes is where agents who have information on the production process buy the land, while the second process is one where the agent who does not have information on the production process buys the land. Rao(1972) identifies the first buyer as cultivator while the second type of buyer as non-cultivator. The cultivator as buyer is seen to represent a case of adjustment of land resource by the cultivators to expand the operational holding, while the second process represents a case where agents buy land as rentiers. In the same vein, an attempt is made to study the nature of agents involved in the transaction. This variable

has been captured as the occupation of seller[14] or it is agriculture or non-agriculture (where they are dominantly non-cultivators) Rao in his study analysis the role of non agriculturist from the buyer side, while in this study we would like to see are the transfers from non agriculturist or agriculturist, from seller side, is studied as the villages does not have non-agriculturist as buyers. In addition to this we are interested to see if information differences between agents also have an impact on the land exchanged This has been captured as migrant-native differences between agents In other words, an attempt is made to capture the nature of agents involved in the transaction in terms of information differences on production process, resource endowment etc.,. Secondly, to study whether the above mentioned variables determine the price of land & the land transaction or not. As an extension, an attempt would be made to study whether the processes are leading to transfers of land towards generation of rentiers or are agents adjusting resources as cultivators.

The second part of the this chapter is on the variability in price. Bhaduri(1986) identifies two processes of commercialisation. One process of commercialisation is one where agents involve in the transaction with an assumption of "gains from trade" or individuals attempt to gain from the transaction While the second process is a forced commerce or distress sale where individuals enter the market "induced by threat of survival". This difference between the two processes can be captured in terms of price-difference for the same type/quality of land A normal process of commerce would lead to convergence of prices, while in a forced commerce, there would exist price differences in terms of resource endowment. The specific resource considered in the literature is land owned by the seller and buyer. Is the price of land different for the different size groups of farmers[9] Rao(1972) in his study saw that price differences don't exist for small

[14] Here, one assumes that an non-agriculrurist(who earns more in non-agriculture as compared to agriculture) has a lower information on cultivation of the specific crop cultivated on the land as compared to cultivator. The non-agriculturist may have information on the marketing or on alternate use of land.

and large farmers as buyer, as sellers and as buyers and sellers in the different size groups. Here, is there a price variation for different class group of farmers in the village.

Before the entry of the migrant, the village was a traditional economy, with near absence of permanent transaction market and the lease market dominated by traditional forms of arrangements. Into this form of economy, the migrant has entered. There can be two alternate impacts on the village,

a) there does not exist any difference in information in cultivation of wet lands between the migrant and native, which could be a result of the native having learnt the state of art of cultivation,

b) there exist difference between the migrant and native, with the native producing the same crop as the migrant. In this case the native could have learnt cultivation or the migrant has better quality of land

The studies on peasant migration show two phases in the market, a phase of high turnover followed by a phase of low turnover in the market A migrant, as indicated earlier, migrates in response to low price of land and the potential of the land to be converted to wet land As migration is generally in the form of "bunch" and they all purchase land leading to a phase of high turnover of market followed by a decrease of turnover of market when the native also learns the new form of cultivation. [Rajsekhar(1990), Maddulety(1988), Tripathy(1985)]. So unlike the idea of low turnover one sees phase of high turnover in the land market as a response to migration. In this chapter an attempt is made to study the nature of agents involved in the market and the determinants of price & land transacted in the permanent transfer market as a response to migration.

As has been specified earlier land market can be said to be active if the agents are responsive to price signal. The data are too inadequate to estimate the structural equations (adopting simultaneous method). Here one has estimated price/rent & quantity of land transacted in a reduced form approach.

This chapter aims

a. To study land distribution and land concentration at two points of time i.e., 1987 and 1994.

b. to identify phases in the land market transactions,

c. to analysis variability in land exchanged in terms of characters of buyers and sellers,

d. To study variability in price of land and identify the nature of agents involved in distress sales.

e. Lastly to identify factors influencing land transacted & price of land.

3.1 Land Distribution and Concentration:

This section deals with the changes in the land distribution in the village at two points of time i.e., 1987 and 1994. Table 3.1 gives the land distribution at two points of time i.e., 1987 and 1994. The year 1987 is a few years after water was released in the canal while 1994 is the year the field work was conducted. The year 1987 was taken for study as this was the year when migrant related land market turnover was decreasing and the market was in the phase of stabilization. While 1994 was the period when land market had been stable.

TABLE 3.1 DISTRIBUTION OF LAND HOLDINGS AND THE AREA HELD IN 987 AND 1994
(Land : acres)

	MIGRANTS				NATIVES			
Acres\years	1987		1994		1987		1994	
	No	land	No	land	No	land	No	land
Landless	2	-	2	-	43	-	48	-
0- 1	-	-	-	-	10	7.0	21	16.5
1- 2	2	2.5	4	5.0	21	29.5	25	33.0
2- 4	2	7.0	4	12.5	58	208.0	55	205.5
4- 6	5	28.0	6	33.0	62	279.0	47	304.0
6- 8	11	82.0	13	91.0	26	118.0	21	202.0
8-10	-	-	1	9.0	16	144.0	16	158.0
10 Above	5	67.0	6	74.0	31	418.0	32	348.0
Total	27	186.5	36	224.5	267	1203.5	264	1267.0

Source: Field Work

The total operated area in 1987 was 1389 acres which had increased to 1491 acres by 1994[15]. The year 1987 had 27 migrants households who owned 186 acres of land By the year 1994 the number of migrants had increased to 36 households who owned 224 acres of land. In the year 1987 there were 267 native households owning 1203 acres of land while in 1994 the number of households was 264 while the land owned had increased to 1267 acres. This village witnessed out migration of four households, who migrated to areas cultivating sugarcane crop, as labourers. The increase in area is a result of expansion in the area of cultivation after the coming of assured water supply, The increase in the area of cultivation increased by 101 acres. This would mean an expansion of an average of 17.25 acres per year. These lands were earlier grazing lands in the

[15]The increases in operated area is due to expansion of land brought under canal irrigation in the village. These lands were earlier fallow lands.

village. The share of migrant in the total owned area has increased from 13.3% to 15.1% between 1987 to 1994.

In both the periods the maximum number of migrants were in the size group of 6-8 acres. Where as for the natives the modal size group was 4-6 acres in 1987 and 2-4 acres in 1994. In terms of combination of size groups, a large proportion of the migrants have 4-8 acres of land while in case of natives it was 2-6 acres. In terms of land holding also one sees the same size groups having large proportions of land for the natives and migrants

A comparison of the two periods of the migrants shows that each size group of land holders have increased their land at least marginally with a large increase in land holding by peasants who own more than 10 acres.

In case of natives there are some modal size groups which have increased the land holding while some have decreased land holding The main modal size group which has decrease in land holding is of peasants who own land above 10 acres while the main gainers are in the modal size group of 6-8 acres. The other size groups have gained only marginally.

The table 3.2, provides data on the shift in the land ownership over the two periods of time, namely 1987 and 1994 The table shows that majority of the households have maintained the same position or remain in the same size group over the two time periods. There are four households in the marginal size group in 1987 who have moved to small farmers group by 1994. While another four households have shifted from small to medium farmer group. There was one household in each size group, landless, marginal, small and medium who have shifted to the next size group. In case of households who have moved down the ladder, there are six households who were small farmers and in 1994 are landless labour (out of the six, four have migrated out) while nine medium

farmers in 1987 are small farmers by 1994. In addition two households, one marginal and one large farmer became medium farmers Interestingly, the size group who have increased the number of households are the small farmers while the losers are the medium farmers.

TABLE 3.2 : MOBILITY OF HOUSEHOLDS OVER LANDWISE SIZE DISTRIBUTION IN BETWEEN 1987 AND 1994

FOR YEAR 1994							
1	Land dist (sizewise)	LL	MR	SM	MD	LG	Total
	Landless(LL)	44	1	-	-	-	45
9	Marginal Farmer(MR)	-	59	4	1	-	64
	Small Farmer(SM)	6	2	47	4	1	60
8	Medium Farmer(MD)	-	-	9	68	1	79
	Large Farmer(LG)	-	-	-	1	35	36
7	In-Migration	-	2	3	3	1	9
	Total	50	64	63	77	38	

Source: Field Work

The study of some of the other aggregate indices show some interesting features. The mean size of holding of the migrants is higher than the natives, but the mean size of both the migrants and the native is decreasing. Correspondingly, there is a high standard deviation for migrant and native land holding. The coefficient of variation bring out the feature that variation in case of migrants is less as compared to the natives. The coefficient is nearly constant for the migrants as compared to the natives which has increased. The mean size of holding of the migrants is higher than the natives, but the mean size is falling for both and the coefficient of variation of the migrants is less than the natives.(Table 3.3).

Table 3.3: Aggregate Statistics on Difference Between Land Holding for Migrant Native (Land:Aeres)

	Mean Land		S.D of Land		C.V	
	1987	1994	1984	1994	1987	1994
Migrant	7.44	7.00	4.43	4.19	0.59	0 59
Native	5.56	5.19	4.42	4.10	0.75	0.78

Where S.D= standard deviation, C.V. =coefficient of variation

The concentration ratio for the natives is higher than the migrants in both the years In case of both the years the land concentration is increasing for both the sets of agents. In case of migrants the concentration ratio has increased from 18 1% to 19.8% while in case of natives it has increased from 20.7% to 20.9%. Unlike earlier studies the concentration ratio is marginally increasing in the village(table 3.4)

TABLE 3.4: CONCENTRATION RATIO (CULTIVATORS) FOR MIGRANT, NATIVE AND TOTAL AGRICULTURAL POPULATION

	1987	1994
Migrant	18.1%	19.8%
Native	20.7%	20.9%
Total	19.8%	20.6%

3.2 PHASES IN PERMANENT TRANSACTION MARKET:

The period after the release of water can be divided into three phases. The first phase from 1978 to 1983, the second phase from 1983 to 1989 and the third phase from 1989 to 1995. The first phase witnessed 7 transactions in the market The average price per acre was Rs 2,570. While the coefficient of variation of price was 0.65. The average area transacted was 1.77 acres with a coefficient of variability of 0.56 (Table 3.5). The second period witnessed an increase in transaction on land, with the migrants playing a important role. The number of transactions increased to 47. The average price also

increased to Rs 7,234 with a slight increase in variability to 0.79. The average quantity also increased to 5.03 (acres) with a nearly equal coefficient of variability. This was the period of dominance of migrants in the market with the natives playing a smaller role as buyer of land. In this period the number of transactions by migrants were 26 involving 158 acres of land, while the native had 23 transactions involving 74 acres of land. The third phase witnessed 44 transactions on land. The average price more than doubled to Rs 16,327 and a marginal fall in the coefficient of variation of price. The average quantity per transaction reduced to nearly half of the earlier quantity. An interesting feature has been the increase in the coefficient of variation of the quantity transacted during this period to 1.39. Here, an attempt is being made to understand the process at work in the third phase, a phase where average price doubled, the average quantity was reduced to half and the coefficient of variation of quantity per transaction was very high The real prices in the first phase the price was Rs 2,921 per acres which had increased to Rs 4,921 per acre in the second phase and had further increased to Rs 7,455 per acre(table 3.5).

The migrants in the village(as is specified in the earlier chapter), were main player from 1984 i.e., the starting of the second phase, in the market until 1989. The migrants had the maximum number of transactions as well as the land transacted. The turnover of the land market in the second phase has been the result of the migrants. In the third phase, the migrants were no longer the dominant actors, the natives were involved in more transactions excluding 1995 which was the period of entry of the fourth migrant.(see for details, table in chapter II).

TABLE 3.5: AGCREGATE STATISTICS MEAN, COEFFICIENT OF VARIATION- OF PRICE AND AREA TRANSACTION IN THE THREE PHASE(1978-95)

(land : acres, price : 000/acres)

FIRST PHASE(1978-83)	
Average Price per Acre (Rs 000)	2.57(2.84)
Coefficient of Variation of Price	0.66
Average Quantity/Transaction	1.77
Coefficient of Variation of Quantity	0.56
Number of Transactions	7
SECOND PHASE(1984-89)	
Average Price per Acre (Rs 000)	7.23(4.81)
Coefficient of Variation of Price	0.79
Average Quantity/Transaction	5.03
Coefficient of Variation of Quantity	0.55
Number of Transactions	47
THIRD PHASE(1990-95)	
Average Price per Acre(Rs 000)	16.06(6.37)
Coefficient of Variation of Pnce	0.53
Average Quantity/Transaction	2.79
Coefficient of Variation of Quantity	1.39
Number of Transactions	44

Source-Field Study.

Figures in brackets are real land prices, deflated by wholesale price index number with base year as 1981.

Analysis of Real prices : Regression Analysis

Here, an attempt is made to study the differences in the two phases. First, to study whether Real Prices are different in the two phases or not and whether Migrant-native character influences the real prices or not. The migrant-native character have significant influences in the second phase but not in the third phase, where the t-value is low. The second feature is that the migrants pay a higher real pnce compared to natives. In the II phase migrants were significant players giving a higher price for land, while in III phase, the migrants did not pay a significant higher price for land. The second result from the table 3.6 is that the quality of land is a very important variable explaining variability in

Real price of land, in both phases Wet lands have a consistently higher price of land than dry lands.

TABLE3.6 : VARIABLES INFLUENCING REAL PRICES(1978-95): REGRESSION ANALYSIS (PRICE: 000/ACRES)

Phases	Constant	MG-NT*	Quality of Land**	R^2
II Phase	**12.69**	-0.48	-9.21	0.95
	(39.47)	(2.15)	(30.75)	
HI Phase	9.72	-1.04	-6.63	0.64
	(11.79)	(1.26)	(8.60)	
A1J *Phases*	10.15	-0.715	-6.84	0.74
	(21.15)	(1.69)	**(15.82)**	

Figures in brackets are t values
• value one if native and zero for migrant,
•*value one if wet lands and zero if dry lands.

At a second level we would like to study whether, migrants influence the land transacted.

Analysis of land transacted: Regression Analysis

In case of land transaction, migrant-native character has a significant impact on land transacted in II phase and also in the III phase. In the second as well as the third phase migrant purchase more land (though this relation is not significant in III phase). While in case of quality of land exchanged in the market, one can see that the more dry lands were exchanged than the wet lands in the two phase (even though this relation is not statistically significant in the III phase). The R^2 has a low value in these relations(table 3.7).

TABLE 3.7 : VARIABLES INFLUENCING QUANTUM OF SALES (1978-95) : REGRESSION ANALYSIS(LAND : ACRES)

Phases	Constant	MG-NT*	Quality of Land**	$\bar{R}^2$
II Phase	4.32 (3.00)	-2.27 (3.00)	2.08 (2.07)	0.23
III Phase	3.25 (3.08)	-1.90 (192)	0.72 (0.73)	0.08
AU Phases	3.60 (5.10)	-2.00 (3.21)	1.79 (2.81)	0.23

Figures in brackets are t values
* value one if native and zero for migrant,
**value one if wet lands and zero if dry lands.

CASTEWISE DIFFERENCE IN THE THIRD PHASE:

For the sake of simplicity the different caste groups are classified into three groups. The first caste groups are the dalits (Caste I = S.C), the second group are the non-cultivating caste groups (Caste II = Brahmins and Vaishyas) and the third are the cultivating caste groups (Caste III =Kammas, Balijas). The table above shows that the maximum number of transactions were made by Caste III to caste II. The price paid for wet lands was more than the price paid for the dry lands In Addition, the transaction in the same caste group have a price are lower(table 3.8).

TABLE 3.8 : PRICE DIFFERENCE PAID/RECEIVED BY DIFFERENT CASTE
(price : `000/acres)

Buyer Caste Seller Caste	Caste I wet dry	Caste II wet dry	Caste III wet dry
Caste I	20.0 6.45 (1) (2)	31.0 (1) —	17.5 8.0 (2) (J)
Caste II	~- ----	13.3 --- (1)	30.0 4.0 (1) (2)
Caste III	24.0 8.5 (1) (1)	26.46 10.1 (13) (7)	19.6 7.5 (2) (5)

Source: Field Work
Caste I =S.C, Caste II =Brahmin and Vaishya, Caste III =Kamma, Balijas.
figure in brackets are number of transactions.

For a detailed analysis of the contracts on land, a questionnaire was canvassed to get information of contracts on land for the period 1990 to 1995 i.e., the third period The village witnessed 44 contracts involving an area of 94.25 acres (6 22% of the total land). To do the above said, data was collected on a detailed level on the permanent transaction for 5 years in the 3rd phase i.e., 1990-1995 A separate schedule was canvassed for all the households involved in the market i.e., seller as well as buyers The information collected included details of household resource endowment (land owned), terms of contracts (land transacted, price), and qualitative information on characteristics of the peasants like migrant-native, caste, occupation of seller, and land use pattern before the transaction.

3.3 Characteristics of Agents and Contracts:

In this section an attempt is made to study the nature and the structure of permanent transaction market An emphasis is made to see the influence on price/acres and land transaction.

1. The land owned by sellers in the market:

The table 3.9 provides data on the land owned by the seller. There are 44 transactions in the market and the land transacted is 94.50 acres. The lowest number of transactions were by sellers of marginal farmers category and the highest number of transaction were by medium level farmers. In terms of land transacted there is an increasing trend with the marginal farmers having the least land transacted (9.00 acres) and the large farmers selling the maximum land in the market This provides a trend where large land owners were the main sellers in the market. This trend has the potential for decrease in the concentration The average land owned by the seller is 5.84 acres. Nearly all the size groups of farmers were selling land in the market and this village did not show any tendency of marginal farmer selling their land.

TABLE3.9 : MEAN ANDS.D OF LAND OWNED BY SELLERS DURING 1990-95 (land acres)

	Number	Land Exchanged
Marginal Fanner	**8**	9.00
Small Farmers	**10**	17.00
Medium Farmers	**15**	24.50
Large Farmers	**11**	44.00
Entire Population	44	94.50

Source: Field Work

2. Land owned by buyers in the market:-

Table 3.10 provides data on the nature of buyer in the market. Here an attempt is made to study the resource position of the buyer of land Here, the landless labour household have 3 transactions but have purchased 23.00 acres of land. A migrant who had come to this village and purchased 20 acres of land was classified as an individual without land in this village In terms of number of transactions, and area transacted, the small farmers have the maximum land transacted followed by the medium farmers The main purchaser of land were small and medium farmers The table 3.9 and 3.10 show that size-wise the main sellers of land were medium and large farmers while the main buyers in the market are small and medium farmers.

In the village small farmers were the agents who had the largest transaction The medium, small and marginal farmers formed the near total of transacted in the village. This village did not show any tendency towards large farmers buying land but showed a tendency where the middle peasant groups were the active participants in the market.

TABLE 3.10: LAND OWNED **BY BUYERSIZEWISE DURING 1990-95** (land : acres)

	Number	Land Exchanged
Landless Labour	**3**	23.00
Marginal Farmer	**10**	15.00
Small Farmers	**15**	24.00
Medium Farmers	**11**	23.50
Large Farmers	**5**	9.00
Entire Population	44	94.50

Source: Field Work

3. Land transacted and occupation of sellers:

Were the agriculturists or non-agriculturists the main seller of land in the village? Households in the village are classified in three groups in terms of occupation of sellers. Firstly, whose occupation is agriculture, second whose main occupation is business and who also own land, while the third group is for individuals who are teachers in schools and also own lands. The later two occupations are classified as non-agriculture as their income is greater in non-agriculture than in agriculture The table 3.11 gives data on the land sold by occupation of seller. In case of 28 transactions out of 44 transactions the seller was a non-agriculturist, while the average area transacted was 2.57 acres Whereas the average land transacted by agriculturist was 1.42 acres in 16 transactions. This table shows that non-agriculturist were the dominant sellers in the market. This would have a tendency, where rentier income would decrease for the village. The non-agriculturists sold larger quantity of land, while the agriculturist sold less average land than the non-agriculturist. The average quantity sold by non-agriculturist also had a larger variability than the agriculturist. The number of transactions were also larger among non-agriculturist. (The non-agriculturists have only two transactions as buyers.)

TABLE 3.11 : LAND TRANSACTED CLASSIFIED **BY** OCCUPATION OF SELLER **DURING 1990-95.** (land acres)

	Mean	**S.D**	**Number**	**Total Exchanged**
Non-Agriculturist	2.15	2.99	**28**	72
For Agriculturist	**1.42**	0.73	16	22

Source: Field Work

4. Occupation of Seller and Migrant-Native Character of Buyer:

In case of land transactions the occupation of seller had an important role. Here, an attempt is made to study the relation of sellers occupation and migrant-native status of buyer. The dominant buyer of land from non-agriculturists were migrants. The number of transactions to migrants and natives were the same from non-agriculturists but the quantum of land transaction was very high in case of migrants. The agriculturist as a seller had very few transactions with migrant and the average land transaction was nearly

the same for both. The table 3.12 provides data on one character of seller i e ,,. occupation of seller and migrant-native character of buyer In case of non-agriculturist seller, the natives had more number of transactions but the migrant was the main purchaser of land This would imply that migrants purchase more extent of land when compared with the natives. In case of agriculturist as sellers, the migrants had few transactions with a low quantum of land, while the natives had larger number of transactions with a very low mean per transaction. So one sees that larger extent of land was sold by non-agriculturist seller, smaller extend of land by agriculturist. Migrants as sellers of land one see only two transactions.

TABLE 3.12: LAND TRANSACTION BY OCCUPATION OF SELLER AND MIGRANT-NATIVE STATUS OF BUYER DURING1990-95. (land acres)

Variable	Number	Land Exchanged
OCCUPATION OF SELLER (non-agriculture)	**28**	72.50
buyer *migrant*	**11**	45.50
buyer native	**17**	27.00
OCCUPATION OF SELLER (agriculture)	**16**	22.00
buyer migrant	3	5.00
buyer native	**13**	17.00

Source: Field Work

5. Land Transacted and change **in** Crop **Cultivated:**

Here an attempt is made to study the nature of crop before and after transaction. If the fanners are changing the crop cultivated after transaction the land transacted is high while if the farmers are cultivating the same crop the land transacted is low as well as a higher standard deviation. A change in crop, in a new command region is a proxy for conversion of land in the village.

TABLE 3.13 : LAND TRANSACTION AND LAND USE PATTERN DURING 1990-95 (land : acres)

Variable	Number	Land exchanged
Different Crop after Transaction	18	53.50
Same Crop after Transaction	26	41.00

Source: Field Work

3.4 VARIABILITY IN PRICE

There are two methods to study distress sales. One of the methods to study distress sale is to study the reason for the sale of land While the second method to study is to see if there exists variability in the mean price paid or received by different size group of buyers. Rao(1972) in his study of land transfers in ryotwari regions studies to see if the mean price is variable across size groups. As a seller the mean price of land transaction is the highest for the small farmer followed by the medium farmer while the marginal farmer gets the least mean price. An explanation of the above feature could be in terms of two features in the market, one is the quality of land in the market, and the second could be a result of characteristic of agents in the market. These features are analysed in this section.

1. Is the mean price different for the seller as the size of land owned by the seller increases.

The table 3.14 provides data on the mean price received by agents in the different size groups. The result shows that marginal farmers received the lowest mean price, while the small farmers received the maximum mean price. The mean price-difference between small and medium farmers was negligible. While in Rao's(1972) study, the small farmer did not receive a "noticeably low price" for land. (small farmer for Rao (1972) is individual who owns upto 5 acres).

