Introduction

The desert of Thal lies along the left bank of the Indus River in Punjab Pakistan, having five million acres area (Mehar, 2003). The plan of Thal Canal Colony Project had prepared by the Punjab Government in 1873 but was delayed till 1939 by the British because they prioritized other projects such as Bhakra Dam Project, Sutlej Valley Project and Sukkar Barrage Project etc. At last, the central government accepted Thal Canal Colony Project and construction work began in the year of 1939. The construction of Jinnah Barrage at Mianwali and Main Line Upper was started but stopped due to Second World War in 1942. The construction work was resumed in the year of 1943, and the British government completed Jinnah Barrage and Main Line Upper till their departure from the Sub-continent in 1947 (West Pakistan Year Book 1962, 1962). At the time of partition, only 139 acres of the Thal desert was watered by Thal Canal. The newly established Government of Pakistan allotted land to tenants under different schemes, but hot climate conditions, huge dunes and other challenges blocked the development of the region. The new settlers left the Thal region one after another due to big challenges; they faced in the deserted land. The watercourses of Thal Canal were also choked up by the sand due to frequent wind storms. In a nutshell, Thal Colony Project was failed badly. The nonstop pressure of refugees on upper Punjab and failure of Thal Canal Project put the provincial and central governments under tremendous pressure in the initial years of Pakistan. Both
governments decided to resolve the problem once for all and created the Thal Development Authority (TDA hereafter) in 1949. TDA remained serviceable for the next twenty years from 1949 to 1969, chasing the goals of settlement and development in the Thal region (Thal Development Act of 1949, [1949]). That desert is located across Muzaffargarh, Jhang, Layyah, Khushab, Bhakkar and Mianwali districts having an area of five million acres. TDA was responsible for the development and settlement of state and acquired land of Thal region inside and outside boundaries of Thal Canal. It was abolished by the government in 1969, but till then TDA had made marvelous achievements in settlement of the region, levelling of land, the extension of irrigation, and establishment of new villages (A Handbook of Thal Development Authority, [1954]).

The Thal Desert in the Map of Pakistan

Literature Review
TDA act of 1949 is a basic source about TDA, its powers and duties, formation, working domain, accounts, finance, accounts and dissolution. A Handbook of Thal Development Authority published by public relation division of TDA provides in-depth information about the authority; its formation and first five year’s work and researcher have to consult other sources for remaining years of the authority. A book, “Thal Development Authority and Galaxy of Revenue Tenures” written by Malik Ghulam Shabir Khokhar provides valuable information about acquisition and adjustment of land carried out by TDA. This book is only about acquisition and adjustment and silent about the settlement of the region. J.M. Qureshi book, “An Economical Survey of Eight Typical Villages in the Thal” is a research work which provides valuable information about socio-economic conditions of the masses of the eight villages. T.D. Bedi also provided comprehensive information through his research work carried out before partition with the name, “Indebtedness in the Pastoral and Agricultural Zones of the Bhakkar Thal”. It described the socio-economic conditions and physical aspects of the masses of the region in detail. Gazetteers of District Muzaffargarh and Mianwali are very helpful for the provision of in-depth information about Thal desert, its history, physical aspects, and socio-economic condition of people. Colony Manual book published by KLR and written by Sharjil Ijaaz and Sameer Ijaaz is a comprehensive source about the colonization official notification of the whole Pakistan since the British age. But it only makes available the notification regarding colonization, not any information about the whole process of colonization. A book, “Takeekh Riasat Mankera” written by Malik Dost Muhammad Khokhar and published by Bhakkar Printing Press Bhakkar throws light on the history of Mankera state especially. A very important research work carried out by Mehr Abdul Haq with the name, “Thal” published by Lok Virssa Publishers Islamabad is the only source written in Urdu. It provides significant data regarding flora and fauna, natural division, history and culture of Thal desert in detail. The only book regarding the history of canal colonies is, “Punjab under Imperialism 1885-1947” written by Mr Imran Ali. It is a research work and provides in-depth knowledge about the whole process of canal
colonization in the British era, but it is silent on Thal Canal Colony after partition. Suppose research wants to know history, socio-economic conditions of the people before the arrival of the British, the Land Revenue Settlement Report of D.I.Khan (1872-1879) prepared by George Tucker is the best option. Latest research work carried out by Mr Muhammad Wasim Abbas; Assistant Professor Pakistan Studies Government College Dullewala District Bhakkar is “Role of TDA in the Progress of Thal with Special Reference to Bhakkar Region”. It only provides valuable information about the settlement and development of Bhakkar region, not of the whole Thal desert. A researcher can get access to year wise information about the settlement and development of the Thal region by reading yearbooks published by Public Relation Department Lahore from 1950 to 1969. After in-depth and in detail reading of available literature, it is obvious that not even a single research has been carried out about the settlement of the Thal region. This specific study will provide comprehensive information about the Thal, TDA and its services. It will also throw light on acquisition, adjustment and allotment of the land to different segments of society from 1949 to 1969.