TABLE 3.14 :MEAN PRICE/ACRE AND SIZEWISE DISTRIBUTION OF LAND OWNED BY SELLER DURING 1990-95. (price : 000/acres)

	Mean	S.D	Number
Marginal Fanner	9.08	5.45	8
Small Farmers	20.71	7.19	10
Medium Farmers	19.47	10.22	15
Large Farmers	13.17	7.14	11
Entire Population	16.29	9.04	44

Source: Field Work

2. Is the mean price paid different for small and large farmers as buyers:

The mean price paid by the buyer had a tendency to decline from the landless labour to the small farmers and then increase for the medium and large farmers While the standard deviation is the highest for the landless labour. The standard deviation also increases from marginal farmer to medium farmers but fall for large farmers The interesting feature is the increase in the mean price/acre for large fanners.

TABLE 3.15 : MEAN **PRICE/ACRE** AND LAND OWNED BY **BUYER(SIZEWISE)** DURING **1990-95** (price : `000/acres)

	Mean	S.D	Number
Landless Labour	16.33	11.84	3
Marginal Farmers	15 03	7.60	10
Small Farmers	13.74	9.30	15
Medium Farmers	19.51	9.60	11
Large Farmers	19.35	8.75	5
Entire Population	16.29	9.04	44

Source: Field Work

Another way of looking at the two tables is to see the mean price received and paid by different size groups. Rao(1972) did not find any marked differences in mean prices by the different groups, excluding the case of medium owners (5-15 acres for Rao (1972) which he feels is difficult to explain But results show that large land owners as buyers pay a very high price as compared to the price they receive as seller. The medium farmers showed a consistency equality in mean price as sellers and as buyers. The small

farmers look to be paying a lower price as buyers while they receive a higher price as sellers, who look to be gaining as a class in the transaction. While in case of sellers, the marginal farmers got a very low mean price as sellers but had to pay a higher mean price as buyers.

Here an attempt is made to see if the variability in mean price can be explained in terms of occupation of seller, migrant-native status and pattern of use of land(which is taken as a proxy for productively). The table 3.16, provides results on the differences in mean price charged for migrant-native in terms of occupation An interesting result seen is that the agriculturists of a lower mean price as compared to non-agriculturist. These specific results are explained in the following table.

3. Is the mean price different for migrant and native:

In case of mean price/acres the migrants pay a lower mean price than the natives for land bought from non-agriculturist, and in case of agriculturist the price was the same. The migrant buys large land from non-agriculturist but paid a lower mean price but with a larger S.D of price or the variability in the price vector was larger for migrant as compared to the native. The difference in mean price between agriculturist and non-agriculturist is interesting (table 3.16).

TABLE **3.16:** MEAN **PRICE/ACRE** AND OCCUPATION OF SELLER **AND MIGRANT-NATIVE** STATUS AS BUYERS **DURING1990-95 . (price : `000/acres)**

Variable	Mean	S.D	Number of Exchanges
OCCUPATION OF SELLER	17.84	9.22	28
(non-agriculture)	15.46	10.41	11
buyer migrant	19.37	8.33	17
buyer native			
OCCUPATION OF SELLER	13.58	8.30	16
(agriculture)	13.33	14.43	3
buyer migrant	13.63	7.81	13
buyer native			

Source: Field Work

The following table 3.17, provides details about the mean price paid by the migrants and natives in the different size groups The natives paid a higher mean price compared to the migrants in all the size groups but interestingly the S.D of price paid by the migrants had a larger variability when compared to the native.. This could be the result of the nature of crop cultivated by the two agents.

TABLE : 3.17 MEAN AND S.D FOR PRICE PER TRANSACTION, LAND OWNED (BUYER) AND MIGRANT NATIVE STATUS DURING 1990-95. (PRICE : OOP/ACRES)

Variable	Mean	S.D	Number of Exchanges
FOR LAND LESS LABOUR	16.33	11.84	3
migrant	10.00	0.00	1
native	19.50	14.84	2
FOR MARGINAL FARMERS	1503	7.60	10
native	15.03	7.60	10
migrant			
FOR SMALL FARMERS	13.74	9.30	15
migrant	12.96	12.14	6
native	14.25	7.65	9
FOR MEDIUM FARMERS	19.51	9.00	11
migrant	17.47	10.65	7
native	23.08	7.33	4
FOR LARGE FARMERS	19.35	8.75	5
native	19 35	8.75	5
migrant			
For Entire Population	16.29	9.04	44

Source: Field Work

The table 3.18 shows that the natives pay a higher mean price Here we see that the natives dominantly cultivated the same crop after transaction but the migrants had a preference for different crop. So the migrants purchase land (dominantly dryland) and convert it to wet lands, while the natives cultivate the same crop after transaction.

TABLE 3.18: MEAN **PRICE/ACRE** AND CROP CULTIVATED AND MIGRANT-NATIVE STATUS **OF BUYER DURING 1990-95** (price : 000 acres)

Variable	Mean	S.D	**Number of Exchanges**
Different Crop Cultivated migrant native	7.03 6.51 7.45	1.95 2.28 1.65	18 8 10
Same Crop Cultivated migrant native	22.70 26.33 21.60	5.80 5.08 5.67	26 6 20
For Entire Population	16.29	9.04	44

Source: Field Work

DISTRESS SALES:-

The literature on land transaction identifies distress condition of seller as an important reason for sale. Hence, an attempt is made to identify the number and nature of distress transactions. The method followed is to identify distress transactions in terms of "low" real price of land per acre

Distress Price:- A price is defined as distress price if the price is 25% below the *mean* real price *of land.*

To identify distress sales, the real price of land was estimated from the nominal price using W.P.I 1980-81 as a deflator. The real price of land was taken as the dependent variable and quality of land(a dummy variable with value one for wet lands and zero for dry lands) was taken as an independent variable. From the estimated equation the average real price of land for wet and dry lands were calculated. Given the definition of distress price as price below 25 % of mean price, the distress price for wet and dry lands were calculated. Given the prices the exchanges where price is below the distress sale was identified

After identifying the number of transaction under distress, we identify the recourse position **and** nature of seller and buyer.

Distress exchanges in the villages

PHASE - II a. Distress Price - Dry land - 2.31 thousand rupees per acre Wet land - 7 26 thousand rupees per acre. b. Number of transaction for Dry - 4 for Wet - 1
PHASE - HI **a** Distress Price - Dry land - 2 61 thousand rupees per acre Wet land - 9.51 thousand rupees per acre. b. Number of transaction for Dry - 5 for Wet - 2

At a theoretical level , a distress sale is defined as small and marginal farmers selling **land.** In the III phase, out of the seven transactions 3 transaction were by marginal and small farmers, while four of the transactions were by medium and large farmers At the second level, the medium and large farmers were non-cultivators, and absentee landlords. Some interesting feature of agents in exchange are,

1. all the buyer in phase II and III were natives not migrants So one does not have any evidence to show that migrants induce distress sale but maybe the opposite is true as the migrants generally pay higher price.

II) The buyers of these lands are medium and small farmers

HI) Caste wise the sellers were S.C and the buyers were Kammas.

IV) The land exchanged was below 1 acre in all exchanges.

V) The reason for sale was that the non-agriculturists were in need of cash for business in town or a marriage.

So one can say that the exchanges in the village, which look as distress sales are *adjustment* mechanisms by households *to* smoothen cash needs.

Rao(1972)studies the correlation coefficient between price and quantum of land transacted, and gets a negative coefficient He says that "The assumption made earlier regarding the factors leading to sales of land by cultivators, would imply a pnce inelastic supply curve(i.e., supply in the market defined by other factors than price) shifting from year to year in response to circumstances causing sale of land Given such a supply curve, the negative correlation would be consistent with the proposition that the demand for land tends to be stable and, more importantly, normal i.e., the quantity demanded varies inversely with price."[Rao(1972): p-A144] The following table also shows a negative correlation between price/acres and quantity demanded. In chapter VII an attempt is made to study the nature of demand and supply function in the village. The following table also shows a negative correlation coefficient between price/acres and land owned by seller while a positive coefficient for land owned by buyer.

TABLE 3.19: CORRELATION COEFFICIENT BETWEEN PRICE PER ACRE(IN THOUSAND RUPEES) DURING 1990-95

Variables	**Land Exchanged**	Land Owned (seller)	Land owned (buyer)
price/acre	-0.131	-0.073	+0.237

On the demand side the migrant had an important influence. If one moves to the seller side, the occupation of the seller had a significant influence. The land owned by the seller was 3.0625 in case of the occupation being agriculture while it was 7.4286 in case of non-agriculture. This shows that non-agriculturist was the main actor as seller in the market and the size of land holding was higher for non-agriculturist as compared to agriculturist. In other words, large non-agriculturist and small agriculturist are the main agents in the sellers market.

The most significant influences on the permanent transaction market was the land use pattern before transaction. In this period, only 7.03 acres of land were transacted for paddy land, while the majority of the dry land or land not under paddy were involved in exchange (22.70 acres). This difference in mean has a very high t value of 10.99.

The cross-tabulation of variables show some interesting observations The natives preferred paddy land to the rest of the land (a ratio of 0.66) while the migrants preferred other land to paddy land (a ratio of (0.57). In terms of occupation of seller, the dominant seller of land to the migrant were the non-agriculturists while the agriculturists sold to the natives i.e., internal circulation for the natives. The non-agriculturists sold more paddy land as compared to non-paddy land, while the agriculturists maintained a stable ratio

3.6 Regression Analysis:

The following are the studies which explain the variation in land sales and land prices. Shergill(1982) attempts to explain the variation in land sales and land prices from 1952-53 to 1978-79. His analysis is a trend analysis to study the changes in prices of land sold over the period time. Patterson(1986)attempts to develop a cross-sectional land quality index to exclude the influence of non-agricultural uses on land prices. He uses the model to explain variation in land prices in four years for USA's economy. He maintains that population density explains two-thirds of variations in land prices. Reckow(1993) studies the relation of land prices and rent to technological change for a period of 30 years. He maintains that technological change has a positive impact on price and rent. He says, 70% of change is due to capitalization of rent and prices and expected capital gains drive up the price. All the above studies are long term and large sample studies, while this study is conducted to analyse short term determinants of price and quantity transacted in the villages. The emphasis of the study is to see the variables influencing the price and land transaction in the market and to see if migration does influence the market.

Table 3.20, contains detailed description of means and standard deviations of variables used in this analysis. The mean value of land transacted is 2.15 acres with a standard deviation of 2.99. The mean value of price per acre (in thousand rupees) is 16.32 and a standard deviation of 8.79. The third variable being studied is the character

of the seller i.e., migrant-native status. This is specified as a Dummy Variable where value of one implies the peasant is a native The mean value of this Dummy is 0.95 implying a dominance of natives in the number of transactions. There was one migrant seller in this period who sold the land and left to another place (Step-migration) The mean size of land owned by seller is 5.84 acres Correspondingly the mean size of land owned by the buyer is 4.44. The larger owners are selling to smaller land owners. The buyer can be a migrant or a native. This variable has been specified as a dummy, where it takes value of one for natives and zero for migrants. The mean value of this dummy is 0.68 implying the native plays a dominant role A qualitative variable introduced was the land use pattern before transaction. This dummy variables takes value of one if the land was under paddy before the transaction, if not it takes value one.

TABLE 3.20 DESCRIPTION, MEAN AND STANDARD DEVIATION OF VARIABLES IN PERMANENT TRANSACTION MARKET DURING 990-95 (land : acres, price : 000/acres)

Description of Variable	Mean	S.D
(Y_1) Land Transacted(in acres)	2.15	2.99
(Y2) Price per Acre	16.32	8.79
(X1) MG-NT Status of Seller[D] 1 = if native 0 = otherwise	0.95	0.21
(X2) Occupation of Seller[Dl 1 = if occupation agriculture 0 = otherwise	0.37	0.21
(X3) Land owned by Seller(in acres)	5.84	3.56
(X4)Land use before Transaction [D] 1 = if same crop 0 = otherwise	0.59	0.49
(X5) MG-NT status of Buyer[D]	0.68	0.47
(X6) Land Owned by Buyer	4.43	3.12

Source-Field Work
[D] stands for dummy

The regression equation estimated is a simple linear regression(the regression is estimated using SPSS package).

$Y_i = F [X_j]$ where i = 1,2

j = 1 to 7

Variables Influencing the Quantum of Land Transacted

There are three variables that are influencing the land transacted in the market (table 3.21)

a) Migrant-Native Character of Buver(X5):

The migrant-native character of buyer has a significant influence on the quantum of land transacted. According to the coefficients the migrants buy a larger extent of land as compared to the natives. The coefficient for the migrants is 12.88 while for the natives it is 1.27. The t-value for the difference is 6.679.

b) Land Owned by Buyer(X6):

This is a quantitative term significantly influencing the land transacted. This interestingly has a negative coefficient i.e., as the size of land holding by the buyer increases, the land bought decreases or the main purchaser of land are not large land owners. This result is also significant at t-value of 6.14.

c) The interactive term of land owned and migrant nature of buyer(X8):

This defines the interactive term of land owned by the buyer and the migrant native status. This coefficient implies that migrant as the land owned by the migrant increases the land purchased also increases which is indicated as the coefficient is positive and significant at t-value of 6.01.

The variables that don't influence the land transacted are the price of land, land owned by the seller, occupation of the seller and the land use pattern.

Variables Influencing Price of Land

a) Occupation of Seller(X2):

This is a Dummy, where the variables takes a value of zero if the occupation is agriculture and one if the occupation is non-agriculture This coefficient has a negative value implying that if the seller is a non-agriculturist he gets a higher price when compared to an agriculturist who gets a lower price The non-agriculturist gets a price of Rs.11,151.60 while the agriculturist gets a price of Rs.7,300.21 per acre. This relation is significant with a t value of 2.133.

b) Land use Pattern Before Transaction(X4):

This is also a Dummy, where the variables takes a value 0 if the crop before transaction is not paddy and 1 if the crop is paddy. This variable has a highly significant influence on the price of land. This dummy is significant at t value of 10.586.

c) Land Owned by Seller(X6):

This is a quantitative variable influencing the price of land This coefficient has a negative sign implying that as the land owned by seller increases the price decreases But this result is significant at a low t value of 12% level of significance.

The variables that don't influence the price of land are land transaction, land owned by buyer and the migrant native status of buyer The result is significant at a R^2 value of 0.53 and an adjusted R^2 value of 0.50(Table 3.22).

Analysis of Results

From the Buyer side the migrant- native status has a significant influence on the land transacted i.e., the migrants were buying larger pieces of land as compared to the natives. But the migrants did not pay a higher price for the land that was bought.

This lead to a second issue of lack of difference in mean price paid by the two agents. If the migrants were paying a higher price why do the native sell to them (except if we assume distress sale condition for seller and lack of purchasing power with natives). The reason is in terms of the nature of the seller and the land use before transaction The migrants, as has been discussed earlier, had a preference for the non-paddy crop land while the natives had a preference to paddy crop land. The second reason could be that the non-agriculturist want to sell away their dry lands which the migrants prefer.

The regression results bring out some very interesting features of the permanent transaction market The price of land is influenced predominantly by the supply-side i.e., the seller, while the quantum of land is influenced by the demand-side factors i.e., the buyer characters. But two results from the regression analysis are

a) As land owned by buyer increases, the quantity purchased decreases,
b) As land owned by seller increases the price falls.

In this village, there was a marginal increase in the concentration on land. An attempt was made to study the process behind this increase in concentration. One of the important seller's were whose occupation was non-agriculture This had come in the analysis of sellers but was not substantiated by the regression results. This shows that non-agriculturist who would have leased out land have sold land. In this village, transfers of and are to agents who are adjusting their resource. In case of price variability, one can see that variability can be explained by occupation of seller, land use pattern and land owned by seller. In this case also one sees that the quantity transacted in the market was influenced by the migrants who take larger quantity while price paid was not influenced by the migrants i.e., the migrants did pay a higher price then the natives for a piece of land. In addition, the quantum of land transacted was influenced by supply side factors which might imply, like the study of Rao(1972) that fixed amount of land enter the market and is not influenced by demand side factors.

3.6 CONCLUSION:

A study of permanent transaction in command area shows a different picture compared to the general hypothesis of low transaction in the permanent market The potential that an area can be in the command area or a new command area has lead to an increase in the number of transactions in the market in the first phase, followed by a second phase of low transacted in the land market.

I) In the village, Annasamudram, there is a tendency for marginal increase in the land concentration ratio of land. A study of land concentration ratio for migrants and natives shows that, migrants have an increase in land concentration ratio while the natives witnessed a marginal increase in land concentration In case of migrants, the increase in concentration is a result of entry of medium size holders.

II) The land distribution at the two points in the village, has a tendency for generating "middle peasant " economy in the village with a tendency for land transfer from non-agriculturist to agriculturist

III) Three phases were identified in the post canal irrigated period. The first phase of low turnover in the market, the second phase of high turnover with migrants playing a dominant role. While the third phase natives also were competing player in the market. A study of real prices of land and land transacted in the later two phases showed that migrants had influenced real price as well as quantity in the second phase While in the third phase migrants influenced only the quantity of land. In other words the real price paid by migrants was higher in second phase but not in third phase, while quantity purchased was higher by migrant in both phases.

IV) A study of variability in price was conducted to study "distress sales" and to see the factors influencing real prices. This village did not witness distress sales in the sense defined in the literature All households selling land were adjustment processes of households for liquid cash need At another level, the real price of land was dominantly influenced by quality of land.

V) The structure of the market, is one when large and medium land owners are

sellers while smaller land owners are buyers In terms of occupation, the main seller are non-agriculturist.

VI) The regression results for land transacted show that land owned by buyer has a significant influence on it, while land owned by seller influences price A second result is that the buyer's characteristics influence the land transacted, while the seller's characteristics influence the price of land

TABLE 3.21 FACTORS EFFECTING QUANTUM OF LAND TRANSACTED DURING 1990-95

REGRESSION RESULTS

Variables	Coefficients
i) Constant	12.68 (7.91)
ii) Migrant-Native Character of Buyer[D] 1= if native 0= otherwise	-11.61 (6.67)
iii) Land Owned by Buyer (in acres)	-2.05 (6.14)
iv) Slope term of Migrant-Native Character of Buyer and Land Owned by Buyer	2.11 (6.01)
R^2 = 0.53, adjusted R^2 = 0.50	

Variables not in equation

Variables	Coefficients
Price per acres (in thousand rupees)	-0.01 (0.01)
land owned by seller (in acres)	-0.01 (0.05)
Occupation of seller(D) 1= occupation is agriculture 0=otherwise	-0.03 (0.33)
Land use(D) 1 = if same crop before & after transaction 0= otherwise	-0.02 (0.19)

(figures in brackets are t values)

[D] dummy

TABLE 3.22 :FACTORS EFFECTING PRICE/ACRE DURING 1990-95 : REGRESSION RESULTS

Variables	Coefficients
i) Constant	11.15 (4.77)
U) Occupation of Seller |D] **1= if Occupation Agriculture** **0= if otherwise**	-3.85 (2.13)
iii) Land use Pattern before Transaction [D] **1= if Paddy is Cultivated** **0= otherwise**	14.99 (10.58)
iv) Land Owned by Seller **(in acres)**	-0.39 (1.61)
R^2 = 0.77 adjusted R^2 = 0.75	

Variables not in equation

Variables	Coefficients
Land Transaction **(in acres)**	0.05 (0.64)
Land Owned by Buyer **(in acres)**	-0.07 (0.96)
Migrant- Native Character(D) **1= native** **0= otherwise**	0.03 (047)

(Figures in brackets are t values)
[D] dummy

CHAPTER-IV

ANALYSIS OF TEMPORARY TRANSFERS: CASE OF ANNASAMUDRAM

4.0 : Introduction

A much debated issue about Indian Agriculture is the Tenancy relations. The debate the tenancy reform visualises land tenancy as an instrument to adjust the differences in the resource endowment among the agents. A production unit with an excess of labour or other non-marketed resource relative to land or other units it possess makes a temporary transfer possible from another unit with an excess of land. This temporary transfer can take a number of forms like fixed rent in kind [FR(K)], fixed rent in cash [FR(C)] and share tenancy [ST]. In the absence of an active land market, the instruments of temporary transfer acquire an added importance.

The temporary transfer market via tenancy, either share-cropping or fixed rent contract, is an institution commonly found in the rural areas of many developing countries. "Attempts to understand the economic role of this institution using simple neo-classical models have proven unsatisfactory". [Skaufias(1995), p:42]. The puzzles of the market are the 'existence' of share-tenancy, the 'Co-existence' of different contractual forms and the nature of lease market. In this chapter an attempt is made to understand the later two issues. C.H.H. Rao(1971) maintained that, "...they(economists) regarded tenurial arrangements as exogenous constraints determined largely by customs and traditions and do not attempt to analyse how and to what extent the prevailing lease arrangements might have been influenced and shaped by economic factors" [p.578].

One important set of models which attempt to explain the Co-existence of different forms of contract as well as to explain the nature of lease market are the resource adjustment models Resource adjustment models are a set of models which specify the lease market as a process of adjustment in the presence of non-marketed resources of the agents

If we assume a world without uncertainty, perfectly competitive markets for inputs and outputs, inputs are divisible and households have identical constant returns to scale production function there would be no need for land tenancy and the only explanation for lease are a function of customs and norms.[Bliss and Stern(1982), Shaufias(1995)].

The resource adjustment models identify resources that are owned by households but market for them are absent or it is a case of missing markets Resources are seen to be essential in the production process. Households are seen to adjust their operational holding of land so as to use the non-marketed resource. The adjustment by the households is done in the lease market. If a household has more of a resource as compared to land, the household would demand land in the lease market, while if a household has less resource as compared to the land they own they would lease out land.

Bliss and Stern(1982) maintained that if managerial ability is the non-marketed resource to which operational holding adjusts, the leasing out of land would serve the purpose of buying-in managerial services. The seller of managerial service would be paying rent on land but would receive income for the managerial service in the sense that the return would be higher that it would be to someone with less or poorer managerial service. Some of the key non-marketed resources identified in the literature are draft animal power [Bliss and Stern(1982), Bell(1977)], Family labour [Pant(1983), Skaufier (1995)], Managerial ability [Reid(1975), Eswaran and Kotwal(1995)} and entrepreneur' under conditions of certainty/uncertainty Rao(1972))

At an empirical level, there exist a few studies which provide some explanation of the co-existence of different forms of contracts. Rao(1971) offers an explanation for Co-existence of different contracts with respect to different crops under conditions of decision making under uncertainty. Under conditions of economic certainty and little role for active decision making is required share cropping as a contract would exist.

While a larger scope for active decision making would lead to the presence of fixed rental contract. "Rice lands are leased out on share basis, where as lands growing sugarcane and chilli were leased out on cash rent basis" [p.587]. He maintained that decision making plays a more important role for the later crops. The second feature specified by Rao(1971) was that "rice is sharecropped by small farmers essentially to augment factor labour and bullocks, where as larger farmers in tobacco zone, lease in area at fixed - cash rent with a view to earning profit". [p.588]. Rao (1971) explains the variety of contracts in terms of different roles for the lessee in terms of decision making and land owned.

Bliss and Stern (1982) in their study of Palanpur maintain that share tenancy is the main form of contract, where supervision and enforcement play a role in defining the contract. They maintain that leasing, in Palanpur, takes the form of share-cropping. Moreover it is significant that the exceptions nearly all take the form of cash tenancy between a village landlord whose time is heavily committed outside the village. The interpretation ...where the landlord cannot afford the time to supervise, say because he has a job outside the village, cash tenancy may be the only feasible alternative even if the tenant to undertake the risk involved means that the cash rent obtainable is only a low one". [Bliss and Stern(1982), p:127]

In the study of dry villages Jodha(1984) also maintained that share-cropping is the dominant form of contract in his study excluding Aurepalle, where fixed rent contracts are dominant. The reason provided by Jodha was that this village has the presence of absentee landlords who leased out on fixed rent contract. In addition, in Jodha the dominant reason for leasing was resource adjustment by households. [Similar results are reported by Fujimoto(1996), Bharadwaj(1974)].