**Acquisition and Adjustment of Land**

Thal Canal was constructed to irrigate almost 2.1 million acres out of which 0.37 million acres was state land whereas 1.8 million acres was occupied by private landholders. TDA appointed land acquisition officers to acquire land from the locals in the areas of District Khushab, Mianwali, Bhakkar, Layyah and Kot Adu tehsil of District Muzaffargarh. Full powers were granted to acquisition officers through TDA Act of 1949 by the authority (Khokhar, 2002). Thal Development Authority classified land into three categories during the process of acquisition, adjustment of land within and outside irrigation boundaries of Thal canal, which are as under:

1. Rain irrigated land.
2. Well irrigated land.
3. Un-cultivated wasteland.

Sameer Ijaz and Sharjeel Ijaz (2012) describes that TDA acquired only uncultivated wasteland from local landholders within and outside irrigation boundaries. The authority did not acquire rain irrigated and well-cultivated land from the locals. The process of acquisition continued from local landholders till 1955. After the acquisition, the central government and local people, both were owners of the acquired land. The return process of land among local landholders according to the formula is known as adjustment of land. The Government of Punjab and West Pakistan had to issue different notifications for the return of acquired land to local landholders as they were deprived of their whole lands (West Pakistan Year Book 1963, 1963). The following notifications were issued by the provincial government time and again on successive demands of local landholders:


Notification No. 713-54/1199-Th, dated 1/5/1954 given above at number three is known as Marginal Adjustment Formula (Sameer Ijaz & Sharjeel Ijaz, 2012). The main features of the formula are given as under:

1. TDA would acquire only un-cultivated and wasteland of Thal region. After the acquisition, the land would become government property.
2. According to the formula, the cultivated land would be land which was not shown either as uncultured wasteland or which has remained fallow for at least eight successive harvests or not shown in harvest inspection register or a piece of land which cannot cultivate for 1951 summer crops.
3. TDA would not acquire land irrigated through well water.
4. TDA would not acquire any land from the landholder having land less than fifteen acres.
5. TDA would acquire 50 per cent land from the people having land less than a hundred acres but more than fifteen acres.
6. TDA would acquire 75 per cent land from the landholders having land more than one hundred acres.
7. Sixty-five rupees per acre would be charged as a development fee from the settler (Colony File, 1962).

The local landowners were not happy with marginal adjustment formula; therefore, the government issued another formula known as Slab Adjustment Formula. The locals were satisfied with Slab Adjustment Formula, but TDA strictly followed Marginal Adjustment Formula and later Supreme Court of Pakistan declared it a governing law (Abbas, 2015). The following table shows acquisition, adjustment of land and land available for development to the authority.

Table 1. Land Available for Development to TDA

<table>
<thead>
<tr>
<th>S. No</th>
<th>Detail About Acquisition and Adjustment of Land</th>
<th>Area in Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Thal desert area</td>
<td>50,00,000</td>
</tr>
<tr>
<td>2</td>
<td>The area under Thal Project Canals</td>
<td>21,55,733</td>
</tr>
<tr>
<td>3</td>
<td>State land in Thal Project Canals</td>
<td>4,06,555</td>
</tr>
<tr>
<td>4</td>
<td>The land occupied by indigenous land proprietors</td>
<td>18,24,733</td>
</tr>
<tr>
<td>5</td>
<td>land acquired by TDA from indigenous land proprietors</td>
<td>9,38,778</td>
</tr>
<tr>
<td>6</td>
<td>Land adjustment (Returned to local landowners)</td>
<td>4,07,297</td>
</tr>
<tr>
<td>7</td>
<td>Outstanding acquired land available for settlement</td>
<td>5,31,481</td>
</tr>
<tr>
<td>8</td>
<td>The total area available to TDA for Development within the irrigation boundary</td>
<td>9,06,036</td>
</tr>
<tr>
<td>9</td>
<td>Total state land available to TDA for development outside the irrigation boundary.</td>
<td>7.15000</td>
</tr>
</tbody>
</table>

Source: West Pakistan Year Book 1965, P. 41.

Settlement Schemes of TDA

TDA allotted state and acquired land to new settlers under various colonization schemes. The beneficiaries were not only the refugees but also people whose land had been damaged by waterlogging and saline or by river action. Some colonization schemes allowed ordinary people from all around the country to buy the land. The authority first reserved land for forests, roads, and new villages then planned to allot the remaining land under different settlement schemes (Gazetteer Layyah District 1984, 1984). The details of different colonization schemes announced by the authority from 1949 to 1969 for refugees as well as for locals inside and outside the irrigation boundaries of Thal Canal are given below:

Tube well Scheme 1952

Thai Development Authority introduced Tube Well Scheme 1952 vide Notification 1486-C, Dated October 31, 1952, on the recommendation of Punjab Government to settle the migrants, locals and other people from the country. Each lot consisted of one hundred and fifty acres located outside the irrigation boundary. It is important to mention that this scheme was introduced only in Bhakkar region. The lots were allotted in Rakh Dhinghana, Rakh Khasoor, Rakh Haiderabad, Rakh Haitu and Rakh Jandanwala. TDA cancelled a few lots due to incompletion of already given terms and conditions in the notification (West
Pakistan Year Book 1961, 1961). Main terms and conditions of the Tube Well Scheme 1952 are given below:

1. The allottees had to pay one hundred rupees as an advance to TDA for trail boring; if boring would successful, the advance amount would be returned.
2. If trial boring failed, the allottees had to pay one hundred rupees more as an advance to the authority for another boring.
3. If the second boring failed, the said lot would be declared unfit for allotment.
4. After successful boring, the allottees would credit nine rupees per acre to the authority, and the land would be awarded on lease.
5. After successful allotment, the tenant needed to shift his residence to his lot in the first six months, and he would construct his house in the first eighteen months.
6. There was an option that the tenant would deposit the price of land in a lump sum or eighty easy equal instalments.
7. If the tenant failed to pay an instalment on time, he would deposit 2.50 per cent an additional amount as an interest to the authority.
8. The land rights of a plot reserved for residence at a village site would be awarded after successful completion of terms and conditions (Statistics File of TDA, 1969).

Table 2. Tube Well Scheme 1952 Allotted Lots Statement

<table>
<thead>
<tr>
<th>S. No</th>
<th>Name of District</th>
<th>Total No. of lots Allotted</th>
<th>The area Allotted in Acres</th>
<th>No. of lots of Property Rights Granted</th>
<th>No. of Resumed Lots</th>
<th>No. of lots Under Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Khushab</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Mianwali</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Bhakkar</td>
<td>1036</td>
<td>155400</td>
<td>471</td>
<td>282</td>
<td>283</td>
</tr>
<tr>
<td>4</td>
<td>Layyah</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>Kot Adu</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>


Well Scheme 1952

TDA initiated Well Scheme 1952 vides Notification No. 1486-C, Dated October 31, 1952, on the approval of Punjab Government. According to the scheme, the authority allotted lots each consisted of twenty-five acres in Rakh Khasoor, Rakh Haitu, Rakh Mankera, Rakh Dhighana and Rakh Haiderabad only in the area of Bhakkar region. The land was allotted to refugees of India, locals as well as other people of the country (Colony File, 1969). The main terms and conditions of the Well Scheme 1952 are given below:

1. The desired person had to pay one hundred rupees to the authority for the trial of digging of well.
2. If the trial was successful, the authority was liable to refund one hundred rupees to the allottees.
3. If the trial failed, the desired person had to pay one hundred rupees more for another trial.
4. If the second trial failed, the allotment of the lot would be confirmed as unfit.
5. The grantee needed to use the land for agricultural purpose.
6. The allottees would deposit nine rupees per acre.
7. According to the notification, the grantee would permanently shift his residence to the agricultural land in the first six months. He would also construct his house in the first eighteen months in the lot.
8. The allottees would cultivate thirty-three per cent of his lot in the first three years and fifty per cent in the first five years.
9. The grantee would deposit the price of land either a lump sum or in the form of easy equal instalments.
10. If the tenant failed to deposit any instalment, then he was responsible for paying 2.50 per cent additional amount as interest.
11. The tenant would also get land rights of the residential plot located at the village site when he would receive property rights of the agricultural lot (Statistics of TDA, 1969).

Table 3. Well Scheme 1952 Allotted Lots Statement

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of the District</th>
<th>No. of Allottees</th>
<th>Total Land in Acres</th>
<th>Total No. of Allotted Lots</th>
<th>Total No. of Cancelled Lots</th>
<th>No. of lots Under Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Khushab</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Mianwali</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Bhakkar</td>
<td>759</td>
<td>18975</td>
<td>198</td>
<td>122</td>
<td>439</td>
</tr>
<tr>
<td>4</td>
<td>Layyah</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>Kot Adu</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>


Sheep Breeding Scheme 1952

Thal Development Authority introduced Sheep Breeding Scheme 1952 vides Notification No. 817-Th, Dated March 28, 1952, for poultry and sheep breeding. According to the notification, the authority allotted lots each consisted of fifteen acres to the new settlers for fifteen years on lease. The tenant had to maintain two hens, one cock and fifty sheep according to the terms and conditions. Sheep Breeding Scheme 1952 came to an end in 1967 (Statistics of TDA, 1969).

Table 4. Sheep Breeding Scheme 1952 Allotted Lots Statement

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of Scheme</th>
<th>Total No. of Lots</th>
<th>State Land in Acres</th>
<th>TDA Land in Acres</th>
<th>Total Land in Acres</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sheep breeding scheme</td>
<td>211</td>
<td>2450</td>
<td>715</td>
<td>3165</td>
<td>In whole Thal</td>
</tr>
</tbody>
</table>

Source: TDA Record File, Housing Department, Bhakkar. P. 35.

Sale/Auction Scheme 1954

Thal Development Authority introduced Auction Scheme 1954 vides Notification No. 331/53-Th, Dated March 15, 1954, to settle the local people and refugees of India. This scheme was also known as Sale Scheme of 1954. There were two types of lots according to this scheme, land segments of fifty acres and twenty-five acres. The land was allotted in Layyah, Bhakkar, Mianwali and Khushab regions. Following are the main terms and conditions of the Sale/Auction Scheme 1954.

1. The land would be awarded to the allottees through open auction.
2. The allottees would credit twenty-five per cent of the full prices of the agricultural land to TDA at the time of sale.
3. The remaining amount of the land would be received by the authority in ten equal instalments.
4. According to the terms, the tenant would pay the first instalment after two years of the contract, while remaining instalments would be received by the authority on every harvest.
5. If the new settler failed to pay instalment to TDA in a given time, he would be responsible for paying interest at the rate of four per cent as an additional amount.

6. It was compulsory for the tenant to shift himself to his lot within a half year and would construct his house within eighteen months.

7. According to the notification, the tenant would cultivate twenty per cent of the agricultural land in the first three years while thirty-three per cent in the first five years.

8. The land rights of the residential plot would be awarded by the authority when the tenant would receive the property rights of the agricultural land.

9. According to the terms given in the notification, the grantees were bound to deposit 2.50 per cent of his income to the authority as a welfare fund. The said amount would be used for the repairing and maintenance of hand pumps, wells, road cleaning, meeting room etc. (Abbas, 2020).