Inspite of the explanations, in the studies refereed to, a widespread opinion is a failure to provide a complete explanation for the coexistence of different forms of

contracts of tenancy [Rao(1972)] , Fujimoto(1996) "... variables which are considered responsible for the determination of tenancy form were in fact not convincing, Share tenancy may have persisted simply because of tradition or other factors which are not taken into consideration" (p: 312)

On the other hand, at the theoretical level, Cheung(1969) postulated that ST has an advantage in terms of risk sharing as compared to other forms of contracts Cheung considers only production risk The optimal trade off in a particular situation would determine the nature of contracts. Both at the empirical level as well as the theoretical level this proposition has not been substantiated. Newbery(1974) has shown that a combination of wage and FR would offer the same risk sharing advantage as ST At an empirical level studies of Pant(1981), C.H.H Rao(1971) and Bardhan(1984) have not substantiated this opinion. Rao(1971) shows that ST is generated under conditions of economic certainity, in other words under conditions where there is less role for decision making, while FR is generated in conditions of economic uncertainity, and little less scope for decision making. Bardhan(1984) maintains that " (I)t is not clear in general if increase in production uncertainty will increase or decrease the percentage of leased area under share-cropping"[Ibid., p : 151].

The only detail model explaining the co-existence of contracts is Eswaran and Kotwal(1985). The explanation on the Co-existence of contracts, "...different contracts reflect different techniques of combining non-marketed productive inputs." [Eswaran and Kotwal(1985)]. They recognise two types of non-marketed resources namely information on production and marketing. A share cropping contract is an arrangement in which both the agents have an incentive to self monitor, while a fixed rent contract, the monitoring of all input quality is undertaken by the tenant - the residual claimant An important variable that explains the "existence" of contracts is supervision/monitoring costs involved in transaction. An non-marketed resource is information, which can be seen as differences in information between agents. "Information is asymmetrically

distributed between the landlord and tenants because only the tenant can know how much effort he or she will provide the landlord cannot know this at sufficiently low cost. "[Biswanger et. al p-18]. The debate on the "existence" of share tenancy is in terms of providing incentive to tenants under asymmetry in information.

They view different forms of contracts as "pooling" of non-marketed resources between different resource endowment households They identify two forms of non-marketed resources, namely, "ability to supervise" and "the managerial ability to make production decisions based on technical knowhow and market information". In addition they view , (R)esident landlords who are not alienated from farming and the rural scene are, therefore, likely to be better suited for the role of overall decision making (i.e.,foreman), [Ibid., p: 355]. Given this type of constraint , they attempt to study the income levels for landlord and tenant under different comparative static conditions. Of their results[16], one important finding is

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1. If a society is polarised into two classes a landlord class alienated from day-to-day farm work and a working-class devoted of managerial ability-share cropping as a contract would prevail.

2. "As market develop, diffusing information and hence eliminating the disparity in managerial abilities between the two classes, share-cropping will give way to fixed rental contracts". [Ibid, p-360].

3. Absentee landlords typically appear to lease out their land under fixed rental contracts (Alston-Higgs, 1982), Bliss and Stern (1982), Chao (1983). "This is consistent with our model, an absentee landlord typically does not provide any information at all apart from land and consequently share-cropping is not viable land owners who are engaged in some activity other then cultivation processes neither supervisory ability nor any advantage over the worker in access to information," [Ibid ,p-360].

4. To explain the heterogeneity of contracts in the same geographic area, the author have introduced, a case of more than two classes and different endowment "(A)bsentee landlord may be found to lease out their land on fixed rental basis to small farmers with some managerial ability but low opportunity income, while large farmers with access to market information might share-crop with marginal farmers having none". [Ibid, p-366].

5."An implication of this result is that geographical areas in which the opportunity income of landlords are relatively higher, ceteris paribus, are likely to exhibit a greater prevalence of fixed

"The assumption of only two classes and a single production function inevitably leads to a single dominant contract"[Ibid., p-364]. The incorporation of heterogeneous rural population with more than two classes or more than one production function or crops leads to co-existence of contracts.

In the context of the above discussion, the rest of the chapter is devoted to a study of lease market in Annasamudrum, focusing on the following issues:

Firstly, to examine the structure of the lease market, and identify the lessor and the lessee Second, to identify the extent to which migrants can be viewed as entrepreneurs who have come into the migrated villages with information on cultivation of a different crop or technology and face uncertainty. These entrepreneurs have an non-marketed resource i.e., information on the cultivation of a crop which the native lack. The study would also examine if the resource endowment, forms of contracts and the performance are different between migrant and native. Thirdly, to study the co-existence of different contracts in the village Fourthly, to study the variation of rent and differences in rent received and paid in different land size groups Fifthly, to study whether differences in information on production process, resource endowment(land), forms of contracts and differences in production decision have an impact on the land leased and the rental.

4.1: The Nature of Temporary Transfer Market in the Village:

The data on the lease market were collected by questionnaire method In the first stage, lease households were identified in the village. All the households taking part in the lease market were provided a separate questionnaire. A separate questionnaire was

rental contracts". [Ibid, P-362].

canvassed for the lessor while another was canvassed for the lessee The information that was collected were details of contracts (period of lease, rent, crop grown, time of payment of rent, nature of contract), on household resource endowment (land owned, quality of land), on value of output, and other qualitative information like migrant-native status, caste, occupation, production for market or self-consumption etc Here contract is taken as the basis for the study of the lease market.

The village has 42 lease contracts. The land involved in the lease market forms 75.5 acres or nearly 5% of the total land cultivated The households entering lease market are exclusively leasing-out land or are leasing-in land.

The village had 12 contracts in which the migrants are the lessee The natives, as a lessee had 30 contracts. Out of the 12 contracts, 9 contracts were of fixed rent in kind category and three were share-cropping contracts. All the contracts of the migrants were for the paddy lands(table 4.1 and 4.2). The fixed rent in cash contracts were for dry crops like chilli and groundnut. The village has a dominance of fixed rent in kind contracts which are 28 out of 42 contracts. The payment of rent was in the end of the production cycle. The periods of lease were different for the crops, paddy had a one year contract while chilli had a three year contract and groundnut had a two-year contract

TABLE 4.1: FORMS OF CONTRACTS AND NUMBER OF CONTRACT BY MIGRANT-NATIVE STATUS OF LESSEE

	FR(K)	FR(C)	ST	TOTAL
Migrant	9	0	3	12
Native	19	5	6	30
Total	28	5	9	42

Source : Field Work

TABLE 4.2: CROPS CROWN AND NUMBER OF CONTRACT BY MIGRANT-NATIVE CHARACTER OF LESSEE

	Paddy	Chillies	Groundnut
Migrant	12	0	0
Native	25	1	4

Source : Field Work

In the study of contracts, FR (cash), FR (kind) and share-tenancy are only examined. The rent free contracts represent cases in which the markets are interlinked and the terms of exchange are not well-defined creating problems of comparison.

4.2 Characteristics of Agents and Nature of Contracts:

The first aspect of study of lease market is the nature of lessor and lessee In other words is the village characterised by small or big lessee and lessor One form of lessor is - a small land owner is the lessor and the second form is a large land owner is the lessor.

i) Who are the lessor and lessee

Both the neo-classical and the Marxian literature take into consideration the nature of lessor, in order to explain the tenurial mode and the rental shares In the literature, the form of tenancy emphasised is, a large landowner leasing to small/landless households. Empirical studies in India suggest both traditional (big lessor and small lessee) and reverse (small lessor and big lessee) in different regions, the later is quite substantial in some parts of north-west, west and south India [Bhalla(1976), Jodha(1981), Nadkarni(1976)]

TABLE 4.3 : SIZEWISE LAND OWNERSHIP AND NUMBER OF CONTRACTS BY LESSOR AND LESSEE

	Lessor	Lessee
Landless Labour	0	11
Marginal Farmers	4	11
Small Farmers	7	12
medium Fanners	20	5
Large Farmers	11	3
Total	[42	42

Source : Field Study

In the table(4.3), the main lessor are the medium and large land owners. There are comparatively few lessor in the small and marginal farmers. In terms of number of contracts the medium farmers have the maximum number of contracts followed by the large farmers. In other words the village has a dominance of medium and large lessor.

In case of lessee, it is observed that a large number of lessees are smaller holders. The second largest number of contracts are by landless labour and marginal fanners. The table 4.3, show that small land owners, marginal and landless farmers are the lessee while large and medium farmers are the lessors.

ii) Significance of leasing out

In the table(4.4) the significance of leasing out, in lessor households is analysed. The significance is seen in terms of proportion of land leased out to land owned by lessor. The following table shows that on an average, households who lease out 75% of the land. This proportion has a tendency to decline as one moves to large land holding In case of large land owners only 45% of the land was leased out An inference drawn is, leasing may not be dominant feature for large land owners These households might have faced other resource constraint in the lease market

TABLE 4.4 : DISTRIBUTION OF HOUSEHOLDS BY PROPORTION OF LAND LEASED OUT(LESSOR) TO LAND OWNED.

	Proportion	S.D	Number
Landless labour	-	-	-
Marginal fanners	1.00	0.00	**4**
Small farmers	0.73	0.34	7
Medium farmers	0.87	0.26	20
Large fanners	0.45	0.37	**11**
Total	0.75	0.35	42

Source : Field Study

iii) Significance of **leasing in**

The significance of leasing in is examined as a proportion of land leased to total land which can be an indicator of importance of leasing to the lessee household. The importance seems to decline with the increase in size of land holding. In case of all size

farm groups of farmers, on an average, the proportion of land leased decreases as the land holding increases. The number of transactions also has a tendency to decline as the size of land holding decreases(table 4.5).

TABLE 4.5: DISTRIBUTION OF HOUSEHOLDS BY PROPORTION OF LAND LEASED OUT(LESSEE) TO LAND OWNED.

	Mean	S.D	Number
Landless Labour	1.15	0.66	1
Marginal Farmers	0.66	0.47	12
Small Fanners	0.21	0.09	5
Medium Farmers	0.15	0.08	3
Large Farmers	0	0	0
Total	0.71	061	42

Source : Field Study

The Table 4.6 shows the number of contracts made by the land owned lessor and lessee side wise. The table does not show a trend towards either large land owner leasing out to small tenants or small tenants leasing to large land owners. This village had a combination of traditional form as well as reverse tenancy.

TABLE 4.6: DISTRIBUTION OF HOUSEHOLDS BY NUMBER OF CONTRACT BETWEEN DIFFERENT SIZE GROUPS OF LESSOR AND LESSEE

Sizewise Land Distribution of Lessor					
	MF	SM	**MD**	LF	**TOTAL**
Landless Labour(LL)	1	3	5	2	11
Marginal Farmers(MF)	1	2	7	1	11
Small Farmers(SM)	0	1	6	5	12
Medium Farmers(MD)	1	1	2	1	5
Large Farmers(LF)	I	0	0	2	3
Total	4	7	20	11	42

Source : Field Study

iv) Nature of occupation of lessor

The literature identifies occupation of lessor as an influencing factor on the lease arrangement. The occupation is defined in terms of agriculture and non-agriculture. An

agriculturist leases as a process of adjustment of resource while non-agriculturist leases as they have another occupation Here, the nature of occupation of lessor is studied The emphasis is to see who are the main lessors in the market In this village 31 contracts were by non-agriculturists while only 11 contracts were by agriculturists as lessor(table 4.7). The mean land leased out by agriculturist was 1.66 acres while for agriculturist it was 1.93 acres. The rent paid was nearly the same for the two sets of agents. The land owned by agriculturists was greater than the non-agriculturists who were leasing out land In other words non-agriculturists, large land owners were main lessor. The output produced by non-agriculturists was also marginally greater than agriculturists.

TABLE 4.7: DIFFERENCES BETWEEN NON-AGRICULTURIST AND AGRICULTURIST LESSORS IN RESOURCE POSITION AND PERFORMANCE BY LESSEE ON THE FARM

Occupation of Seller		
	Non agri#	**Agri$**
Number of Cases	31	11
Mean value of Land Leased(acres)	1 66	1.93
Mean Value of Rent(thousand rupees/acres)	2.53	2.57
Mean Value of Land Owned Lessee(acres)	3.39	1.72
Mean Value of Land Owned Lessor(acres)	6.69	668
Mean Value of Output(thousand rupees/acres)	11.25	10.93

#refers to non-agriculture,$refers to agriculture
Source : Field Study

v) **Different between migrant/native** lessee:

Are there differences in resource position and in performance between migrant and native. The number of contracts to the migrants were 12 while the number while contracts to natives were 30 The land leased in by the migrants were more than the land leased in by natives, while the rent paid was also greater by the migrants as compared to the native.(table 4.8). The migrants as lessee, owns more land as compared to the native, while agents leasing out land to the migrants owned less land as compared to those leasing to natives The output produced by migrants was more as compared to the natives.

TABLE 4.8: DIFFERENCES BETWEEN MIGRANT-NATIVE(LESSEE) IN RESOURCE AND PERFORMANCE

Migrant Native status of Lessee		
	Migrant	**Native**
Number of Cases	12	30
Mean Value of Land Leased(acres)	2.06	1 60
Mean Value of Ren t(thousand rupees/acres)	*3.00*	2.31
Mean Value of Land Owned Lessee(acres)	3.33	3 11
Mean Value of Land Owned Lessor(acres)	,5.86	691
Mean Value of Output(thousand rupees/acres)	11.97	10.86

Source : Field Study

In the table 4.9, number of contracts made to migrants and natives from agriculturist and non-agriculturist is analysed. The migrant had a dominance of contracts from non-agriculturists which were 10 while only two contracts were from agriculturists. While in case of native, the non-agriculturists had the maximum number of contracts numbering 21 while only 9 were from agriculturists.

TABLE 4.9: DISTRIBUTION OF NUMBER OF CONTRACT OCCUPATION OF LESSOR AND MIGRANT/NATIVE LESSEE STATUS

Occupation of Seller			
	Non Agri#	**Agri$**	**Total**
Migrant	**10**	**2**	12
Native	**21**	**9**	30
Total	31	**11**	42

refers to non-agriculture. $refers to agriculture.
Source : Field Study

The table 4.10 attempts to explain sizewise land distribution of migrant/native status and occupation of seller. The migrants had 12 contracts, 7 were from medium level farmers, whose occupation was non-agriculture while 1 contract was from marginal farmer and 1 from large farmer. In case of natives who leased land, non-agriculturists in the size group of medium and large farmers were the main lessor, while in case of agriculturists the small and medium farmers were the main lessor.

TABLE 4.10: SIZEWISE DISTRIBUTION OF NUMBER OF CONTRACT BY MIGRANT-NATIVE CHARACTER OF LESSEE AND OCCUPATION OF LESSOR

	MIGRANT		NATIVE	
	non-agri	agri	non-agri	agri
Marginal Fanners	0	1	3	0
Small Farmers	2	0	2	3
Medium Fanners	7	0	8	5
Large Farmers	1	1	8	1

* occupation of lessor where agri stands for agriculture and non-agriculture.
source : Field Study

On the one hand, the migrants were producing a higher output as well as paying a high rent. On the other hand the migrants had a higher proportion of contracts from non-agriculturists.

v) Difference in motive of production

The literature recognises two types of lessees The first set of agents, lease land to meet their subsistence, while the second lease to produces for the market.[C.H.H Rao(1972), Eswaran and Kotwal(1995)]. It would be interesting to study lessee in terms of motive of production, whether they lessee for the market or for consumption

The table 4.11 classifies households in terms of motive for production. There arc 19 households who leased land for self consumption and 23 households who leased land for market. The mean size of land leased by agents leasing for market was 1.81 acres, while that of the natives it was 1.67 acres. The rent paid by agents producing for market was marginally higher than for households producing for self consumption. The land owned by agents producing for market was very high as compared to agents producing for consumption. While the mean size of land owned by lessor was nearly the same for both sets of agents. But the interesting feature is that the output produced by agents for consumption was greater than that of the agents producing for the market This could be the result of the agents producing for consumption intensively using of various inputs.

TABLE 4.11: DIFFERENCES IN RESOURCE POSITION AND PERFORMANCE IN TERMS OF

MOTIVE FOR PRODUCTION

Motive for production		
	Market	**Self** Consumption
Number of cases	19	23
Mean Value of Land Leased(acres)	1 81	1.67
Mean Value of Rent(thousand rupees/acres)	2.560	2 46
Mean Value of Land Owned Lessee(acres)	5.31	1.41
Mean Value of Land Owned Lessor(acres)	6.39	6.80
Mean Value of Output(thousand rupees/acres)	**11.25**	10.93

source : Field Study

In table 4.12, an attempt is made to see if there exists a relation between migrant/native status and motive for production of leasing in agents The migrants have 8 contracts where, the motive for production was for market and 4 contracts where the motive was for consumption While the native had 19 contracts where the motive was for consumption and 11 contracts where the motive was for market In other words, in case of leased households migrants had a higher proportion of agents who produce for the market while the natives had a higher proportion of agents producing for consumption.

TABLE 4.12: NUMBER OF CONTRACTS BY MIGRANT/NATIVE STATUS AND MOTIVE FOR PRODUCTION

PRODUCTION DECISION FOR			
	Market	**Self** Consumption	**Total**
Migrant	8	4	12
Native	11	19	30
Total	19	23	42

Source : Field Study.

The following table 4.13 provides data of distribution of households (lessee)and their relation to production to market or consumption. Small fanners produce for consumption while larger farmers produce for market.

TABLE 4.13 : DISTRIBUTION OF HOUSEHOLDS(LESSEE) IN TERMS OF PRODUCTION FOR MARKET OR CONSUMPTION

Variable	Market	Self Consumption
Landless Labour	0	11
Marginal Farmers	2	8
Small Farmers	7	2
Medium Farmers	4	0
Large Fanners	2	1

Source : Field Study

The table 4.14, provides data on the occupation of seller and its relation to motive of production for lessee. Out of the 19 contracts where production was for market, 15 were by lessor whose occupation was non-agriculture and 4 by agriculture lessor to agents whose motive for production was for market. While agents producing for consumption have 16 contracts from non-agriculturist and 7 contracts by agriculturists.

TABLE 4.14: NUMBER OF CONTRACTS BY OCCUPATION OF SELLER AND MOTIVE FOR PRODUCTION

	OCCUPATION OF SELLER		
	Non agriculturist	Agriculturist	Total
Production for Market	15	4	*19*
Production for Consumption	16	7	23
Total	31	11	42

Source : Field Study

4.3 Variability in Rent:

This village in the year 1995 witnessed four transactions which come under the category of no rent land. These four cases can be classified into two groups. Firstly, a case of a large land owner (Kamma by Caste) who leased 70 cents of land to a landless labour (Madiga by Caste) on a no rent basis. In this exchange the lessee appropriated all the output on the land (70 cents) but the son of the lessee was attached to the lessor for a loan taken three years back The quantum of the loan was Rs 2,000. The second group of cases of no rent land were, large land owners leasing land to lessee (who are

dominantly from S.C households) for the conversion of non-paddy land to paddy lands These contracts were for three years after which the land owners resumed the land for self cultivation. In case of the three years, there was no output in the first year, while the second year the paddy output produced was 5 bags, while in the third year, the output was around 10-12 bags.

The output produced in case of FR(C) was quite low The basic explanation that was given was the difference in the crops cultivated under different contracts Here, variations in rent for paddy lands in case of FR(K) and ST contracts are analysed

The number of contracts for paddy lands were 37 Medium farmers as lessor had the maximum number of contracts. Interestingly, the maximum rent received was by the marginal fanner and the average rent per acre decreased as the size of holding increased. While the main leasing in agents were landless and Marginal farmers, the lowest rent was paid by large farmers. The highest rent was paid by medium farmers.

By standardising rent for quality differences in land the systematic differences in variation across size groups are analysed The output was taken as a proxy for quality of land. The proportion of rent to output was around 0.23 to 0.27 for the village. The maximum proportion (0.29) was paid by landless labour (lessee) to a marginal farmer (lessor).

The study has identified cases of low rent to output for analysis.

Cases where the proportion of rent to output was below 20% are identified as cases of low rent land.

This village had 7 cases of low rent land An analysis is made of the nature of the agents involved in the contracts. There are three characteristics of the lessor which are

interesting. Firstly, all the lessors were agriculturists, who are cultivating these lands. Secondly, land ownership wise, the lessors were medium (3 contracts) and large (4 contracts) land owners. Thirdly, all the lessors were natives and Kammas by caste The lessees were also marked by three features. Firstly, the lessee, were landless labour Secondly , they leased land for self consumption. Thirdly, the form of contracts were FR(K) contracts. Castewise the lessees were S.C (2) and Kamma (5).

TABLE 4.15: **DISTRIBUTION OF NUMBER OF CONTRACTS, AVERAGE RENT PAID AND RECEIVED BY** LESSEE **AND LESSOR**(rent : 000/acres)

Land Size	**Average Rent Lessor**	**Cases (lessor)**	**Average Rent** Lessee	**Cases (lessee)**
Landless Labour	—	—	2.56(68)	11
Marginal Farmer	3.00(.20)	**4**	2.77(.56)	10
Small Farmer	2.89(77)	**6**	2.48(42)	9
Medium Fanner	2.59(47)	19	2.89(29)	**4**
large *Farmer*	2.27(.50)	**8**	2.34(59)	3
Total	2.61(.55)	**37**	2.61(55)	37

(figures in brackets are S.D, and rent is expressed in rupees)
Source : Field Study.

TABLE 4.16: **DISTRIBUTION OF PROPORTION OF RENT TO OUTPUT PAID OR RECEIVED BY** LESSEE **AND** LESSOR

	Marginal Farmers	**Small Farmer**	**Medium Farmer**	**Large Farmer**
Landless	0.29	0.20	0.24	0.20
Marginal Fanners	0.27	0.27	0.21	—
Small Farmers	—	—	0.21	—
Medium Farmers	0.24	0.27	0.24	—
Large Farmers	0.22	—	—	0.22

Source : Field Study

TABLE 4.17: PROPORTION OF RENT TO OUTPUT PAID/RECEIVED BY LESSEE CASTE AND LESSOR CASTE

	Caste 1	Caste 2	Caste 3
Caste 1		2.74(4) [0.24]	2.29(10) [0.21]
Caste 2	—	—	—
Caste 3	3.05(2) [0.24]	2.45(20) [0.22]	2.71(6) [0.23]

Source : Field Study

A study of the reason for the low proportion of rent to output provided information on a specific type of interlinkage of markets in the village. The seven lessee households provided free labour services to the lessor for two agricultural operations. One of the operation was weeding and the second was harvesting of the paddy crop. During these operations, the lessee had to provide free labour while the lessor provided meal(lunch) during the operations The dominant explanatory vanable for differences in rent is quality of land and an explanation of low proportion of rent is cases of recourse adjustment(labour) in the households

In the lease market, rent was low for contracts in the same caste, while higher rent for cases outside the [S.C - Mala, Madiga, referred to as Caste 1, Brahmins and vaishya as Caste 2 and Kamma and Baliga and other cultivating caste group as Caste 3] The reason for including Brahmin and Vaishya as a group is that they are absentee landlords and pursing occupations other than agriculture. There were no contracts from S.C to S.C households. The S. C as lessee had 14 contracts, out of which 4 were from Caste 2 lessor while 10 were from Caste 3 as lessor The rent as proportion of output paid was higher when S.C households leased from Caste 2 than from Caste 3. The Caste group 2 were not leasing in agents The Caste 3 were the dominant lessee while caste 2 were the main lessor. The rent paid was the highest for Caste 1, lessor leasing to agents in Caste 3. The above table show two results, one is that the Brahmin and Vaishya, the non-cultivating absentee landlords get lower rents from caste 3. but higher rent from caste 1. But the above table does not depict any case of large variation of rent according to caste groups.

CHARACTERISTIC OF AGENTS WITH LOW RENT LANDS: - 7 CASES

a. The lessors are medium (3) and large (4) land owners.

b. The occupation of lessors is agriculturist

c. Castewise lessees are S.C (2) and Kamma (5) while lessors are Kammas.

d. *lessee* lease *in land for* self - *consumption.*

e. The form of contract are FR(K) contracts.

f. The lessors are Natives

g. For two operations, the lessee had to provide free labour services. One was during weeding (which the house lady had to provide) another during threshing the male member had to provide labour During the days of these operation meal was *provided* by lessee.

4.4: Co-existence of Contracts:

As has been specified earlier the village has three forms of contracts This has been an important feature which at a different level has generated a large debate on the Co-existence of different forms of contract The below Table 4 18 brings out this feature.

TABLE **4.18:** FORMS OF CONTRACT AND ITS RELATION TO RENT AND OUTPUT

(rent and output : 000/acres)

	FR(C)	FR(K)	ST
Rent	1,700	2,6630	2,4857
Output	7,590	11,629	11,876

Source : Field Study

Here three different forms of contract can be observed with different levels of output. The lowest level of output was for the FC(C) contract while the highest level of output was in the case of FR(K) form of contract The level of rent also showed the same feature. The issue that arises is why is, fixed rent contract accepted? A possible

explanation is in terms of the nature of crop The fixed rent in cash form of contract is seen for dry crops which are marketed Here the crops cultivated were chilli and groundnut. While the other contract was for paddy crop The dry marketable crop like chilli had to be sold in an external market and had a high price risk involved So maybe the lessor was risk averse and did not offer other contracts The reason that such as resource endowment and difference in information could be an explanation for the Co-existence of ST and FR(K) for paddy is explored

The following table(4.19) provides data on the difference in mean values for resource endowment and performance of agents for different forms of contracts The number of contracts for ST were 9 while for FR(K) were 28. The quantum of land leased and rent was greater for FR(K) than that for ST. Output and land owned by lessor was nearly equal for both forms of contracts. The land owned by lessee in case of ST is 4 11 acres while land owned by lessee is 2.44 acres for FR(K) contracts The table 4.19 attempts to see if resource position could be an explanation for the difference in contracts.

TABLE **4.19:** DIFFERENCE IN MEAN VALUE FOR SHARE TENANCY **AND** FIXED RENTAL CONTRACTS

Nature of Contract		
	ST	**FR(K)**
Number of Cases	**9**	28
Mean Value of Land Leased(acres)	**1.55**	1.85
Mean Value of Rent(thousand rupees/acres)	**2.48**	2.66
Mean Value of Land Owned Lessee(acres)	**5.11**	2.44
Mean Value of Land Owned Lessor(acres)	**6.44**	6.36
Mean Value of Output(thousand rupees/acres)	11.73	11 62

Source : Field Study

The table 4.20, examines whether the nature of contracts are different for the lessee for different size groups land owners. In case of landless labour, FR(K) was the dominant form of contract for marginal farmers 4 contracts were for ST while 6 contracts were for FR(K). In case of small farmers, 2 contracts were ST, and 7 contracts were FR(K), and for medium farmers all the 4 contract were FR(K) contracts While in case of large farmers, 2 contracts were ST and 1 was a FR(K) contract.

TABLE 4.20: THE DISTRIBUTION OF CONTRACTS ACCORDING TO LAND OWNED BY LESSEE

	ST	FR(K)	TOTAL
Landless Labour	1	**10**	11
Marginal Farmer	***4***	**6**	*10*
Small Farmer	***2***	**7**	**9**
Medium Farmer	**0**	**4**	**4**
Large *Farmer*	**2**	**J**	**3**
Total	**9**	28	**37**

Source : Field Study

The following table 4.21 provides data on the number of contracts by land owned by lessor and the nature of contracts. Out of the 9 ST contracts, 6 contracts were by medium farmers while 2 and 1 contracts were by large and small farmers. In case of FR(K) also, the medium farmers were the dominant lessor(13 contracts) While marginal farmers had 3, small fanners had 6 and large had 8 contracts of FR(K) The above tables show that there does not exist any systematic tendency for existence of specific contracts in terms of the resource position(landowned) of lessor agents. The higher mean value for land owned by lessor could be because ST contracts were concentrated in medium and large farmers, while FR(K) was distributed in all size groups.

TABLE 4.21 FORM OF CONTRACTS AND LAND DISTRIBITION OF LESSOR

	ST	FR(K)	TOTAL
Landless Labour	**0**	**0**	**0**
Marginal Farmer	**1**	**3**	**4**
Small Farmer	**0**	**6**	**6**
Medium Farmer	**6**	**13**	**19**
Large *Farmer*	***2***	**6**	**8**
Total	**9**	**28**	**37**

Source : Field Study

Table 4.22, provides data on distribution of contracts in terms of migrant-native contracts. It is observed that both migrants and natives had a preference for FR(K) as compared to ST. Table 4.23, provides data on distribution of contracts in terms of occupation of agents An interesting feature is that agriculturists did not give land on ST but only on FR(K). While non-agriculturists gave land on both FR(K) and ST. Next, is the impact of production decision on the nature of contracts.

Table 4.22: distribution of ST and FR(k)(k) between migrant and native.

	ST	FR(K)	TOTAL
Migrant	3	9	**12**
Native	6	19	**25**
Total	9	28	37

Source . Field Study

Table 4.23: distribution of ST and FR(kXk) in terms of occupation of seller.

	ST	FR(K)	TOTAL
Non-agriculture(occupation)	9	18	27
Agriculture(occupation)	0	10	10
Total	9	28	37

Source . Field Study

In terms of production decision, out of the 15 contracts who produce for the market, 4 were ST and 11 were FR(K) contracts In case of 22 contracts of production for consumption, 5 contracts were for ST and 17 were FR(K) contracts (table 4.24).

Table 4.24: Distribution of S.T and **F.R(k) in terms of production** decision

	ST	FR(K)	TOTAL
Production for marker	**4**	**11**	**15**
Production for consumption	**5**	**17**	22
Total	**9**	**28**	37

Source : Field Study

The logistic regression results show that at 10% level of significance, the variables influencing the form of contract are value of output produced on the farm, land owned by the lessee and occupation of the lessor. The land leased variables have a negative sign. This would imply that as the land owned by lessee increases, there is a higher probability of a shift in contract from FR(K) to S.T.

Table 4.25: choice of contract in leased land : logistic **regression**

VARAIBLES	COEFFICIENT	WALD
Value of output (in thousand rupees per acre)	1.22(0.52)	**5.40****
Migrant-native (lessee) 1=native 0= otherwise	*0.79(1.13)*	0.49
land owned lessee(acres)	-0.29(0.15)	**3.67****
Production decision (lessee) 1=production for market, 0=otherwise	**-0.98(1.18)**	0.68
land *owned* lessor(acres)	**-0.02(0.13)**	0.02
Occupation (lessor) 1 =if agriculture, 0=otherwise	3.36(2.00)	**2.81****
land leased(acres)	0.74(0.70)	1.09
Constant	-13.5(6 19)	**4.78***

*significant at *10%*

An interesting feature of the regression is the influence of resource (land) of the two agents on the forms of contracts, The land owned by lessor does not influence the forms of contracts, while the land owned by lessee influences the forms of contracts. In addition, the lessee characteristic, land and lessor characteristic occupation influence the form of contracts. A possible inference, of the above regression is that the lessee resource position and alternate employment influence the form of contracts.

Two sets of explanations seem to explain the Co-existence of contracts. The first is the nature of seller in terms of occupation and the second is the land owned by lessee In case of occupation of lessor, the agriculturist lease land as FR(K) only while non-agriculturist lease on FR(K) as well as ST The second is in terms of land owned by lessee, the landless labour and marginal farmers lessee prefer FR(K) contracts who produce for self consumption, while larger farmers lease as ST and produce for market.

To explain the heterogeneity of contracts in the same geographic area, Eswaran and Kotwal(1994) have introduced, a case of more than two classes and different endowments. "(A)bsentee landlord may be found to lease out their land on fixed rental basis to small farmers with some managerial ability but low opportunity income, while large farmers with access to market information might share-crop with marginal farmers having none". [Ibid, p: 366].

Eswaran and Kotwal(1994) attempt to explain the Co-existence of three forms of contracts in the village in terms of differences in crops.
"The assumption of only two classes and a single production function inevitably leads to a single dominant contract"[Ibid., p: 364] The incorporation of heterogeneous rural Population with more than two classes or more than one production function or crops leads to Co-existence of contracts Here heterogeneity of class is in terms of land owned of lessee, while a second heterogeneity is in terms of occupation of lessor which explain the forms of contracts.

The literature on tenancy studies a particular form of tenancy, which is large land holders leasing out to small farmers. But in this village, tenancy of both kinds, i.e., small farmers leasing in as well as large farmers leasing in land So the lease arrangements in the village cannot be categorized as tenancy of small farmers leasing like Bliss and Stern (1984), (ICRISAT village studies etc). Nor does it fall in the case of reverse tenancy.

A study of land holding of lessee and form of contract brings some interesting features. In the village 66% of the contracts are fixed rent contracts. In case of landless labour 90% of the contracts were in fixed rent This proportion decreases as the larger holding increases, excluding the case of medium farmers In case of medium farmers, out of the five farmers, four contracts were fixed rent(kind) contract. Out of the four, three were taken by the migrant A descriptive character of the leasing-in agent is the Migrant-Native character There were significant differences between a Migrant and Native lessee in terms of rental values, output produced, proportion of land leased out by lessor to Migrant and Native.

In case of land leased, the migrant leases in 2 06 acres of land on an average while the Native leases in only 1 60 acres of land i.e., the migrants lease in more land then the natives. In addition, to leasing in on an average more land, the Migrants pay a higher rental value as compared to the Natives. This difference in rental values between Migrant and Native is statistically significant. The Migrant on an average pays a rent of Rs.3000 per acre of land while the Native pays only Rs.2313.2 per acre. The variability in rent is slightly higher for the Migrant as compared to the Native. The payment of higher rent by the Migrant is correlated with production of higher output by the Migrant. The Migrant, on an average, produces an output of Rs.11,945 value while the Native produces an output of Rs. 10,862 per acre. But an interesting feature is that the variability in value of output is higher for the Native (1.658) while it is less (0 680) for the Migrant. A reason for the higher variability of the Native could be the cultivation of

dry crops (Chilli and Groundnut) by Natives in addition to paddy The value of output fluctuates for the Natives as they had three crops and the mean value of output is low for dry crops like chilli and groundnut The agents leasing out to Migrants leased in on an average nearly 96% of their land while if they are leasing to Natives they lease on an average 66% of the land. The Migrants made a difference with reference to rent paid, value of output, as compared to the Natives and had a higher average than the Natives.

In the process of data collection a question was asked to enquire about the motive for leasing-in land. In case of the village, nineteen contracts were with the intention of production for market while in 23 cases the Lessee leased the land for production for self-consumption. The mean size of holding was different both the cases. The mean size of holding was 5 31 acres for agents producing for market while it was a meagre 1 41 acres for agents producing for self-consumption. A study of the difference in production decisions between Migrant-Native was undertaken. Out of the 42 cases, there were 19 cases agents produce for market, 23 cases the agents produce for self-consumption Out of the 19 cases of production for market, eight are migrants while eleven were Native. While in the 23 cases of production for self-consumption, only four cases represented the Migrant cases, while nineteen represented cases of Native . The difference between Migrant-Native for production decision is significant at 8% level of significance.

An important reason for leasing-out land was the existence of alternative source of employment. This aspect has been captured in the questionnaire as the occupation of the agent. The occupation was broadly divided into agriculture and non-agriculture. In case of non-agriculture, the group includes teachers, traders etc. It was found that the main lessor in lease market was Lessor is the non-agricultural. The non-agriculturist had 31 contracts with a mean size of 3.69 acres while the agriculturists had a eleven contracts with a mean size of 1.72 acres So agents with agriculture as occupation leased out less land as compared to non-agricultural occupation agents.

In terms of agents the Migrant-Native status of Lessee has a significant influence on terms of exchange while the occupation of Lessor has a significant influence from the supply side

4.5 Analysis of Variation of Rent and Land Leased: Regression Analysis

As discussed earlier, there are many studies on the lease market which attempt to analyze features of the lease market like adjustment of lease market to bullock power [Bliss and Stern(1984)], to family labour[Shoufier(1994)] etc. Bliss and Stern(1984)maintain that ,"...market for leased land is somewhat a sellers market in that it is easier for a land owner to find a tenant than for a tenant to find a land owner." Here an attempt is made to study the impact of migration on the lease market. Some of the results of earlier studies are, as land owned(lessee) increases land leased-in decreases while opposite relation holds for land owned(lessor), [Bliss and Stern(1984), Shoufier(1994) Srivastava(1986)], rent is Positively related to average output, land owned is not significantly related to rent, but significantly related to land value, and positively related to form of contract [Fujimoto(1996)].

The literature recognizes two non-marketed resources that influence the temporary lease market. An non marketed resource examined in the literature is family labour and the second is bullock power. In Annasamudram, the use of contract (Gang) labour for operations had relaxed the labour scarcity at peak periods i.e. planting and harvesting. The village also had seen the replacement of bullock and plough by tractor. Here, an attempt is made to study the variables that influence rent and extent of land transacted and to see if migration has influenced the dependent variables in the model. We have introduced two independent variables, migrant-native character of leasing-in as well as leasing out agent The second set of variables are the land owned by the two peasants in the market. Does the land holding influence the rent and land leased variables. Descriptive variables are introduced to capture the nature of peasants like basis of production decision of the leasing-in peasant Do peasants leasing for

self-consumption of for market[9] On the other hand, whether agriculturists non-agriculturists character of lessor influences the market? Are the forms of contract (fixed rent, share-tenancy) influencing the independent variables? Lastly, are the independent variables influenced by the value of output. To test for the above we have estimated a multiple linear equation.

The table 4.26, gives detailed description of the variables used in the analysis, like their mean and standard deviation *1* he mean quantum of land leased (in acres) is 1.73 with a standard deviation of 0.98. The second variable is the rent. This variable is expressed as value of rent per acre (in thousand rupees). To homogenize the rental value we have multiplied the rent in kind with price of paddy in the market at the harvest time. The mean value of rent works out to be 2.51 (thousand rupees) and a standard deviation of 0.61. A characteristic of the leasing-in agent examined is migrant-native status. These migrants had come to the village in the 1980s and form first generation migrants so we collected information on the village of origin of the members of households. If the village of origin is Annasamudram we have termed them as natives otherwise as migrants. This variable was captured as dummy in the analysis, with a value of one for native and zero otherwise. The mean of this dummy is 0.71 with a standard deviation of 0.45 The mean of 0.71 implies that natives are dominant in the lease market as compared to the migrants. The mean size of land owned by leasing-in agent is 3.17 acres with a standard deviation of 3.83. A high standard deviation would imply a high variability in land owned by the agent In our questionnaire we collected information on basis of production decision If a peasant sells more than 50% of the return, they are termed as producing for the market. While if he consumes more than 50% of the return, this decision is termed as production for self-consumption. This variable is captured as a dummy, with value one for peasants who produce for market while this dummy takes a value zero otherwise. In our sample this variable takes a mean value 0.54 and standard deviation of 0.50. The mean value of 0.54 implies that nearly equal proportion of transactions are by both sets of households but a little emphasis towards production for

market. Migrant native status lessor is analysed. The mean value for the dummy is 0.83 implying a dominance of native as lessor The mean size of land holding of leasing-out peasant is 6.61 acres with standard deviation of 3.39. The mean size of landholding by the leasing-out agent is more than mean size of land holding by leasing-in agent Larger size of land owners are leasing out to smaller size land owners The occupation of leasing-out agent is a dummy variable. If a land owner is a cultivator and derives more the fifty per cent of income from agriculture, we define this peasant as agriculturist and if occupation is otherwise we define them as non-agriculturist as the main occupation This dummy takes a value of one for peasants whose occupation is agriculture and zero for other situations. The mean value of the variable is 0.26 and standard deviation of 0.44. The mean value of 0.26 implies a situation where dominantly leasing-out peasant is a non-agriculturist. The last variable to be considered is the value of output of land per acre (in thousand rupees). We had collected the total output that was produced per acre this was multiplied with the harvest price of the crop in the year The mean value of output per acre is 11.19 with a standard deviation of 1.52 The ratio value of rent to output per acre is 0.22 or 22.43% of output goes as rent. The value of output per acre shows a comparatively low variability to value of rent per acre.

Table 4.26: description of mean and standard deviation in temporary transfer market. (land : acres, value : OOP/acres)

Description of variables	mean	SD
(Y1) Land Leased	1.73	0.56
(Y2) Value of Rent/acre	2.51	0.61
(X1) MG-NT Status of Lessee[D] 1 = if native 0 = Otherwise	0.71	0.45
(X2) Land Owned by Lessee	3.17	3.45
(X3) Production Decision[D] 1 - *if Production for* Market 0 = Otherwise	0.54	0.50
(X4) MG-NT Status of Lessor[D] 1 = if Native 0 = Otherwise	0.83	0.37
(X5) Land Owned by Lessor	6.61	3.37
(X6) Occupation of Lessor[D] I = if Occupation is Agriculture 0 = Otherwise	0.26	0.35
(X7) Proportion of Land Leased to Land Owned by Lessor	0.75	0.351.52
(X8) Value of Output	11.19	1.52

D stands for dummy

source-field study

In the study of contracts we would study FR (cash), FR (kind) and share-tenancy only. The rent free land represent cases where the markets are interlinked and the terms of exchange are not well-defined creating problems of comparison.

$Y_i = F[X_j]$ where i = 1,2

j = 1 to 11 where

Y_1 = Land leased, Y_2 = Value of rent per acre

(in acres) (in thousand rupees)

X_j = are independent variable.

VARIABLES THAT EFFECT THE QUANTUM **OF LAND LEASED**

There are three variables that influence the quantum of land leased by agents[17].

i) Occupation of Lessor:

As has been described earlier, the occupation of Lessor has a significant influence on the land leased. This variable has been captured as Dummy, zero value for the dummy implies that the agent is an non-agnculturist, while a value of one would imply that the variable describes a agriculturist For a non-agriculturist the value of the coefficient is -1.05 and the coefficient for the agriculturist is + 0.01. So the non-agriculturist leased-out land while the agriculturist leases in land This difference is also significant.

ii) Proportion of Land Leased(X6):

This is a quantitative variable. This variable tries to capture the effect of proportion of land leased out to total land owned on the quantum of land leased, i.e., does the quantum of land leased get influenced by proportion of land leased We found that the influence is positive.

ni) Land Owned by Lessor(X5):

The land owned by Lessor has an influence on the quantum of land leased. As the size of land holding increases the quantum of land leased also increases

This result has a R^2 of 28% while adjusted R^2 is 18% (Table 4.27). The quantum of land leased is influenced by the characters of Lessor while the Migrant-Native character does not have a significant influence.

The variables that does not significantly influence the quantum of land leased is MG-NT character of *leasing-in agent* The t' value on calculation was significant at 25% level of significance.

VARIABLES THAT INFLUENCE THE RENTAL VALUES(TABLE: 4.28).

i) Actual Land Owned by Lessor(X5):

There exists a negative relationship between the rental value and the land owned by lessor. As the size of land holding increases the rent paid decreases.

ii) Value of Output(X6):

There exists a negative relation between the rental value and the value of output per acre, or in other words, as the value of output per acre increases the rental value decreases.(an attempt to explain this peculiarity is done later in this section)

iii)The Proportion of Land Leased:

This is the third quantitative variable. As the proportion of land leased increases the rental value decreases.

iv) Migrant- Native Character of Lessee(X1):

The Migrant-Native character of the Lessee has a significant influence on the rental value. The Migrant-Native character is captured as a Dummy. The migrant gives a higher rent as compared to a Native .

v) Occupation of Lessor(X6):

The occupation of the Lessor also has a significant relation on the rental values. The non-agriculturist Lessor gets more rent as compared to an agriculturist Lessor.

vi)Forms of Contract(X9,X10):

In the three forms of contract the Lessor with FR (kind) gets a higher rent as compared to FR (cash). Rankings the three forms of contracts, share-tenancy falls between these two types of contracts.

Analysis of Result:

The migrant, as has been defined earlier, is an agent who comes to the village with a different set of information. As can be seen from the earlier section the migrant-native character of the leasing-in agent influences the rental value but does not influence the quantum of land leased. The higher rental value paid by the migrants is

also corroborated with a higher level of output being produced by the migrants In other words, the higher output produced and higher rental rates by the migrants depict a situation where either the migrants had a different information set than the natives or the migrants had more fertile land than the natives.

The migrants are ready to pay a higher rent as compared to the natives but the migrants do not influence the quantum of land leased i.e. if the migrants are ready to pay more rent the landowners should give more land to them.

The occupation of leasing-out agent has a significant influence. The non-agriculturists are leasing out to the migrants while agriculturists are leasing out to natives pre-dominantly. A related aspect of this result is that non-agriculturists get more rent on land.

In terms of contracts, it looks that Fixed Rent (is a preferred form of contract as compared to the rest of the contracts. So in terms of the above model, the image is one of village is transition and migrant as such has an advantage in terms of information.

Some very interesting results follow the regression analysis:

(a) Rent is negatively related to proportion of land leased out: A possible explanation of this result is in terms of forms of contracts. From the table 4.29 it can be seen that the fixed rental contracts, where the payment being in cash, has the lowest rent as well as output. The percentages changes in mean output and rent for share cropping as well as fixed rent contract(in cash), as the base contract, the mean output has increased by 56%for share tenancy and 53% for fixed rent in kind system. But the rental have shown some differences. The mean level rent has been about 46% for share tenancy while it has increased by 56% in case of fixed rent contract(in kind). Maybe the share tenancy as a form of contract is influencing the growth of rent and is responsible for the negative relation.(table 4.29)

Table 4.29 : Forms of contract and its relation to rent and output (in rupees/acres)

	FR(C)	FR(K)	ST
Rent	1,700	2,663	2,485
Output	7,590	11,629	11 ,,876

FR(c)= fixed rent in cash, FR(k) fixed rent in kind, ST= share tenancy.
source-field study

(b) Rent is negatively related to value of output

An explanation of this result could be in the nature of migrant-native status of the lessee. The migrant gives a higher rent as compared to the native. But the mean size of land holding by the lessor is 5.87 acres for the migrants while it is 5 91 acres for the natives. The migrants give a higher rent as compared to the natives but the households giving land to the migrants own less land as compared to households leasing to natives. This could be the reason for the negative relation between the variable.(table-4.30)

Table 4.30: land owned by lessor, rent and character of lessee
(in rupees/acres)

	Land Owned (Lessor)	Rent
Migrant	5,875	3,003
Native	6,916	2,313

source-field study

(b) Land owned by lessor is negatively related to rent:

An explanation of this difference is in terms of occupation of lessor as well as migrant native status of lessee. The households whose occupation is agriculture, lease out on an average 43%of the land ownership wise while non-agriculturists lease out on an average 86%of the land. These migrants give a rent of 2.89 thousand rupees while the natives give 2.30 thousand rupees which is below the rent paid by the agriculturist.

The regression results and the t-test show that the migrants are paying a higher rent on the land as compared to the natives but they are not influencing the quantum of land leased. At the supply side the occupation of sellers has an important influence.

4.6 : Conclusion:

I) The lease arrangement in the village, does not have the feature of "traditional" lease arrangement. The village has some contracts which are big lessor - small lessee as well as small lessor - big lessee.

II) An explanation of co-existence of contracts was seen in terms of heterogeneity of classes and crops cultivated . Out of the three forms of contracts, FR(C) was specific to a crop (chilli and groundnut crop). While the choice of contract between FR(K) and ST, which is for paddy crop, was in terms of heterogeneity in resource position of land for lessee and heterogeneity of agents in terms of migrant native status and production decision of lessee. At second level, these contract was influenced by the lessee character rather then the lessor.

III) A study of variability of rent brought out some interesting features This village had four cases of no rent land. In these four cases, one case was of an attached labour while the rest were cases where lessor lease - out land for conversion of land to canal irrigated land. The study of share of rent to output brings out the feature of low variability of rent to output, in other words, there did not exist large variability of rent to output. This would imply that quality of land is a pre-dominant factor explaining variability in rent. This village witnessed only seven transactions with low share of rent to output. All these transactions were linked transactions where the lessee had to provide labour services to the lessor.

IV) An analysis of variation of land transacted and value of rent(regression analysis) brings out the feature of land owned by lessor which influences both the variables. While land owned by lessee does not influence both the variables. At a second level, land transacted is influenced by lessor characters, while rent is influenced dominantly by lessor character, performance and form of contracts.

V) In contrast to permanent transaction market, the migrant - native status of lessor influences the rental value but does not influence the land transacted in the market.

TABLE 4.26 : FACTOR AFFECTING AMOUNT OF LAND TRANSACTED IN LEASE MARKET: REGRESSION ANALYSIS

VARIABLES	COEFFICIENT
A. *Constant*	**-0.64** (0.65)
B.Migrant-Native Character of Lessor(D) 1= if Native 0= Otherwise	-0.43 **(1.18)**
C. Land Owned by Leasing-out Agent (in acres)	0.15 (2.85)
D. Occupation of Leasing-out Agent(D) 1=if Occupation is Agriculture 0= Otherwise	1.12 (2.63)
E. Proportion of Land Leased-out	1.65 (224)
F. Slope term for Migrant-Native Land-owned by Leasing-in Agent	0.05 (1.30)
R^2 = 0.28, adjusted R^2 = 0.18	

Figures *in* Brackets are t values.
D stands for dummy

variables not in the equation

Variables	**Coefficient**
Rent (in thousand rupees/acres)	-0.32 (0.18)
Land Owned Lessee (in acres)	-0.37 (0.71)
Production Decision(D) l=Production for Market 0=Otherwise	-0.03 (0.18)
Migrant- Native Character of Lessor(D) 1=Native 0=Otherwise	0.04 **(0 31)**
Value of Output (in thousand rupees/acres)	0.07 (0.50)
fixed rent in kind(D) 1=fixed *rent in* kind 0=otherwise	0.10 (0.62)
Fixed Rent in Cash(D) 1=Fixed in Cash 0=Otherwise	-0.07 **(0.51)**

TABLE 4.28 : FACTORS AFFECTING THE RENTAL VALUES REGRESSION RESULTS

Variables	Coefficient
Constant	6.25
a)Migrant Native Character of Lessee[D] 1= if Native 0= Otherwise	-0.73 (4.49)
b)Migrant-Native Character of Lessor[D] 1= if Native 0= Otherwise	0.38 (2.10)
c) Land owned by Lessor (in acres)	-0.089 (3.36)
d) Occupation of Lessor[D] 1= if Occupation is Agriculture 0= Otherwise	-0.90 (2.29)
e)Proportion of Land Leased out by Lessor	-0.77 (2.29)
f) Value of Output (in thousand rupees)	0.39 (2.17)
g) Fixed Rent (in Kind)(D)]= if fixed rent in kind 0= otherwise	-1.25 (2.77)
h) Fixed Rent (in cash) 1= if Fixed Rent in Cash 0= Otherwise	
R^2 = 0.62, adjusted R^2 = 0.53	

Figures in Brackets are t values.

Factors not effecting the rental values: regression Results

Variables	Coefficient
Land Owned Lessee (in acres)	-0.07 (0.58)
Production decision(D) 1= PRODUCTION FOR MARKET 0= OTHERWISE	-0.03 (0.27)

CHAPTER - V

COMPARATIVE ANALYSIS OF LAND MARKET IN THE THREE VILLAGES

5.0 Introduction:

In the earlier chapters an analysis of temporary and permanent transactions in Annasamudrum was undertaken where the agency of change was the migrant, in the presence of assured water. Here, an attempt is made to study the nature of land market Specifically, the study would analyses, first, the agents involved in the exchange and, secondly, estimate the demand and supply curves, and study if they are normal in the two other villages. As an extension of the study on land market, are the variables influencing the price(rent) and land transaction specific to the village or are they general to all the villages. In addition, the demand and supply functions for land would also be estimated.

The land market was seen to consist of two markets, namely temporary(lease) market and permanent (sale-purchase) market The determinants of the price(rent) and quantity of land exchanged in the two markets has been quite different. In case of lease market, the migrant-native status has an influence on the rent but not on the quantum of land leased. In case of permanent transaction market however, the migrant native status has an influence only on quantity of land transacted but not on the price. The migrant has an influence on the price variable (Rent) in one market while it influences the quantity variables on the other hand. A second interesting result was the influence of land owned by the two agents, in the exchange, on the price and quantity variables. In case of temporary transaction market, land owned by leasing out agent has a significant influence, both on the quantity transacted and the rent while the land owned by lessee does not influence both the variables. On the other hand, in case

of permanent transfer market, land transacted is significantly influenced by land owned by the buyer while the price/acre of by land owned by seller.

Given these broad results from the study of Annasamudrum, an attempt is being made to study:

a) the nature of agents involved in the exchanges in the two markets,
b) the process of land transfers in the village,
c) to study variability in price and estimate the distress,
d) to estimate the demand and supply function of land.

Two other villages namely Medapi and Lellapalli with different characteristics have been selected. Medapi is a village next to Annasamudram and is also part of the command area of Nagarjuna Sagar Right bank canal. This village has not witnessed any in-migration of peasantry. While Lellapalli is a dry village which also has not witnessed any in-migration .

5.1 : Description The two Villages:

Lellapalli:

Lellapalli is a small dry village in Thriparanthakam Mandal of Prakasam district of Andhra Pradesh The total population of this village is 1408 persons, while the total irrigated area is 1494 acres of land. Out of the total population, the number of cultivators are 245 individuals, while agricultural labourers are 467. The number of persons working in cottage industry is a insignificant number, namely 14 individuals(see table 5.1).

]. [A detailed *description of* the villages follows in the *next section]* We have *not attempted* to do a complete study of these two village as we had done for Annasamudram but have concentrated only on the land market.

The agricultural census reveals that this village has 58 bullock carts, 77 wooden ploughs, no iron plough, 6 diesel pumpsets, 8 electrical pumpsets and 12 dusters. In addition, the villagers don't own even one tractor in the year 1994-95.

TABLE 5.1 : DESCRIPTION OF LELLAPALLI AND MEDAPI VILLAGE (1994-95)

	Lellapalli	Medapi
1. Total Population: Male: Female:	1408 711 697	5350 2680 2670
2. Cultivable Area(acres):	1494	2224
3. No of Cultivators: No of Agricultural Labours:	235 467	840 1837
4. No of Pumpsets:	14	20
5. Land Irrigated(acres). Canal: Large Tanks: Tubewells:	 nil 20 88	 1550 nil 676
6. Crops.	Rice, Ragi Horsegram,	Paddy, Chillies Redgram
7. No of Tractors:	nil	4

Source : Agricultural Census of Thriparanthakam Mandal 1995-96

We have collected data on the sources of irrigation at two points for the village for two years 1984-85 and 1994-95. In the year 1984-85 the village was a completely dry village and dependent on rainfall for cultivation While in 1994-95 the village had 20 hectares that was irrigated by a major tank and 88 hectares of land being irrigated by community tubewells. This village at present has 23 tubewells which were a result of loans being given by the government.

In the year 1984-85 crops cultivated in the village were dry crops like jowar, bajra, ragi etc. By the year 1994-95, a major change to paddy, occurred that replaced the dry crops in the village. Even in the dry lands, a change in the crops from subsistence crops like jowar, bajra to horsegrams is taking place. At present, an

important change taking place is a shift to vegetable crops like Brinjal and Tomato(which was introduced by a school teacher who saw the price difference in vegetable crop between this village and Guntur town) The produce is being sold at the Guntur market. The change in the crop is a result of land being irrigated by tubewells

Here the land distribution of the village in the year 1994-95 are presented

TABLE5.2 : LAND DISTRIBUTION IN THE TWO VILLAGES(1993-94)
(Land : acres)

	Lellapalli		Medapi	
Size Class	No of HD	Land Owned	No of HD	Land Owned
0-1.23	17(7.52)	6.06(0.004)	286(20.8)	240.05(5.8)
1.24-2.46	22(9.7)	44.60(2.9)	495(36.1)	917.16(22.3)
2.47-4.92	47(20.7)	158.17(10.5)	413(30.1)	1285.02(31.3)
4.93-7.38	51(22.5)	311.38(20.8)	92(6.7)	548.05(13.3)
7.39-9.84	35(15.4)	196.12(13.1)	35(2.5)	304.90(7.4)
9.85-12.30	25(11.0)	285.05(19.0)	16(1.1)	173.35(4.2)
12.31-18.45	21(9.2)	309.9(20.6)	23(1.6)	379.77(9.2)
18.46-24.60	7(3.0)	147.86(9.83)	9(0.006)	192.22(4.6)
24.61-49.20	1(0.004)	34.88(2.27)	2(0.001)	55.77(1.34)
49.21&above	-	-	-	-
Total	226(99.02)	1494.02(99 10)	1371(98.9)	4099.24(99.26)

Where VIL 3 is Lellapalli village and VIL 2 is Medapi village, no stands of number of household
Figures in brackets are percentage to total.
Source : Agricultural census of thriparanthakum Mandal 1995

Table 5.2 presents the land distribution in the village in the year 1993-94. There are 17 households which own land in the size group of 0-1.23 acres and own an extent of 6.06 acres. So this village looks to have a very small proportion of landless labour. In the size group of 1.24 - 2.46 acres there are 22 households with 44.06 acres or an average size of holding in this size group is 2.02 acres. The third size group which is the second largest in terms of number of households has 47 households owning 158.17 acres. The average size of ownership is 3.36 acres The size group 4.93 to 7.93 acres has the maximum number of households. The land owned by these 311.38, which is also the largest land owning group. Here, the average size of holding is 6.10 acres. The

next size group (7.39 - 9.84 acres) witnesses a drop in the number of households as well as on the extent of land owned. The modal size group of 9.35 to 12.30 acres has 25 households owning 285.05 acres or an average of 11 40 acres The size group of 12.31 - 18.45 acres has a relatively low number of households but approximately the maximum extent of land in modal size groups. The average land owned by households in this group is 14.75 acres. The next two modal size groups have 7 and 1 households owning 147.86 and 34.88 acres of land. The average size of land owned is 21.12 and 34.88 acres respectively(table 5.2)

MEDAPI:

Medapi is a relatively bigger village compared to Annasamudram. This village is on the road that connects Annasamudram to Vijayawada-Cuddapah highway. The total population of the village is 5350 individuals. The total cultivable owned land is 4099.30 acres. The total number of cultivators is 940. While the number of agricultural labourers is 1122 individuals In terms of percentages the number of agricultural labourers form 20.97% of the population(table 5.1).

The agricultural census (1994-95) for Thriparanthakam provides an idea on the nature of instruments of production in the village. This village has 240 wooden ploughs and 3 iron ploughs. The number of diesel pumpsets are 16 and 4 electrical pumpsets. There are 4 tractors also in the village and 36 dusters. The number of bullock carts is 160.

The village has had some part of the land being irrigated even before the arrival of water in the canal. In the year 1984-85, there were three sources of irrigation, while the quantum of land irrigated by each source is not provided by the Agricultural census. Medapi had two small tanks i.e., tanks that can irrigate less than 100 acres. This village, in addition, had eight dugwells with oil engine and forty seven dug wells

with pumpsets. By the year 1994-95 this village had 1550 acres of land being irrigated by a major project which is the canal water of Nagarjuna Sagar Dam which was released in early 1980's.

This has brought about a major shift in the crops cultivated in the village. Rice was the dominant crop in the year 1984-85 as well as in the year 1994-95. In the year 1984-85, paddy and chillies were the dominant crop in irrigated land, while jowar, bajra and Redgrams were cultivated in the dry land. By the year 1994-95 the dominance crop was paddy in wet lands and Redgrams in dry land.

The table 5.2 describes the land distribution in the village. The number of families owning land in the modal size group of 0.00 to 1.23 acres is 286 and they own 240.05 acres of land. The average size of land owned is 0.83 acres. The second modal size group is 1.24 to 2 46 acres. This size group has the maximum number of households and the second largest extent of land owned So as compared to Lellapalli, Medapi has a lesser modal size group having the largest number of owners. The modal size group 2.47 to 4 92 acres has the maximum extent of land in the group. The number of households is 413 but the extent of land owned is 1285.02 acres. All the modal size groups after this modal size group witness a decreasing trend on the number of households. The village Lellapalli is a small village as compared to Medapi in terms of land cultivated as well as population.

5.2 : Contracts on Land Market in Three Villages:

This section would study variables influencing the permanent transaction market i.e., on the variables influencing the price/rent and quantity of land transacted.

Firstly, the structure of markets in the three villages is presented and explanation is provided in the later sections. Table 5.3 gives the number of transactions, area and average price of land that is transacted in the villages. Annasamudram witnessed the

maximum number of transactions (26), followed by Medapi with 26 transactions and a very low level of transactions (7) for Lellapalli.

TABLE 5 3 : NUMBER OF TRANSACTIONS, AVERAGE AREA AND PRICE OF LAND TRANSACTED(1992-96)

(Land : acres, price : 000/acre)

	No of Exchanges	Average Area	Total Area	Average Price
Annasamudrum	**26**	4.75 (1.75)	65.75 [4.5]	1632 (8.79)
Medapi	**26**	1.11 (0.56)	28.88 [0.68]	18.82 (2.38)
Lellapalli	**7**	0.92 (0.34)	6.50 [0.43]	17.28 (4.83)

Source : Field Work.

Figures in round brackets are standard deviation while square are percentages of land exchanged to total land.

As Annasamudram had the maximum number of transactions, it also had the maximum area that was transacted followed by Medapi and then by Lellapalli The average area per transaction was highest for Annasamudram followed by Lellapalli and then by Medapi. But the variability of land exchanged was highest for Annasamudram followed by Medapi and Lellapalli. In Annasamudram, a larger variability in land transacted with lower variability as compared to other villages was witnessed. In case of price/acre, Medapi had the largest pnce being given for an acre of land followed by Lellapalli and then by Annasamudram. So Annasamudram had the lowest price/acre of land. But the variability of land/acre shows that Annasamudram had a large variability compared to the other villages. Lellapalli had the second largest variability. So Annasamudram had very lower price but a larger variability, while Medapi had a higher price and lowest variability. The proportion of land exchanged was the highest at Annasamudrum which was 4.5% of total land of the village. The proportion was low for the other villages at around 1%. [An attempt is made to explain the variability in the following section].

Table 5.4 gives the broad information on the lease market. Annasamudram had the highest, in all 43, number of transactions. Medapi had 23 transactions, while Lellapalli had 9 transactions. The average area that was exchanged for Annasamudram was 1.73 acres, while for Medapi, the average area that was transacted was 1.22 acres. The variability of area leased was higher for Annasamudram, which is 0.98 while for Medapi it is 0.55. The total area that was leased for Annasamudram is 73.00 acres, while for Medapi, it was 31.75 acres The rent paid per acres in Annasamudram is 2.51 thousand rupees, while in Medapi the lessee paid 2.36 thousand rupees. The standard deviation of rent paid is 0.61 for Annasamudram and 0.57 for Medapi. The average land leased as well as rent paid was higher at Annasamudram. This was accompanied by a higher variability in Annasamudram village.

Lellapalli, on the other hand, had the lowest number of transactions and also a low mean value of rent as well as land leased These two variables also have a low variability as compared to other villages. The proportion of land exchanged is the highest at Annasamudrum which is 5.07% of total cultivable land of the village. The proportion is low for the other villages and around 1%. [An attempt is made to explain the variability in the following section].

TABLE 5.4 : NUMBER OF TRANSACTIONS, AVERAGE LAND LEASED AND AVERAGE RENT IN TEMPORARY MARKET

(Land : acres, rent : 000/acre)

	No of Transactions	Average Area	Total Area	Average Rent
Annasamudram	**43**	1.73(0.96)	73.00(5.07)	2.51(0.61)
Medapi	**26**	1.22(0.55)	31.75(0.77)	2.36(0.57)
Lellapalli	**9**	1.11(0.48)	9.99(0.66)	0.86(0.51)

Source : Field *Work.*

Figures in round brackets are standard deviation while square are percentages of land exchanged *to total* land.

5.3 : Permanent Transfer Market:

The year-wise behaviour of the above variables is analysed(table 5.5). In case of Annasamudram we would concentrate until 1995 while for the other villages we would study the year 1996 also. We would analyse the data for the year 1992 to 1996. Table 5.5 gives details on the year-wise transaction of land, their price and area for each year. Medapi and Lellapalli have transaction around five and one respectively but Annasamudram in the year 1994 had fifteen transactions, while the year 1995 had a big jump in average area transacted. In terms of variability of price/acre and average land, Annasamudram has a larger variability consistently for all the years for the two variables. The differences in the standard deviations are also large for thc villages.

The average land transacted in Annasamudrum was high due to the purchase by the migrants. As was seen in the earlier chapter the average land transacted by migrants was 4.4 acres while the average land transacted by natives was 1.2 acres The later is nearly equal to the land exchanged by natives. The year 1994 and 1995 have witnessed high transactions in the market The year 1995 witnessed the entry of migrants who had bought 20 acres of land. While the year 1994 saw sale of land by agriculturists, who had 9 transactions out of the 15 transactions as they faced water problems due to a problem of canal and water ın the area was not sufficient for cultivation. This forced some households to sell the land. Out of these exchanges interestingly the migrant is not the purchaser. The entry of migrants also increased the S.D of land exchanged. The average price of land was higher in Med as compared to Annasamudrum as med is a roadside village . The variation in price is also large at Annasamudrum as migrants pay a higher price while the natives pay a lower price and a combination increases the variation in price. Lellapalli, in one year had a high price as a piece of land which had irrigation through borewell sunk by the seller and cultivating vegetables was sold in the market.

TABLE 5.5 : YEARWISE NUMBER OF TRANSACTIONS, AVERAGE AREA AND PRICE/ACRE (1922-1994)

(Land : acres, price : 000/acre)

	1992	1993	1994	1995	1996
Medapi					
No. of Exchange	5	4	8	5	**4**
Total Area	4.50	3.50	9.25	7.50	4.25
Average Area	0.90(0.37)	0.87(0.27)	**1.15(0** 77)	1.50(0.27)	1 06(0.36)
Average price	19.00(2.60)	17.75(3.34)	19.00(2.60)	19.30(2.22)	19.12(1.43)
Annasamudram					
No. of Exchange	7	3	**15**	6	NA
Total Area	7.15	3.50	32.00	23.25	NA
Average Area	1.11	1.17	3.17	7.67	NA
Average Price	16.07(26.21	21.33(7.78)	14.58(13.06)	13.06(8.51)	NA
Lellapalli					
No. of Exchange	1	12	1	**2**	
Total Area	*1.00*	0.50	1.50	1.50	*2.00*
Average Area	1.00	0.50	0.75	1.50	1.00
Average Price	14.00	17.00(0.50)	12.50(0.50)	16.00(0.50)	24.50

Source: Field Work.

Figures in brackets are standard deviations.

Structure of Permanent transfer market:

In chapter - IV, an analysis of the permanent transaction market was undertaken. Based on the trends in the nature of permanent transfer market, at Annasamudram, the data on the other two villages are studied The important trends seen in Annasamudram village are

i) The village has middle peasant group as the active participants as buyers in the market and account for 65% of exchanges There does not exist a tendency for large land owners buying land from marginal farmers.

ii) The main sellers of land are non-agriculturists by occupation, in terms of number of transaction as well as area. This would result where agents are adjusting land resources for their operational holding rather then buying land as rentiers.

iii) In terms of variability in price, there not exist consistent differences in price between the different size groups.

A) Land Exchanged in three villages:

Nature of Exchanges:

Medapi, the command area village had 26 transactions. Out of these transactions, 12 exchanges were by middle peasant to middle peasants which forms nearly 61.5% of the total land transaction Here, one sees two forms of exchanges, one a mortgage and second is outright sale A household, if they have cash needs for consumption or for marriage, mortgage the land to a household with a surplus income. These mortgages in this village are for a period of four years. In this period, the land is cultivated by the household who have taken the mortgage At the end of the period, if the household who have given the land on mortgage repay the debt the land reverts back to the household, otherwise the mortgage is taken as a sale of land In this village the number of exchanges which are mortgage are 15 or 57% of the total number of transactions(table 5.6) The land mortgage is 64% of the total land exchanged The main feature of the exchanged are :

a) land is exchanged in the same size group with a dominance of middle peasant in the exchanges. A small farmer does not mortgage the land to large farmers as there is a possibility of land not reverting to them

b) land is exchanged within the same caste group

TABLE 5.6: NATURE OF EXCHANGE IN MEDAPI VILLAGE
(LAND : ACRES)

	Mortgage	Outright sale
Marginal Farmer	1.0(1)	0.5(1)
Small Farmer	8.0(8)	2.0(2)
Medium Farmer	9.5(6)	4.5(5)
Large Fanner	0	3.5(3)
Total	18.5(15)	11.5(11)

Source . Field Survey
figure in brackets are number of transaction

At Annasamudrum outright sales are only present.

The second type of sellers are households who want to sell land to get money either to set up a shop in town or to have jobs in town and want to sell land in the village. The reason for sale are classified into four groups for Medapi. The maximum number is of cash need for establishment of shops in town, followed by sale by households with professional jobs in towns, and sale to meet consumption expenditure While sale of land as the owner has professional commitments was due to supervision problem In the village 20 out of 29 were sold for need of cash.

TABLE 5.7: REASON FOR SALE OF LAND IN THE TWO VILLAGES

(LAND : ACRES)

	Medapi	**Annasamudrum**
Consumption Loan	7.00(0.24)	15.00(0.22)
Marriage Purpose	2.00(0.06)	8.00(0.12)
To Establish Business	11.00(0.44)	12.00(0.18)
Professional Outside Village	9.00(0.31)	31.00(0.46)

Source : Field Survey

figure in brackets are proportions to total land

At Annasamudrum the main sellers were professionals who sell land, forming 46% of households. The proportion of households which sell land for cash needs are large in this village(table 5.7)

At Lellapalli, the number of exchanges are low. Out of the 7 exchanges 4 are for cash needs for marriage, while 3 are for mortgage of land for consumption need of households. In this mortgage the seller works as a lessee on the land. When the lessee has the money to pay back the loan the land reverts back. Here, the buyer are large land owners. The people's opinion on the land market here is that there are no buyers in the market.

The sales in the three villages are in response to cash needs of agents At Annasamudnim, the sales are outnght sales. At Medapi, there is outright sale as well as mortgage by middle peasant to middle peasant At Lellapalli, also one see a combination of the two arrangements with mortgage from small farmers to large farmers.

Is there a tendency for generation of middle peasant land ownership:

Table 5.8 provides data on the land exchanged by different size groups in the two villages. In case of Medapi, the main seller of land were medium farmers followed by small farmers, while the main buyers were again the same group As buyers, these two size groups account for 22 exchanges while the land involved is 22.5 acres In case of sellers these groups have 21 exchanges involving 23.0 acres. This gives a picture of intra-inter these group exchanges.

Lellapalli, on the other hand, had few transactions, where sellers are marginal and small farmers while buyers are medium level farmers(table 5.8).

Unlike Annasamudram, where transfers were from larger land owner to smaller land owners, at Medapi, the transfers were in the middle size groups, while at Lellapalli, the transfers were from small land owners to larger units. This can be explained in terms of nature of sales. At Medapi, the trend in exchanges was for maintenance of the existing concentration ratio with exchanges internal to middle peasantry, while the few transactions at Lellapalli tends toward transfers to larger land owners(table 5.9).

Unlike Annasamudram, where transfers were from larger land owner to smaller land owners, at Medapi, the transfers were in the middle size groups, while at Lellapalli, the transfers were from small land owners to larger units

At Annasamudrum, the explanation was in terms of migrant-native status and occupation of buyer. Large land owners(non-agriculturist) are the main sellers of land with middle size groups the main buyers(in this group migrant also is part) in Annasamudrum.

TABLE 5.8 **SIZEWISE** PEASANT LAND **TRANSACTION(** PERMANENT TRANSACTION) IN **MEDAPL** (LAND : ACRES)

		Land Owned by Buyer				
S		**marginal fanner**	**small fanner**	**medium fanner**	**large fanner**	**total**
E	**marginal fanner**	-	~	1.5(2)	—	15(2)
L	**small farmer**	-	6.5 (6)	3.5 (4)	—	10.0(10)
L	**medium fanner**	25(2)	6.5 (5)	5.0(4)		**14.0(11)**
E	**large fanner**	**2.5 (2)**	1.0 (1)	-		3.50(3)
R	**total**	5.0(4)	14.0 (12)	10.0 (10)	-	29.0 (26)

Source : Field Work
figure in bracket are number of transactions

TABLE 5.9 SIZEWISE PEASANT LAND TRANSACTION(PERMANENT TRANSACTION) IN LELLAPALLI (LAND : ACRES)

		Land owned Buyer				
S			**small farmer**	**medium farmer**	**large farmer**	**total**
E	**marginal farmer**	--	~	5.5(3)	--	5.5(3)
L	**small farmer**			-	-	—
L	**medium farmer**	**1.0(1)**	**1.5(1)**	**1.0(1)**	—	3.5 (3)
E	**large fanner**	-	—	--	**1.0(1)**	1.0(1)
R	**total**	1.0 (1)	1.5(1)	**6.5 (4)**	10(1)	10.0(7)

Source : Field Work
figure in bracket are number of transactions

Who are the Sellers:

Here we would analyse the difference in the nature of the sellers. The character to be studied is the occupation of seller. At Annasamudrum, the number of transactions, the average land per transaction and total land exchanged is large for the non-agriculturists as sellers. Here, 84% of the land is sold by non- agriculturists while 16% is sold by

agriculturists. In both the villages, the number of transactions are nearly equal for agriculturists and non-agriculturists (Table 5 10) The average land transacted is less for agriculturist as compared to non-agriculturist While the total land transacted by non-agriculturist is 20 acres in Medapi, while it is 4.50 acres in Lellapalli while in case of agriculturist it is 9 acres and 2 00 acres respectively The percentage of land sold by agriculturist around 70% for non agriculturist in the two villages. Just like Annasamudram, transfer of land from non-agncultunst to agent to be agriculturist is the villages is witnessed.

At Annasamudrum the main buyers from the non-agriculturists were migrants (at Annasamudrum the migrants purchase 84% of land sold by non agnculturist) with a very small purchase by natives. The average land sold by non-agriculturist migrants is higher then the land sold by non-agriculturist to native The average land sold by non-agriculturist to natives is approximately equal in Annasamudrum and Medapi.

Non-agriculturist are the main sellers in the three villages. But at Annasamudrum a larger extent of land was sold by the non-agriculturist to migrant, while the extent of land so/d by non-agriculturist and non-agriculturist were nearly the same at Annasamudrum and Medapi.

TABLE 5.10: NUMBER OF TRANSACTIONS, AVERAGE AND TOTAL LAND TRANSACTED BY OCCUPATION OF SELLER, NATURE OF LAND AND NATURE OF CROP IN THE TWO VILLAGES (LAND : ACRES)

	Average Land Transacted vil1 vil2 vil3	Total Land Transaction vill vil2 vil3	Number of Cases vill vil2 vil3
Non-agriculture	3.50 **1.37** 1.12	56.0 20.0 4.50 (84) (64) (70)	**16 14 4**
Agriculture	1.60 **0.81** 0.66	16.6 9.00 2.00 *(16) (31) (30)*	10 **12 3**
Total	2.15 1.11 0.92	66.0 29.00 6.50	26 26 **7**
	Average Land Transacted vill vil2 vil3	**Total Land Transaction vill vil2 vil3**	**Number of Cases vill vil2 vil3**
Dry Land	2.66 1.13 0.83	32.0 10.0 2.5 **(48) (34) (38)**	**12 9 3**
Irrigated	2.42 1.10 1.00	34.0 19.0 **4.0 (51) (66) (51)**	**14 17 4**
Total	2.51 1.11 0.92	66.0 29.0 6.5	26 26 **7**
	Average Land Transacted vil1 vil2 vil3	**Total Land Transaction vill vil2 vil3**	**Number of Cases vill vil2 vil3**
Different crop	**4.2** 1.25 1.0	42.0 6.0 2.5 **(63)** *(20) (38)*	**10 5 2**
Same crop	**1.8** 1.08 0.90	24.0 23.0 4.0 (37) (79) (62)	16 21 5
Total	2.51 1.11 .92	66.0 29.00 6.50	26 26 7

where VIL 2 is Medapi and VIL 3 is Lellapalli,
figure in bracket are percentages to *total* Source : Field Work.

Secondly, the nature (irrigated - unirrigated) of lands transferred is analysed. In case of the two villages, larger quantum of irrigated land is entering the exchange as compared to dry land. The number of transactions, average land as well as total land exchanged is high for irrigated land, for the two village. At Annasamudrum, 48% of the total land exchanged is dry land while other villages have around 35% is dry land At Annasamudrum, the fourth migrants' share itself is 20 acres or 30% of total land exchanged in the village. Thus, irrigated land enter exchanges in both the villages which is similar to Annasamudrum village market.(Table 5.10)

As an extension, we have tried to see if there is a change in crop before and after exchange. At Annasamudrum, there is a high percentage of land where the crop is different after exchanged (the percentage is 63%) while the other villages have a preference for maintaining the same crop. At Medapi the ratio is 79% and Lellapalli the percentage is 62% where the same crop is grown after the exchanged. At Annasamudrum the high percentage is due to fourth migrant who increases the percentage by 30% (Table 5.10). In the villages Medapi and Lellapalli, production of same crop is the main feature before and after exchange while at Annasamudrum a change in crop has a high proportion. In both the villages main proportion of dry land entering exchange are for a change in crop.

The main feature of the land exchanged in the permanent transaction market at Annasamudrum that differentiates it from Medapi is the migrant The nature of exchanging are similar in the two villages excluding the migrants who have increased the quantum of land exchanged If one see the quantum of exchanges with natives, at Annasamudram. it is nearly equal to the land exchanged at Medapi. While Lellapalli, is a low turnover village The second feature of the exchanges is the land owned by the two agents. At Annasamudram, the exchanges were from larger land owners to smaller land owners, while at Medapi the exchanges were between middle peasant groups.

B) Variability in Price:

Here, the Average Price paid and received by different size groups of farmers is analysed.

Price paid/received by size ofland holding:-

In case of Medapi, the lowest price received by seller for an acre of land was the marginal farmers, while the price steadily rises as the size of land owned by the seller increased. While in case of buyers, the price paid was again the lowest for marginal farmer, while it increased for small and medium farmers(who pay nearly the same price). The price paid and received in the market by the different size groups were nearly

equal in each size groups, excluding the case of small farmer who payed a higher price as compared to receiving a lower price.(Table 5.11) The lower price maybe a result of sale taking the form of mortgage in these size groups.

While in case of Lellapalli, sellers who were the large land owners got the highest price compared to marginal and medium farmers got the lowest price, with comparable price small and medium farmers(table 5.12).

In case of mean price received by buyers at Annasamudrum, the highest price is received by small and medium farmers with lower price received by other size group. At Annasamudrum, the migrants were main purchases of land from these size groups. While at Medapi, medium and large farmers got the highest price Given the nature of sales at Medapi, which has features of mortgage and sales playing the role of security of repayment the prices in these groups are comparatively low.

So unlike Annasamudram, there are no systematic differences in price across size groups, in these two villages In addition, the results show that at Medapi, the price received by seller and paid by buyer increases as sizewise land holding increases while at Annasamudram, the prices increase upto middle size group and then decreases. As has been described in chapter-IV, migrants had a preference to buy dry lands from large land owners. As the price of land were lower for dry lands as compared to irrigated lands, the mean price of land is lower at Annasamudram as irrigated lands enter exchanges when larger farmers sell land.

TABLE 5.11: PRICE PAID/RECEIVED BY DIFFERENT SIZE GROUPS OF LAND OWNERS AS BUYER/SELLERS IN MEDAPI (price : `000/acre)

	Land Owned by Buyer					
LAND		**Marginal Farmer**	**Small Farmer**	**Medium Farmer**	**Large Farmer**	**Total**
OWNED	**Marginal Fanner**	--	—	17.75	—	17.25
BY	**Small Farmer**	--	17.50	19.5	--	18.5
SELLER	**Medium Farmer**	17.00	19.80	20.25	--	19.01
	Large *Farmer*	18.50	20.00	—	--	19.25
	Total	17.75	19.10	**19.16**	--	

source field work

TABLE 5.12: **PRICE PAID/RECEIVED BY DIFFERENT SIZE GROUPS OF LAND OWNERS AS BUYER/SELLERS. IN LELLAPALLi** (price : 000/acre)

OWNED BY BUYER						
		Marginal Farmer	**Small Farmer**	**Medium Farmer**	**Large Farmer**	**Average**
OWNED	**Marginal Fanner**	—	~	14.00	--	**14.00**
BY	**Small Farmer**	—	~	--	~	--
SELLER	**Medium Farmer**	12.50	16.50	14.00	--	**14.33**
	Large Farmer		--	--	24.00	**24.00**
	Average	***12.50***	16.50	*16.00*	24.00	

source field work

The first character seen is the variation of price according to occupation of seller. At Annasamudrum, agriculturists receive a lower price then the non-agriculturists(table 5.13). The price received by agriculturist is marginally lower then the price received by non-agriculturist in Medapi, while the difference in case of Leilapalli is higher. The S.D of price at Medapi is nearly same for these two sets of agents, while for Leilapalli S.D of price is higher as compared to non-agriculturist. But the variability is the highest in Annasamudrum as compared to other villages.

TABLE 5.13: NUMBER OF TRANSACTIONS AND AVERAGE PRICE IN TERMS OF OCCUPATION OF SELLER AND NATURE OF LAND (price : 000/acre)

	Average Price vil1 vil2 vil3	**Number of Cases** vill vil2 viI3
Non-agriculture	17.95 19.24 19.84 (8.16) (2.40) (5.45)	16 14 **4**
Agriculture	14.00 18.12 14.00 (6.51) (2.54) (2.64)	10 12 **3**
Total	16.32 18.86 17.35	26 26 **7**
	Average Price vill vil2 vil3	**Number of Cases** vill vil2 vil3
Dry Land	9.96 16.16 13.00 (6.51) **(1.58)** (1.00)	12 9 3
Irrigated	20.16 20.23 20.26 (1.85) (1.25) (4.44)	14 17 **4**
Total	19.53 18.82 17.35	26 26 7

where V1L 2 is Medapi and VIL 3 is Lellapalli,
figure in bracket *are* S.D

As is expected, the price for irrigated land is higher then the price for dry land in both the villages.(Table 5.13).

DISTRESS SALES:

Distress sales was estimated by the same procedure as was done in case of Annasamudrum. Given the nominal price of land the real price was calculated using the W.P.I 1980 as a base year. The real price of land was taken as the dependent variable and the quality of land (a dummy with value one for wet land and zero for dry land) was taken as the independent variable. From the estimated equation the mean price of dry and wet land was calculated A distress sale is defined as a case where the actual price **is** 25% below the mean price.

Number of Exchanges of Distress at Medapi :
dry lands : 0
wet lands : 2

[19]The same analysis was not conducted for lellapalli due to less number of transaction.

Unlike Annasamudrum, which has a large number **of** dry **lands entering in this group,** Medapi has only two exchanges of wet **land that** come **under this group. The character** of households in this group are

i. the sellers are small farmers;

ii. the buyers are also small farmers,

iii. the land exchanged is below one acre,

iv. the reason was cash requirement by the household.

Just like Annasamudrum, the cases of distress sales represent adjustment mechanisms to smoothen cash needs at Medapi. But the number of exchanges which are below *25% of mean* price are low at Medapi as there *exist institutions of* sale and repurchase which would also serve the function of meeting cash needs of households.

Difference in the three villages:

1. In case of land transfers, Annasamudram, had tendency for land transfers from larger land owners to middle peasant groups Medapi witnessed transfers in between the middle peasant group, while at Lellapalli the transfers were from smaller peasantry to larger peasantry.

2. The main sellers of land were agents whose occupation is non-agriculture in the three villages. The buyers in the three villages continue to be agriculturist, while the main sellers are non-agriculturists. This has led to a situation where land transfers are leading to decrease in rent income and is a process of adjustment of resources of the households.

3. At Annasamudrum there exist migrants as buyers and no-agriculturists a wilful seller of land, which is absent in the other two villages. At Medapi, farmers do not want to sell and if they have to sell and if they need cash they have generated institutions of sale mediated via a mortgage deal

4. In terms of price variation, Annasamudram as well as Medapi do not show consistent difference in price paid received by each size group But an interesting feature seen is that in case of higher size-class of land holding, the price paid by seller increases for Medapi, while it decreases for Annasamudram. In other words, larger land owners get higher price for their land. While for buyer, the same trend is seen at Medapi but for Annasamudram the highest price is by small and medium farmer with fall in price for other land owing size groups. An explanation of this feature is in terms of quality of land. At Annasamudrum large land owners are selling dry land to migrants(dry lands have lower rice) while at Medapi wet lands enter exchanges in the larger size group.

TABLE 5.14: MEAN AND STANDARD DEVIATION OF VARIABLES IN PERMANENT TRANSACTIONS FOR THE THREE VILLAGES

	VIL 1	*VIL 2*	*VIL 3*
1. Land transacted(acres)	**2.13 (2.99)**	**1.11 (0.56)**	**0.92 (0.37)**
2. price/acre(thousand rupees)	**16.32 (8.79)**	**18.82 *(2.38)***	**17.28 *(4.83)***
3. land owned seller(acre)	**5.84 (3.54)**	**5.65 (325)**	**5.57 (3.60)**
4. land owned buyer(acres)	**4.44 (3.12)**	**4.51 (191)**	**5.07 (1.44)**
5. crop cultivated(D) 1 =if same crop after exchange	**0.59 (0.49)**	**0.80 (0.40)**	**1.00**
6. Occupation seller(D) 1 = if agriculture	**0.37 (0.48)**	**0.46 (0.50)**	***0.42*** **(0.49)**
7. land irrigated(D) 1 = ifirrigated	**0.56 (0.84)**	**0.80 (0.35)**	**0.57 (0.62)**
8. Year of exchange	**3.41 (1.72)**	**3.96 (134)**	4.28 (1.38)

where VIL1 is Annasamudram, where V1L 2 is Medapi and V1L 3 is Lellapalli, D stands for Dummy variable, Value in brackets are Standard deviation.

Based on these observations an attempt is made to study the causes for differences in variability of price/acre and land transacted using regression analysis. Table 5.14 provides the means and standard deviation of the variables. As the number of transactions are low at Lellapalli we have not taken that village into regression analysis of price/rent and land exchanged.

Annasamudram has the highest land that is transacted in the three villages, while Annasamudram also has the largest variability of land transacted. In case of price/acre variable, Medapi has the largest value for price paid, while Annasamudram has the largest variability. As any exchange has two components, here, seller and buyer, we would study the two separately. The land owned by seller has a mean value for all the villages which is around 5.50 acres. The non-agriculturist are the dominant sellers in the three villages.

The land owned by buyer is around 4.50 acres in all the villages While Annasamudram has a large variability of this variable as compared to the other villages. We had collected information on whether the migrant was introducing a change in crop cultivated. Lellapalli had the cultivation of the same crop, while in the village Annasamudram, one saw that there was a change in the crop that was cultivated.

In Lellapalli, on the other hand, the land transacted is low at 0.92 acres per transaction with also the lowest variability in land transacted. The mean value of price/acre (in thousand rupees) is nearly comparable to the other village but has a higher variability as compared to Medapi village The mean value of land sold and standard deviation is nearly the same as the other villages, while at Lellapalli, the buyer of land also has a higher amount of land This village also has witnessed no change in the crop cultivated before and after exchange. Compared to Annasamudram, Lellapalli has a larger number of seller whose occupation is non-agriculture, and dominantly the land exchanged is dry land.

We attempt to estimate two regression equations for the permanent transaction market. In one of the equation we have land transacted as the dependent variable for the second equation, we have price of land per acre as the dependent variable. We estimate a multiple regression equation where the independent variables are variables as defined in the table.

The equation we estimate is

$y_i = a, + a_j x_j$

where i = 1 for land transacted

i = 2 for price/acre

and x_j are the independent variables as specified earlier

Table 5.15 gives the summary statistics of regression result of land transacted The first interesting feature is that Annasamudram has a higher value for constant coefficient while Medapi has a very low value for the constant. The value of constant is not equal to zero for Annasamudram as the value t is significant while for Medapi, the constant is significant at higher values.

The land owned by the supplier does not influence the land transacted in the market (as the t-value is very low) or one cannot reject the hypothesis that the coefficient is equal to zero for the two villages. But the coefficient has positive sign for Annasamudrum i.e., as land owned by the seller increases land exchanged also increased while for Medapi as land owned by seller increases land exchanged decreases in the market. At Annasamudram large land holders are selling while for Medapi, small sellers are the dominant sellers.

The land owned by buyer has a very significant influence on the land purchased in both the villages, but the sign of the coefficient are different in the two villages. (The coefficient are significant in the two villages). In case of Annasamudram, land owned by the buyer is negatively related to land exchanged, while for Medapi, land owned by buyer is positively related to land exchanged. This is a reflection of the nature of buyer in the villages. In case of Annasamudram, the small and marginal groups are the buyers while at Medapi, the buyers are medium level farmers.

The coefficient of occupation of sellers has the same sign for both the villages but the coefficient of Medapi is significant but not that of Annasamudram. This would

imply that the occupation of sellers had impact on land exchanged at Medapi but not at Annasamudram. So Annasamudram has sellers of land who are agriculturists as well as non-agriculturists, while for Medapi non-agriculturists are dominant sellers This would imply that as compared to Annasamudrum, Medapi is witnessed land transfer from non-agriculturist to agriculturist.

TABLE 5.15: FACTORS EFFECTING LAND TRANSACTED AND PRICE PER ACRE IN PERMANENT TRANSACTION MARKET A REGRESSION ANALYSIS

	LAND#	LAND#	PRICES	PRICES
	VIL 1	VIL 2	VIL 1	VIL 2
1. *Constant*	12.88 (7.94)	0.82 (1.77)	*11.15* (4.77)	14.39 (13.35)
2. land owned seller(acre)	0.006 (0.05)	-0.03 (0.84)	**-0.39** **(161)**	0.015 (0.14)
3. land owned buyer(acres)	-11.61 (6.67)	0.14 **(2.21)**	-0.079 (0.98)	0.16 (103)
4. crop cultivated(D) 1=if same crop postexchange	-0.022 (0.19)	0.09 (0.23)	14.99 (10.5)	0.008 (0.09)
5. Occupation seller(D) 1 = if agriculture	-0.038 (0.33)	-0.93 (2.35)	-3.85 (2.13)	-2.24 (2.44)
6. Year of exchange	0.78 (126)	0.86 (104)	0.46 (1.38)	0.26 (154)
R2 value	0.49	0.54	0.69	0.86

land# refers to land transaction and rent$ refers to rent per acre
where VIL J is Annasamudram, where VIL 2 is Medapi, D stands for Dummy variable, Value in brackets are t-values.

Turning to the results on price of land variable Here also the constant term has significant values, has high t-values. In case of Annasamudram and Medapi, the coefficient value is 11.1516 and 14.3949 respectively.

The land owned by seller and buyer does not influence the price of land as the t-values are low. But comparatively it looks that land owned by seller has an impact as the t-value is 1.616 in Annasamudram. While at Medapi, land owned by seller has impact at high value of t-statistic But interestingly, a reversal of signs for coefficients for variables for the two villages is seen. In case of Annasamudram, as the land owned

by seller increases, price of land decreases or larger land owners are able to buy land at cheaper rate. While as the land owned by seller increases, the price of land also decreases. The larger land owners are selling land at lower rate. In case of Medapi, as land owned by buyer or seller increases, the price of land also increases. In other words, larger land owners are paying and/or getting higher price for land. This is a reflection of the quality of land.

In case of occupation of sellers, the coefficient has negative coefficient for both the villages and the value is statistically not equal to zero as the t-value is significant. The agriculturists as sellers get a lower price as compared to sellers whose occupation is non-agriculture. In case of Annasamudram the crop cultivated has an influence on the price which is absent in case of Medapi In other words, as the mean and standard deviation table showed, in Annasamudram, land is being converted from one crop cultivation to another crop. So may be this variable is significant for the village.

Next we would study the lease market.

5.4 : Temporary Transfer of market:

In chapter - V, an analysis of the temporary transactor market was undertaken. Based on the trends in the nature of temporary transfer market, in Annasamudram, the data on the other two villages are studied. The important trends seen in Annasamudram village are

i) The main lessor are medium and large farmers where the lessee are landless, marginal and small farmers.

ii) The non-agriculturists are main(in terms of number of contracts as well as area) lessor and also receive a higher mean value of rent The non-agriculturists as lessor represents a case of rentier income while agriculturists lessor represent a case of adjusting non-

marketed resources. In Annasamudram, the first type of lease arrangement is dominant

iii) In Annasamudram, one does not witness variability of rent received or paid across size groups.

Structure of temporary transfer market:

Land Owned by lessor-lessee:-

The main lessee are marginal fanners followed by small fanners in case of Medapi while landless labour is added in case of Lellapalli While the main lessor are medium level farmers in case of Medapi, in case of Leilapalli the large farmers are also added. The maximum transactions in Medapi (numbering ten) are to marginal farmers as lessee and medium farmers as lessor. In case of Leilapalli, they are marginal fanners lessee to large farmers as lessor(numbering four). In addition the contracts are from larger land owners to smaller land owners, excluding one exchange at Medapi between a medium farmer to small farmer. This gives an impression that the lease arrangements are from large lessor to small lessee.(Table 5.15 and 5.16)

Unlike the case at Annasamudrum, where one sees in addition to small lessee-big lessor. also the presence of big lessor-small lessee At Annasamudrum, out of the 11 contracts where larger land owners lease to small land owners, 7 contracts are taken by migrant

At Annasamudrum, both reverse as well as big lessor-small lessee pattern exist, while in the other two villages one sees only big lessor-small lessee. At Annasamudrum, small lessor-big lessee arrangement migrant has a dominance.

TABLE 5.16: NUMBER OF CONTRACTS AND LAND LEASED BY SIZE (LAND OWNED) GROUPS IN MEDAPI (Land : acres)

		LESSOR			
L		**small farmer**	**medium farmer**	**large farmer**	**total**
E	**landless labour**		2.50(2)	—	2.50 **(2)**
S	**marginal farmer**	5.00(5)	11.75(10)	0.50(1)	**17.25(16)**
S	**small farmer**	-	5.00(4)	6.00 (3)	**11.00 (7)**
E	***medium* farmer**	1.00(1)	—	—	**1.00 (1)**
E	**large farmer**		—	--	—
	total	6.00 (6)	11.25(16)	6.50 (4)	**31.75(26)**

figures in brackets are number of contracts.

TABLE 5.16A: NUMBER OF CONTRACTS AND LAND LEASED BY SIZE(LAND OWNED) GROUPS IN LELLAPALLI (land : acres)

		LESSOR			
L		**small farmer**	**medium farmer**	**large farmer**	**total**
E	**landless labour**	~	1.00(1)	1.00 **(1)**	2.00(2)
S	**marginal farmer**		1.00(1)	**4.00(4)**	5.00(5)
S	**small farmer**	~	3.00(2)	--	3.00(2)
E	**medium farmer**			—	~
E	**large farmer**		—		
	total		5.00(4)	5.00(5)	10.00(9)

figures in brackets are number of contracts.

The first row in each row are the average land while second are the number of contracts.

Land Transacted by Characteristic of Agents:

Are the non-agriculturists the main lessor in the market as was seen **at** Annasamudrum? They form 71% of the leased land in the village The number of transactions by agricultunsts was marginally greater than the number of transactions by non-agriculturists in case of both the other villages. The average area leased out by agriculturists was greater then non-agriculturists in Medapi and in Lellapalli In case of total land leased out, Medapi had a higher total land leased out by non-agriculturists as

compared to agriculturist, which is not the case for Lellapalli At Medapi, 62% was leased by non agriculturists while at Lellapalli, it was 40% So one see that non agriculturists are the main lessor at Annasamudrum and Medapi while at Lellapalli it is the agriculturists who have a larger proportion of land leased out(table 5.17).

But the interesting feature is the number of exchanges by the both agents. At Annasamudrum, 31 out of the 42 contracts are by non-agriculturists while at Medapi, it is 12 out of 26 contracts. In other words the non-agriculturists dominate the market at Annasamudrum while they are in the same ratio in the other two villages.

At Annasamudrum, the non-agriculturist is the main lessor while in the other two villages the agriculturist and non-agriculturist have the same proportion. While at Annasamudrum, lease for lease is a main feature while in the other villages resource adjustment as well as lease are in the same proportions

TABLE 5.17: NUMBER OF CONTRACTS, AVERAGE AND TOTAL LAND LEASED IN TERMS OF OCCUPATION OF LESSOR IN THE VILLAGES(land : acres)

	average land leased vil 1 vil2 vil3	total land transaction vill vil2 vil3	number of cases vill vil2 vil3
Non-agriculture	1.66 1.47 1.12	52.0 20.0 4.0 (71) (62) (40)	31 12 4
agriculture	1.93 1.81 1.10	21 11.7 6.0 (29) (37) (60)	11 14 5
total	1.73 1.22 1.11	73 31.75 10.0	42 26 9
	average land leased vil1 vil2 vil3	total land transaction vill vil2 vil3	number of cases vill vil2 vil3
for consumption	1.61 1.08 0.90	37.0 17.0 6.50 (50) (54) (65)	23 14 5
for market	1.81 1.37 1.37	36.0 14.7 3.50 (50) (46) (35)	19 12 4
total	1.22 1.11	31.75 10.00	42 26 9
	average land leased vil1 vil2 vil3	total land transaction vill vil2 vil3	number of cases vill vil2 vil3
Dry land	1.00 1.00 0.90	4.0 4.50 4.50 (5) (14) (45)	5 6 5
Irrigated	2.25 1.28 1.37	69.0 27.25 6.50 (94) (86) (65)	37 20 4
total	1.22 1.11	73.0 31.75 10.0	42 26 9

where VIL 2 is Medapi and VIL 3 is Lellapalh,
figure in bracket are percentage to total.

The second character of the agents studied is the motive for production by the lessee. The number of transaction by lessee producing for market is marginally greater then the agents producing for consumption. Just like in Annasamudrum the average acre is greater for agents producing for market as compared to consumption. While in case of total area, the agents producing for consumption have larger land than agents producing for self consumption. At Lellapalli, the percentage of lease contracts where agents

produce for the market are low (35%), while at Annasamudrum the percentages are nearly equal for agents producing for market as well as for self consumption.(Table 5.17).

The third feature studied is the nature of land that enter the lease market In case of Medapi mainly the irrigated land entered the lease market, while in the Lellapalli village, the number of transactions of dry land was higher then that of irrigated land but quantum wise irrigated land was higher then dry land. At Annasamudrum and Medapi, a very low percentage of dry land enter the lease market(5%for Annasamudrum and 14% for Medapi). At Lellapalli, 45% of land entering the lease market is dry lands. (Table 5.17).

B) Rent **Variability:-**

Variation of Rent Across size groups:-

In case of 26 transactions in Medapi, the rent has a tendency to decline over land ownership (sizewise) in case of lessee. The maximum rent is paid by the landless labour, while minimum rent is paid by the medium farmer. The mean rent received by lessor also increases as the land ownership sizewise increases. While the in case of Lellapalli, the same tendency exist.(Table 5.18 and 5.19) Unlike the case of Annasamudram, the rent paid by landless labour is higher then for other class groups.

TABLE 5.18: RENT PAID/RECEIVED BY DIFFERENT SIZE GROUPS OF LAND OWNERS AS **LESSEE/LESSOR FOR MEDAPI** (rent : ` 000/acre)

	LESSOR					
L		**marginal farmer**	**small farmer**	**medium farmer**	**large farmer**	**average**
E	**landless labour**	—	—	2.70		2.70
S	***marginal farmer***		***2.52***	2.62	***2.5***	2.54
S	**small farmer**	-	—	2.32	2.76	2.54
E	**medium farmer**	-	2.00	~	-	2.00
£	**large farmer**	--	—	-	--	0.00
	average	-	2.26	2.54	2.63	

TABLE 5.19: RENT PAID/RECEIVED BY DIFFERENT SIZE GROUPS OF LAND OWNERS AS LESSEE/LESSOR FOR LELLAPALLI . (rent : 000/acre)

	LESSOR					
L		marginal farmer	**small farmer**	**medium farmer**	**large farmer**	**average**
E	landless labour	—	-	1.00	1.20	**1.10**
S	***marginal farmer***	-	-	1.20	0.62	0.91
S	small fanner	--		0.95	—	0.95
E	medium farmer	-	2.00	—	-	
E	large fanner		--	-	—	-
	average	—	-	1.01	0.91	

The price received by agriculturists is marginally higher than the price received by non-agriculturists in Medapi, while the difference in case of Lellapalli is higher. (Table 5.20) The S.D of price at Medapi is nearly same for these two sets of agents, while for Lellapalli S.D of price is higher for agriculturist as compared to non-agriculturists. This tendency of higher price for non-agriculturists is also seen at Annasamudram.

TABLE 5.20: THE NUMBER OF CONTRACTS AND AVERAGE RENT BY OCCUPATION OF LESSOR IN THE THREE VILLAGES (rent : 000/acre)

	average rent vill vil2 vil3	number of cases vill vil2 vil3
Non-agriculture	**2.53 2.50 0.77**	**31** 12 4
Agriculture	**2.47 2.38 0.94**	II **14** 5
total	**2.41 2.43 0.86**	42 26 9

where V1L 2 is Medapi and VIL 3 is Lellapalli,
figure in bracket are SD

The second character studied is the motive of production of lessee. In case of Medapi as was seen in Annasamudrum, agents producing for consumption pay a higher rent as compared to agents producing for market. While this trend is reversed in Lellapalli, may be due to the introduction of Tomato farmers leasing land for the production for market(Table 5.21).

TABLE 5.21: THE NUMBER OF CONTRACTS AND AVERAGE RENT FOR AGENTS PRODUCING FOR MARKET AND SELF CONSUMPTION IN THE THREE VILLAGES AND BY NATURE OF LAND. (rent : 000/acre)

	average rent vil1 vil2 viI3	number of cases vill viI2 vil3
for consumption	2.46 252 0.76	23 14 5
For market	2.56 2.33 1.00	19 12 4
total	2.41 2.43 0.86	42 26 9
	average rent vill vil2 vil3	number of cases vil1 vil2 vil3
Dry land	1.70 2.08 076	4 6 5
Irrigated	2.56 2.54 1.00	37 20 4
total	2.41 2.43 0.86	42 26 9

where VIL 2 is Medapi and VIL 3 is Lellapalli,

As was expected quality of land has positive impact on the rent paid. Lessee on irrigated land pay a higher rent as compared to non-agriculturist in both the villages.(Table 5.21)

Difference in this market in the three villages:

i) In case of land leased Annasamudram has a tendency for a combination of 'traditional' and 'reverse' tenancy, while the other two village have features of "big lessor-small lessee". This is based on the land owned by lessor and lessee At Annasamudrum, the village has a combination of small lessee as well as large lessee, while at Medapi small lessee are the main feature.

ii) The lessor are mainly non-agriculturists in all the villages, where lease arrangement are not a response to adjustment of non-marketed resources in production but lease of land as a response to higher income due to non-agricultural activity.

iii) There does not exist variation in the rent paid/received by the different size groups and the rent has a tendency to increase as land owned of lessor increases while it declines as land holding by lessee increases.

Here, we would like to study the vanables that explain the variability in

price/acre and land leased. Table 5.22 gives the mean and standard deviation of variables that influence the price and quantity of land leased variable.

TABLE 5.22 : MEANS AND S.D OF VARIABLES IN TEMPORARY TRANSFER MARKET FOR THREE VILLAGES

	VIL 1	VIL 2	VIL 3
1. land leased(acres)	1.73 (0.98)	1.22 (0.55)	1.11 (048)
2. Rent/acre(thousand rupees)	2.51 (061)	2.36 (0.57)	0.86 (0.51)
3. land owned Iessor(acres)	6.61 (3.39)	6.68 (2.77)	9.77 (3.92)
4. Land owned lessee(acres)	3.17 (3.89)	6.86 (2.77)	1.55 (1.46)
5FR(C)contract(D) J = if FR(C)	0.11 (0.76)	0.19 (0.84)	--
6. FR(K) contract(D) 1 = *if FR(K)*	0.66 (0.42)	0.76 (0.72)	0.44 (0.96)
7. irrigated land(D) 1 - if irrigated	0.84 (0.56)	0.86 (0.42)	0.44 (0.89)
8. occupation lessor(D) 1= if agriculture	0.26 (0.44)	0.53 (0.50)	0.55 (0.52)
9. production decision lessee(D) 1= if produce for market	0.54 (0.50)	0.46 (0.50)	0.44 (0.52)

where VIL is Annasamudram, where VIL 2 is Medapi and VIL 3 is Leiiapalli, D stands for Dummy variable, Value in brackets are Standard deviation.

The land owned by leasing-out agent is around 6.50 acres for the two villages. The variability is higher for Annasamudram as compared to Medapi. The land owned by lessee is higher in Annasamudram as compared to Medapi. The land owned by lessee is 3.17 acres for Annasamudram, while it is a low 1.8269 acres for Medapi. In case of both the villages fixed rent contract is the dominant of contract as compared to fixed rent cash as well as share contract. In case of occupation of leasing out agent, the non-agriculturist is the dominant lessor.

In Leiiapalli village, the land leased per transaction as well as the rent are the lowest in the three village. The mean value of land owned by the lessor is very high at 9.77 acres, which is the highest mean value in the three villages, while the mean value of

land owned by lessee is the lowest (1.55 acres) in the village The variability of land owned by the lessee is also low, so may be this village witnesses the traditional form of lease contracts, where the large land owner leases to small lessee This village does not have fixed rent in cash contracts. The dominant occupation of the seller is agriculture at Lellapalli, where production decision for market dominate.(Table 5.22)

Here, variability of the rent and land leased variable is analysed. A multiple linear regression equation for the land leased and the rent paid In one of the equations, land leased is the dependent variable, while in the second equation rent/acre is the dependent variable. Land leased is expressed in acres while rent/acre is expressed as thousand rupees per acre. The transformation of rent (kind) data was the same as was done at Annasamudram. The equation estimated is

$$y_i = `a_1 + a_j x_j$$

The table 5.23 gives the summary statistics The constant is insignificant for Annasamudram, while the coefficient is significant at 10% level of significance for Medapi. This coefficient also has a negative sign for Annasamudram, while it has a positive sign for Medapi. The nature of contract does not influence the land leased. Irrigation does not seem to influence the quantum of land leased. The occupation of lessor influences the quantum of land leased. In case of Annasamudram, the coefficient has a non-zero value but in Medapi, occupation does not seem to the quantum of land leased. The sign of the coefficient is also alternate for the village. For Annasamudram, the coefficient has positive sign while it has a negative sign for Medapi. In case of lessor who are non-agriculturist, they are paid higher rent as compared to agriculturist. This relation holds also for Medapi.

TABLE 5.23: FACTORS EFFECTING LAND EXCHANGED AND RENT PER ACRE IN TEMPORARY MARKET- A REGRESSION ANALYSIS

	LAND#	LAND#	RENTS	RENTS
	VIL 1	VIL 2	VIL 1	VIL 2
1. Constant	-0.64 (0.65)	1.28 (1.85)	-6.26 (5 01)	0 86 (0.51)
2. land owned lessor(acres)	0.15 (2.63)	-0.015 (0.29)	-0.08 (3.36)	0.001 (0.07)
3. Land owned lessee(acres)	-0.37 (0.71)	0.11 (1.24)	0.04 (0.17)	-0.011 (0.29)
4. FR(C) contract(D) 1 = if FR(C)	-0.07 (0.51)	-1.01 (1.20)	-1.25 (2.77)	-1.59 (4.40)
5. FR(K) contract(D) 1 = if FR(K)	0.101 (0.62)	-1.70 (0.02)	0.39 (2.17)	-2.29 (8.25)
6. occupation Iessor(D) 1 = if agriculture	1.12 (2.63)	-1.95 (0.52)	-0.50 (2.29)	-2.79 (1.73)
7.production decision lessee(D) 1 = if produce for market	-0.033 (0.18)	3.80 (1.00)	-0.03 (0.27)	1.69 (1.13)
R2 values	0.28	0.37	0.62	0.89

land# refers to land transaction and rent$ refers to rent per acre
VIL is Annasamudram, where VIL 2 is *Medapi,* D stands for Dummy variable, Value in brackets are t values.

The two interesting variables in the analysis are the land owned by the lessor and lessee. Land owned by the lessee, this variable does not influence the land leased-in, as the t-values are very low An alternation of the sign of the coefficient was witnessed in the two villages. In case of Annasamudram, as the land owned by lessee increases the land leased increases while for Medapi as the land owned increases the land leased-out also decreases. Small farmers are lessee in Annasamudram, while large fanners are lessee in Medapi, but this relation is not significant. In case of land owned by lessor, this variable is not equal to zero for Annasamudram but is equal to zero for Medapi, as the t-value is significant for Annasamudram but not for Medapi. For Annasamudram, as the land owned by lessor increases, the land leased out also decreases, while in Medapi, as the land owned increases the land leased out decreases. So may be large land owner are lessor at Annasamudram and not at Medapi.

5.5 : Relations between the two markets:

Lellapalli is a dry village with a low turnover in he permanent and temporary transaction market. In other words there does not exist resource adjustment in either of the markets. This represents the case of low transaction in market. The villagers maintained an absence of demanders of land.

Medapi the command area village has adjustment in both the markets The opinion on the market was the absence of sellers in the market so adjustments are made in the temporary market The temporary has the presence of both adjustment of resources as well as lease for rent This village has feature of the case type of economy.

At Annasamudrum, one sees that in the permanent transfer market migrant is the buyer while non-agriculturists are the sellers. The non-agriculturists have taken advantage of the higher price paid by land to dispose land after the entry of migrant. So one sees a large extent of land entering the market, while temporary transfer market sees non-agriculturist as the main lessor. This village has feature of modern market with high turnover in he two markets

Section 5.6: A Model on Land Market

One of the opinions on the land market is that sales-purchase market is inactive while the lease market is active [Bliss and Stern(1984)], Bardhan(1984), Walker and Ryn(1989)]. Here, an attempt is made to see the nature of land market, see if the demand function have the correct sign and lastly the nature of transfers in the market.

Singh(1982) identifies the supply of land to be a function of price per acre, ownership of land by seller, absentee peasant class status of seller and ownership of land by absentee landlord or peasant class status. While the demand for land is a function of price of land and land owned by buyer His estimated equation of supply function had a positive coefficient for price variable, land owned by seller, peasant class status and

interactive term of land owned by seller and peasant class status While the demand had a negative coefficient for price variable and positive coefficient for land owned by buyer.

One of the important, but less studied, agency of change in the land market is peasant migration for land As has been described earlier, Andhra Pradesh has witnessed quite a large quantum of peasant migration A peasant migrant activates the land market in two ways. Firstly, the peasant migrant is a demander of land and would influence the price variable in the market At a second level, a migrant introduces a new crop into the village they have migrated to This would expand the opportunity set of the agents in the village as well as change the allocation of resources in the village in specific for land This would change the demand and/or the supply function of land.

In case of permanent transaction market, data on exchanges of four years are considered. while in case of temporary transaction market, lease data for one year is analysed Time does not have a statistically significant influence on price in the two villages. The analysis has features of cross section data and this is used to estimate the demand and supply functions of land The data on temporary transaction market is cross sectional data At a point of time, the demand and supply function define the price and the variation is described in terms of characteristics of agents and their resources. 1 and market exchanges are defined as resource adjustment process of agents w.r.t land. Here, an attempt is made to study shifts in demand and supply functions in terms of the land owned by the agents.

We have two villages with different conditions. One of the village, Annasamudram is a lnam village with migrants and the land is cultivated using canal water. While Medapi is a Ryotwari village, and the land is cultivated using canal water. We would like to study the nature of demand and supply function of land for the two villages excluding the case of Lellapalli as the number of transaction in this village are low.

A General Model to Study Land Market

Land market has two markets namely, permanent transaction **market** (sales-purchase) and temporary transaction market. In each of the markets quantity of land demanded $[q^D]$ is postulated to be a function of price/acre of land as well as the resource position of the buyer.

$$q^D = b_1 + b_2 P_t + b_3 L_1 \quad \ldots (1)$$

where P_t is price/acre, and L_1 resource endowment of the buyer

We consider land owned by buyer as the resource endowment of buyer.

In the same way, the supply function $[q^s]$ of land is postulated to be function of price/acre and resource endowment of seller. We consider land owned by seller as the resource endowment of seller.

$$q^s = a_1 + a_2 P_t + a_3 L_2 \quad \ldots (2)$$

where P_t is price/acre and L_1 = resource endowment of the seller.

In the above model, B_2 and a_2 are the price responsiveness to quantity demanded and supplied respectively. B_3 is the responsiveness of land owned by buyer to quantity of land demanded, while a_3 is the responsiveness of land owned by seller to quantity of land supplied. In this model land owned is taken for analysis as the resource endowment variable.

If the supply and demand functions are normal i.e., the price variables have correct signs, then shift in the supply and demand curve can be studied using the signs of the resource adjustment variables Here, we would use these signs to study in a comparative static framework the nature of land market activity.

CASE-I : L_1 and L_2 Coefficient **have positive sign:**

This is a case where demand curve shifts to the right as land holding of the buyer increases, and the supply curve of land shifts to the right as the land holding of

seller increases. So large land owners (Buyers) demand more land, while large land owners also supply more land.

In an agrarian economy, this has interesting implications Agents in an agrarian economy would like to own more land, as land is a factor of production as well as a hedge against uncertainty. So the shifts in demand functions looks normal but not the supply function. Here, the larger land owner as sellers want to sell more land One possible explanation for this could be that the seller in the market has an expected income in non-agriculture which is greater than in agriculture. An agent whose occupation is agriculture would not be wanting to sell off land so these sellers could be non-agriculturists who have a higher expected income in non-agriculture. These types of sales do not represent the case of "distress sales" but represent the case of regular sales i.e., sales without an interest to repurchase and these sales are not a result of temporary shock.

Similarly in case of lease market, as the land owned by lessee increases the demand for land leased-in also increases, while as the land owned by lessor increases the supply of land also increases. May be a part of the large land owner are non-agriculturist owning land and thus want to lease-out While in case of demand for leased-in land, as the size of land increases the demand for land also increases. This form of lease arrangement does not represent the regular case of "Traditional lease pattern" where a large land owner is a supplier of land to a small/marginal farmer.

CASE-II : L_1 and L_2 have negative coefficients:

This is a case where demand curve shifts to the left as land holding of the buyer increases, and the supply curve of land shifts to the left as the land holding of seller increases. So large land owners (Buyers) demand less land, while large land owner supply less land. This would imply that as land holding of seller increases the seller would decrease the supply of land, while as land owned by buyer increases the demand for land of buyer would decrease.

Unlike in Case 1, here the demand function of land that looks specific. Here, the agents don't demand land as the land owned increases, i.e., the agents don't want to buy more land, while the large land owners as suppliers have an incentive to own land but the demanders don't want to increase their holding. In case of supply function, the suppliers have incentive to own land and so any sales that take place could be "distress sales" as land holding sellers don't have incentive to sell. Given the signs of the two coefficients, this case looks to represent a "traditional economy" as the buyers have no incentive to increase their holding while sellers don't have incentive to sell land resulting in static land holding structure(which is one of the features of traditional economy).

In case of lease market, as land holding of leasing-in agent increases the demand for leased land decreases, while as the land holding of leasing-out agent increases the supply decreases The demand side factor depicts a situation of traditional form' of lease arrangement, while the supply function depicts constraints in supply of land by large farmers . May be this form of demand and supply function of leased land shows a case of small/marginal farmer to small and marginal farmer.

In case of concentration, here, there is possibility of maintenance of the same level of concentration of land or an increase in concentration.

CASE-III : L_1 has positive coefficient while L_2 has negative coefficient

This is a case where demand curve shifts to the right as land holding of the buyer increases, and the supply curve of land shifts to the left as the land holding of seller increases. So large land owners (Buyers) demand more land, while large land owners as suppliers, supply less land As the land holding by the buyer increases, the quantity of land demanded increases, while as the land holding by the seller increases the quantity supplied of land decreases.

Here, the agents behave in such a pattern as to retain holding of lands The larger land owners want to increase their holding, while the **land** owners as sellers **want to** retain **land.** As agents have incentive to own land, any sales **of land** have to be "distress sales" while buyers want to increase their land

In case of lease market, lessor who own larger land want to supply less of **land,** while lessee with larger land owning have positive shift in demand curve. This type of lease arrangement has the features where lease is from small/marginal farmers to small/marginal farmers.

CASE-IV : L, has negative coefficient while L_2 has positive coefficient

This is a case where demand curve shifts to the left as land holding of the buyer increases, and the supply curve of land shifts to the right as the land holding of seller increases. So large land owners (Buyers) demand less land, while large land owner as suppliers supply more land. In this case, as the land owned by buyer increases, the quantity demanded would decrease, while as the land owned by seller increases, the quantity supplied would decrease. This depicts a very peculiar situation where both demand and supply function has specific features Here, it looks to be a situation where agents don't have incentive to own land This might represent a case where agents migrate out (like labour migration in Mahaboobnagar) due to forced natural conditions and are ready to sell land but there is less demand in the village economy.

While in case of lease arrangement, as land owned by lessee increases **the** quantity demanded would decrease while as land owned by lessor increases supply would increase. This form of lease arrangement has the features of traditional lease market.

	Coefficient of L1	Coefficient of L2	permanent exchange	Temporary exchange
CASE 1	+ve	+ve	Regular exchange	Reverse tenancy
CASE 2	+ve	-ve	Interim exchange	Reverse tenancy
CASE 3	-ve	+ve	Distress exchange	Traditional tenancy
CASE 4	-ve	-ve	Interim exchange	Reverse Tenancy

Regression Analysis:

In an econometric estimation of these functions one would face two problems. One is that the land holding variable is itself an endogenous variable which in the long run would violate the assumption of exoginity of variable for estimation. We assume that land holding variable can be assumed to be exogenous in the short run and we estimate the demand and supply functions in the short run. The second is the simultaneous equation bias in estimating the supply and demand functions. So we estimate the reduced form of the equation and then calculate the value of the variable in the standard form equations. We would not be calculating the t-value for the standard form equation.

Standard form equations

$q^n = B, + B_2P_t + B_3L_1$

$q^s = a_1 + a_2 P_t + a_3 L_2$

Table 5.24: Sign of land owned by both agents and Price Coefficient for Permanent Transaction Market:

Variables	Annasamudram	Medapi
sign of price variable in demand function	-ve	-ve
sign of price variable in supply function	+ve	+ve
sign of land owned by buyer in demand function	+ve	-ve
sign of land owned by seller in supply function	+ve	-ve

Table 5.25: Sign of land owned by both agents and Price Coefficient for Temporary Transfer Market:

Variables	**Annasamudrum**	**Medapi**
sign *of price* variable in demand *function*	-ve	-ve
sign of price variable in supply function	+ve	+ve
sign of land owned by buyer in demand function	+ve	ve
sign of land owned by lessor in supply function	+ve	-ve

For the two village, Annasamudram and Medapi, we see that the signs of the price responsiveness of demand as well as supply curve have the correct signs. In other words the demand curve is downward sloping while the supply curve is upward sloping.

In case of the coefficient value of L_1 and L_2, we see that Annasamudram village has positive coefficient for both variables while Medapi has negative coefficient for both variables in the study period. So Annasamudram represents Case I type of village, while Medapi represents Case 11 type of village economy.

In case of lease market, we see that the demand function for land, the signs of the variables are correct but in the supply function the price responsiveness of the supply function has -Ve sign i.e. as the rent of land increases the supply of land for lease also decreases. In other words the supply function for land looks perverse for both the villages. Under conditions of inter-linkages of markets where the agents are not price responsive, this result may be expected.

Annasamudram, looks to represent the case IV type of economy in the study period, or the case of traditional form of lease arrangement. While Medapi represents Case III type of economy but one has a perverse supply function for land for the two villages in the study period. This would imply that, in case of Annasamudram, larger land owners want to supply more land in the lease market, while at Medapi, larger land owners supply less land in the market. In other words,

Annasamudram has a tendency for reverse tenancy' as compared to Medapi, which has tendency for traditional form of lease.

In a comparison of the two villages, Annasamudram land market has a tendency for dominance of regular transaction in the permanent transaction market, while Medapi has a tendency for interim sales in the market in the study period While in case of lease market, Annasamudram has a tendency for reverse tenancy[1] as a comparison to Medapi which has a tendency for traditional form of lease arrangement in the study period.

CONCLUSION:

1. In the three villages the village Lellapalli has feature of a low transaction village or the number of transactions of land are low as well as the land transaction are low.

2. In case of permanent transaction, Annasamudrum has a feature of regular transaction while Medapi has feature of interim transactions. The signs of the supply and demand function are correct for the two villages.

3. In case of temporary transaction, the supply function is perverse in both the villages. In addition Annasamudrum has feature of regular transaction while Medapi has feature of big lessor-small lessee.

CHAPTER - VI

SUMMARY AND CONCLUSIONS

Land market transactions involve the transfer of property rights on land between two agents. The transfer could be a permanent transfer or a temporary transfer of land If an agent transfers the right to use the resource for a particular period to another agent, the transfer is called a temporary transfer of land A transfer is called a permanent transfer if the agent transfers the ownership right to another agent An example of a temporary transfer is lease arrangement while an example of a permanent transfer is the sale of land.

Empirical studies on rural land market show a low turnover in the permanent transfer market and a high turnover in the lease market [Bliss and Stern(1984), Dreze(1997), Bardhan(19984), Guhan(1985) etc] In the introductory chapter an attempt was made to classify the relation between the two markets Here, land was taken as a productive asset and exchanges in the market was seen in terms of resource adjustment process between households. Four cases were identified, one was of low transaction in both the markets. The second was high transaction in the lease market and low transaction in permanent transaction market implying a case of resource adjustment in lease market. The third was of high transaction in permanent transfer market and low in temporary transfer market, representing a case of adjustment in the permanent transfer market. While the last case of high transaction in both the markets representing a case where adjustments are in both the markets.

In Andhra Pradesh an interesting but less studied process of high turnover in the land market has been the case of peasant migration into areas which have the potential for getting assured water for irrigation through canals of large Dams The land based peasant migrations leave their village of origin and migrate to another village and introduces a new crop or methods of cultivation in the village they have migrated into.

These migrants originate in four districts of Andhra Pradesh, which had a long history of cultivation using assured water supply by canal water, which was a result of building of ayacut on the Krishna and Godavari rivers by Sir Arthur Cotton. These peasants, who had the skill and knowledge to cultivate using assured water supply, migrated to new command areas where the peasants were cultivating dry crops. These migrants utilised the skill and knowledge that they had gained in their village of origin and migrated to areas where firstly there was a potential for assured water supply for cultivation, secondly the land was available at cheaper price and thirdly the villagers of new destination do not produce crops on which the migrant has skill and knowledge Nagaraju[1990] identifies these forms of peasant migration for land as development initiating migration or in the words of Petterson 'innovative migration'.

The objective of the study was to see peasant migration, which generates a high turnover in the market, as a process of generation of active land market where activity was identified as price responsive behaviour of agents. This study is on the migration induced land market activity rather than migration per se i.e., the study of push or pull factors for migration or the reason for migration, though this would have provided a more comprehensive picture on migration as agency of change.

The Chapter 1, tries to describe a migrant. A migrant is seen as a peasant who has migrated from a region which had a long history of cultivation of wet crops like sugarcane, paddy, etc. These peasants had the skill/knowledge of cultivation of wet crops i.e., they knew the sequencing of inputs, the timing of inputs and quantum of inputs to cultivate the crop. This set of skill/knowledge on the cultivation process is defined as the information set of the agent. These migrants have migrated to areas which were earlier dry, rainfed areas. The crops that were hitherto cultivated in these dry areas were those like jowar, bajra etc. The peasants in these areas had information on the cultivation of these dry crops. With the coming of assured water supply in the canals, the earlier dry land had the potential to be irrigated. But the peasants in the

villages lacked information on cultivation of the wet crops. So one process of transfer of information has been via the migrants who had information on the cultivation of wet crops in the area of origin So here we describe a migrant as an informative agent. In case of choice of village for migration, an interesting feature seen is that migrants generally move into areas where the non-agriculturist own land. The studies of Maddulety(1989), and Tnpathy (1985) show it.

For the purpose of the study a village with the presence of peasant migrants, `Annasamudram', in a command area was selected. The village had three features. One, the existence of sizable proportion of migrants, two, it had got assured water supply through the Right Bank canal of Nagarjuna Sagar Dam and lastly, it is an Inam village. All these features independently and also collectively have an impact on the land market activity. This village has nearly 10% of its population as migrants who own nearly 10% of the cultivated land Before the release of water in the canal, this village was part of a rainfed region with cultivation of dry crops like jowar, bajra etc. But interestingly, this village had a tank which had attracted migrants before the arrival of water in the canal This tank had the potential to irrigate 200 acres of land in this village. In the 1960s, the first set of migrants came to Annasamudram and had taken the tankfed land on a permanent lease (i.e., 99 year lease). They had planned to cultivate cotton crop on the land. But the failure of the land to respond to the cotton crop led them to change the crop to other crops As the land was not responding to the crops that they had plans to cultivate, the migrants were not able to pay the rent. So the Inamdar, who had given the land on lease, applied pressure on the migrants to leave the village, a move supported by the villagers. The 1970s saw the entry of the second stream of migrants who also wanted the tankfed land. They wanted to introduce paddy crop into the region. These migrants had purchased the same piece of land from the Inamdar. But this had led to a case of litigation between the two migrants for ownership rights on land This case as yet is pending in the court.

The third set of migrants came after the release of water in the canal areas in the 1980s. These migrants introduced paddy and red-gram in the village. This phase witnessed a large scale conversion of land to paddy land in the village. The main sellers of land being Inamdars as well as permanent tenants The land market contract generated by the people in the presence of the Inam form of tenure were interesting. From the legal side, the Inamdar was the owner of land and the cultivators were recognised as permanent tenants on the land In the context of implementation of the Inam Abolition Act the land owner gets one-third share of the land and permanent tenant receives two-third share of land. So the exchanges in the land market were a reflection of the future rights on land of farmers, under the condition of the Inam act in the village The permanent tenants were selling user rights on the land while the Inamdar was selling the ownership rights. Conflicts arose when the same land had been sold with different rights. But in majority of cases different pieces of land have been sold.

The third phase was followed by the entry of a lone migrant in 1995 introduced cultivation of Banana crop under borewells. The impact of this migrant was not assessed in this study.

With the entry of third phase of migrants and the release of water in the canals, one saw an increase in the turnover in the land market as was also seen in the studies on peasant migrations. This phase can be divided into three sub-phases. The first sub-phase from 1978 to 1983 was the dormant phase of the land market. The second sub-phase was the high turnover phase - 1984-89, a phase where the migrant was an active player in the market. The third sub-phase was from 1990 to 1995, a phase where native was the active player in the market. The first sub-phase has witnessed a low turnover in the market, while the second and third sub-phases has witnessed more or less the same number of transactions. The trend in price variables shows a tendency to increase over these three periods, while the average quantity transacted was highest during the second phase, where the migrant has played the dominant role. In terms of

coefficient of variation of pnce, the second phase had the highest variation, followed by the third phase. The coefficient of variation of quantity transacted is very high in the third phase. We have taken the third phase for analysis

Permanent Transfer Market:

The trends seen in sale and purchase market in Annasamudrum were

a. the transfer of land were from larger farmers to smaller fanners generating a "middle peasant" economy,

b. The sellers of land were mainly non-agriculturists This would imply a transfer from "rentiers" to agents who were adjusting their resources of land.

c. The migrants as buyers influence the quantity of land purchased in the market but not the price of land when compared to natives.

d. Castewise, the sellers were Vaishya while the buyers were Kamma caste group

e. There does not exist any systematic difference in the price of land across sizewise land distribution. In other words, there was no tendency for distress sales in the market.

f. In addition, the land transacted in the market was influenced by the land owned by the buyer but not by the land owned by seller, while, price of land was influenced by land owned by the seller but not the buyer. Price of land was dominantly influenced by supply-side factors, while the quantum of land transacted was influenced by demand-side factors. This represents a case of resource adjustment by the buyer in the market. The buyer, which also consist of the migrant, is interested to buy land based on their resource position and purchasing power and are ready to pay the price as specified by seller. The price of land is influenced by seller who are non agriculturist who want to dispose of land and move into urban area.

Temporary Transfer Market:

The trends seen in Annasamudrum temporary market were:

a. The village lease pattern has a combination of "traditional" and "reverse" tenancy. In other words, the village has lease transactions from large lessor to small lessee as well as small lessor to large lessee.

b. The lessor in the village was mainly the non-agriculturist The agriculturist lessors who were adjusting their land to labour while non-agriculturists were leasing due to two reasons: firstly, as land holding in the economy was a hedge against uncertainty in the economy, secondly, as these agents have a higher non-agricultural income

c Castewise, the Vaishyas were the lessors and the Kammas were the lessees.

d. A study of variability of rent brought out some interesting features. This village had four cases of no rent land In these four cases, one case was of an attached labourer while the rest were cases where lessor lease-out land for conversion of land to canal irrigated land. A study of share of rent to output brings out the feature where variability of rent to output was low, in other words, one does not see large variability of rent to output. This would imply that quality of land was a pre-dominant factor explaining variability in rent. This village witnessed only seven transactions where the share of rent to output was low. All these transactions were linked transactions where the lessees provide labour services to the lessor.

e. The migrant native character of lessee influences the rent and not the land leased The land owned by lessor agent influences the land leased as well as rent variables. The quantum of land leased and rent are mainly influenced by characters of the lessor or the supply side factors excluding the influence of migrant as lessee on rent. The lease market looks to be a lessor market with the lessor defining the amount of land leased as well as quantum of rent in the market The migrants response is a chararterstically resource adjustment response where migrant's who might be facing financial constraints, in permanent transaction market, lease in land. To lease land they face competition with the natives who are also leasing land so they pay a higher price compared to native to lease land.

Comparative Analysis of Land Market in the three villages:

To study whether the above features were specific to migrant-canal irrigated Inam village or applicable to other villages too, two other villages with different features were studied so as to compare the nature of activity in the land market. One of

the villages selected was a dry non-migrant non-Inam village, namely Lellapalli, while the second was a non-lnam, command area village namely Medapi One had attempted to study the nature of land market activity in these two villages.

Annasamudram, the migrant command area village, had three features which were important for the entry of the migrant and larger turnover in market. First, this was an Inam village with large extent of land owned by non-agriculturist. Secondly, the failed experiment of second stream of migrants to introduce Paddy into the village The entry of the fourth migrant was a result of increase in water table due to the canal water. The dominant exchange was between the migrant and the non-agriculturist. These sales were outright sales, with non-agriculturist selling land and wanting to move to semi-urban or urban towns. The non-agriculturist were large land owners, while buyers were smaller land owners resulting in a transfer of land to middle peasant groups. This village does not have a tendency of marginalisation of small farmers but on the contrary one sees marginal farmers converting land into paddy land for self-cultivation. There were only few cases (3) where marginal and small farmers have become landless labour. An interesting feature seen was the out-migration of carpenters from the village to dry village on diversification into other business. At a broad level one sees the B.C. groups either diversifying or out-migrating.

Medapi, the command area village, is a ryotwari village with a dominance of owner cultivators. This can be seen in terms of the low proportion of land leased by non-agriculturist to total land in the village. Unlike Annasamudram, their village had only one condition necessary for the entry of the migrant, which is the release of water in command area. This village did not have a dominance of non-agriculturist in the village and Paddy crop was being cultivated by cultivators in the tank bed land of this village. This led to a different form of exchanges in the village. Unlike outright sales by non-agriculturist (with jobs in urban areas) here sales were a result of short term cash needs. The form that got generated was "mortgage" by deficit income households to surplus

income households. The deficit income households needed cash for consumption or to run business in town income households The nature of exchanges was dominantly in the same land holding as well as caste group The reason was the surety of return of land in these groups. The large land owners wanted to buy land but land was not entering exchanges. The change in crop has resulted in upward shift in income but the small and marginal farmers in the village are just meeting their subsistence. (An opinion expressed by the villagers was that one year if water is not released they would face severe crises.)

Lellapalli, the dry village, has a different path of change. This village was a traditional, subsistence village. In 1994, a recently retired teacher, heard of the price difference in this region and Guntur for vegetable crop. This teacher was cultivating vegetable crops in their village. The crops cultivated were tomato, brinjal etc Taking the advise of agricultural extension officer, he expanded the scale of operation of the vegetable crops to 1/4 acres and started to sell to traders at Thriparanthakam who used to send it to Guntur Market. So in this village, small extends of lands are converted to vegetable crops sold outside the village. So unlike the other two villages here dry crops are cultivated for consumption while vegetable are sold in market Though one did not witness a marked rise income levels, as yet, this village has a hedge against external shock and may be able to meet their subsistence.

Permanent Transfer:

The trends seen in the villages are

a. The number of transaction were high at Annasamudrum followed by Medapi and then by Lellapalli. The average area transaction was also very high at Annasamudrum followed by Medapi and then Lellapalli. The high transaction in the market was under conditions where the migrant was the main purchaser.

b. The average price of land per acre was high at Medapi followed by Lellapalli and then Annasamudrum. The price of land was low at Annasamudrum compared to Medapi, as Medapi is a road side village. The average price at Lellapalli was lower than the other

villages if one excludes an extreme case which has pushed up the price. This was a wet land in the village(irrigated by community wells) and the production of vegetable for the market.

c. In case of land transfers, Annasamudram, has the tendency for land transfers from larger land owners to middle peasant groups In Medapi, one witnessed transfers in between the middle peasant group, while at Lellapalli the transfers were from smaller peasantry to larger peasantry.

d. The main sellers continue to be agents whose occupation is non-agriculture in the three villages. But the nature of interactions were different in the villages. At Annasamudrum, the non-agriculturist, sells a larger extent of land as compared to the other villages and the main purchasers were the migrants.

c. At Annasamudrum, the sales were outright, while at Lellapalli, the sales were channelised via mortgage, or in other words the seller, mortgages the land. While at Medapi, also the sales were via mortgage. In Lellapalli, the opinion was that there were no purchases of land, in Medapi, there were no sellers of land, and in Annasamudrum, the migrant was the main purchaser and the non-agriculturist was the main seller.

f. Annasamudram as well as Medapi do not show consistent difference in price paid received by each size group in terms of land holding.

Temporary Transfer Market:

The trends seen in the villages are

a. The maximum number of transactions as well as maximum area leased to cultivable area is greater at Annasamudrum village(5%), with lower proportion(below 1%) followed by Medapi and then by Lellapalli. The total area as well as average area follow the same trend.

b. The average rent paid was highest at Annasamudrum followed by Medapi and then Lellapalli as was seen the migrant as main lessor who pushes the price up at Annasamudrum.

c. In case of land leased, Annasamudram has a tendency for a combination of 'traditional' and 'reverse' tenancy, while the other two villages have features of "traditional lease". The migrant as lessee had more reverse lease contracts.

d. The lessors were mainly non-agriculturists in all the villages, where lease arrangements were not a response to adjustment of non-marketed resources in production but lease of land as a response to higher income due to non-agricultural activity. In Annasamudrum, the main lessor was non-agriculturist in terms of area as well as number of transactions, while at Medapi as well as Lellapalli, the area as well as number of transactions by both agriculturists and non-agriculturists were the same. At Annasamudrum, lease arrangement were a response not to adjustment of non market resources in production for lessor but lease of land by lessor as a response to higher income due to non-agricultural activity, while at the other two villages there was an equal proportion of both the sets of agents.

e. At Lellapali village the lease of land takes the traditional form of linkages between land and labour contracts. A large land owner leases a small fraction of land to smaller farmers and in return the labour was an attached labour on the farm land owner. In Medapi as well as Annasamudrum a different form of lease exist. In Medapi, if the lessor was a cultivator, the labourer provides labour during labour scarce periods and if the lessor was a non-cultivator then there were no other exchanges. At Annasamudrum, in case of non-cultivator there were no other exchanges in other markets. In case of big lessor-small lessee, the lessee provides labour services to the land owner, while in case of small lessor and big lessee there were no labour exchanges. The latter form of contract were dominated by migrants lessee.

As an extension an attempt was made to analysis activity of land market in terms of supply of and demand for land. In case of permanent transfer market, one shows that the supply and demand function had the correct signs, while in case of temporary transfer market the supply function was perverse in both the villages.

In addition, regarding permanent and temporary transfer markets, for Annasamudram, one sees the transfers to be of a regular nature, while Medapi the transfer had a feature of interim nature. Secondly, the village Annasamudram has the feature of reduction in land concentration over time while for Medapi, it looks that the concentration would increase or be stable over a period of time. Moreover, in the temporary market, Annasamudram has features of regular lease arrangement, while Medapi has features of reverse tenancy.

Lellapalli, represents the case of low turnover in the two markets i.e., adjustments were not in either of the markets. The reason for the low turnover in the market and the low price is the result of this being a dry village with the cultivation of dry crops. These crops were subsistence oriented crop and so the opinion with the villages that they are ready to sell land but no one wants to buy here. A change in crop with higher marketable value would generate demand for land thus increase the price and also the area transacted. In Medapi, the release of water in the command area increased the area under paddy cultivation generating demand for land. Unlike Lellapalli, here, peasants do not want to sell land so the form of exchanges are mortgages. The forms of exchanges, here, depict a case of low turnover in permanent transaction market and higher turnover in the temporary market i.e., a case of adjustment were in the temporary transaction market. Annasamudrum, the command area village, had the entry of migrant who had information on new crop to be cultivated in the village and generated demand for land. Unlike Medapi, here, there was the presence of non agriculturist who wanted to sell land and the migrant wanted to purchase land. So in Annasamudrum these was high turnover in both the markets and adjustment taking place in both the market. Households who had purchasing power were buying land with households with less of money leasing in land.

In the three village, there are three different process of change. In Annasamudram, the migrant, with information on paddy cultivation generated demand for land and the supply of land was by non agriculturist. At Medapi, the existing

information on tankfed cultivation was used to converts all lands to canal irrigated paddy lands. This change brought about demand for land but land owners were not selling land but were mortgage land. While at Lellapalli, the dry crops did not generate demand for land resulting in low turnover in land. A recent change was marketing of vegetable crops in small scale which was result of difference in price of the crop between this village and Guntur market. This has the potential to generate demand for land in the village.

Annasamudram, a migrant command area village has witnessed, firstly, transfer leading towards middle peasant economy, transfers from non-agriculturist to agriculturist and secondly, an active land market. While Medapi, a command area village, had witnessed mortgages, which can be seen as interim market for land, with sales predominantly in the middle size groups . Lellapalli, the dry area village, had witnessed a low turnover in the market.

The thesis uses three tools of institutional economics to analyse the contracts in the land market. One, to see land transfers as a resource adjustment process at the household level. Two, to consider information differences (which gets reflected in change in crop cultivated) as a category to explain peasant migration. Three, to analyse the variation of contracts in teams of characterstic of agents.

In an economy with the cultivation of the same crop, resource adjustment are mainly in the temporary transfer market. The form of the temporary transfer is big lessor-small lessee. In case of a change in crop two processes of change are envisable. One if the economy, does not have non agriculturist as land owners, peasants themself adopt to the change and cultivate the new crop, while the second process is one where, an 'information' agent, like peasant migrant, enters the village. In case of the first form of change, owner cultivation would be dominant form of cultivation, leading to low turnover in the permanent transfer market and adjustment would be in the temporary market. A necessary condition for the second process of change, i.e., the entry of the

migrant, is the presence of seller of land in the village One type of seller is the non-agriculturist who owns land in the village and wanting to sell land and move to urban areas. The combination of migrant as buyer and non-agriculturist as seller leads to resource adjustment mainly in permanent transfer market in the early stage This stage is followed by low turnover in the permanent transaction and higher turnover in temporary transactions with the peassants learning the process of cultivation and the market for adjustment in the second phase Peasants, who face money constraint to buy land would adjust in the temporary transfer market. So unlike the general opinion of low turmover, here, in the presence of peasant migrants a high turnover in permanent transaction market is seen and resourse adjustment is mainly is mainly in permanent market. This form of peasant migrations plays two roles With a failure of land reform as a policy, peasant migrations plays one role envisaged by the policy of transfer of land from non agriculturist to agriculturist Two, one witnessed transfer of land to middle peasant economy from large land owners

Thus, three simultaneous process resulting with the entry of the migrant is the transfer of land from non agriculturist to agriculturist, the generation of middle peasantry and absence of distress exchanges in both the markets So, peasant migrant, an "information agent" in addition to introducing new crops and techniques of productions increases the turnover in the market leading to activisation of the land market.

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