### Table 5. Sale/Auction Scheme 1954 Allotted Lots Statement

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of the District</th>
<th>No. of Allotees</th>
<th>Total Land in Acres</th>
<th>Total No. of Allotted Lots</th>
<th>Total No. of Cancelled Lots</th>
<th>No. of lots Under Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Khushab</td>
<td>125</td>
<td>3536</td>
<td>117</td>
<td>-</td>
<td>08</td>
</tr>
<tr>
<td>2</td>
<td>Mianwali</td>
<td>35</td>
<td>848</td>
<td>32</td>
<td>-</td>
<td>03</td>
</tr>
<tr>
<td>3</td>
<td>Bhakkar</td>
<td>1342</td>
<td>31325</td>
<td>1245</td>
<td>-</td>
<td>97</td>
</tr>
<tr>
<td>4</td>
<td>Layyah</td>
<td>3005</td>
<td>53663</td>
<td>2120</td>
<td>-</td>
<td>885</td>
</tr>
<tr>
<td>5</td>
<td>Kot Adu</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>


### Peasant Grant Scheme 1955

Peasant Grant Scheme 1955 is also known as Abadkari Scheme 1955. It was a specific scheme introduced to settle the refugees of India and local people of different areas of Punjab whose agricultural land was destroyed by river action or due to waterlogging and saline. It was the responsibility of the Deputy Commissioner of Shahpur, Mianwali and Muzaffargarh to select the people for this specific scheme while the military authorities themselves selected military officials. Chairman TDA initiated Peasant Grant Scheme 1955 vides Notification No. 1477-54/2130/Th, Dated June 27, 1955, and each lot consisted of fifteen acres (Abbas, 2020). The salient features of the Peasant Grant Scheme 1955 are given below:

1. The tenant needed to use the land only for agricultural purpose.
2. A condition was introduced by the authority that the allottees would build boundary marks or would plant different trees as a boundary mark around his lot.
3. It was also compulsory for the tenant to shift to his agricultural land within half a year permanently and would construct his house within one and a half years.
4. The allottees would plant three trees per acre at least.
5. The allottees would construct a well in the center of his agricultural land on his expenditures if the canal water was not accessible.
6. It was essential for the tenant to deposit 2.50 per cent of his income to the TDA as decided earlier for the welfare of the public.
7. According to the notification, the tenant would pay the price of the agricultural land in seventy instalments after ten years of the lease.
8. The tenant would pay an instalment on every harvest.
9. It was also a condition that the tenant would cultivate his one-third agricultural land in two years and complete land within four years.
10. The rate of land per acre was one hundred and fifty rupees.

11. The residential plot land rights and agricultural land rights would be awarded at the same time after the fulfillment of the terms and conditions (Sameer Ijaz & Sharjeel Ijaz, 2012).

Table 6. Peasant Grant Scheme 1955 Allotted Lots Statement

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of the District</th>
<th>No. of Allottees</th>
<th>Total Land in Acres</th>
<th>Total No. of Allotted Lots</th>
<th>Total No. of Cancelled Lots</th>
<th>No. of lots Under Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Khushab</td>
<td>4602</td>
<td>69083</td>
<td>4582</td>
<td>-</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>Mianwali</td>
<td>2930</td>
<td>43950</td>
<td>2845</td>
<td>-</td>
<td>85</td>
</tr>
<tr>
<td>3</td>
<td>Bhakkar</td>
<td>4523</td>
<td>67861</td>
<td>4336</td>
<td>-</td>
<td>187</td>
</tr>
<tr>
<td>4</td>
<td>Layyah</td>
<td>6614</td>
<td>99210</td>
<td>6283</td>
<td>-</td>
<td>331</td>
</tr>
<tr>
<td>5</td>
<td>Kot Adu</td>
<td>1376</td>
<td>20640</td>
<td>1216</td>
<td>-</td>
<td>160</td>
</tr>
</tbody>
</table>


Fixed Price Scheme 1957
The authority granted 3936 lots to the landless farmers of the region under fixed-price scheme vide Notification No. 44, Dated October 18, 1957, and each lot consisted of twenty-five acres. In the start, the land was allotted on lease with the rate of six rupees per acre per harvest, but later the property rights of the lot were awarded to the allottees after the fulfillment of the terms and conditions introduced by TDA (West Pakistan Year Book 1968, 1968). The terms and conditions of Fixed Price Scheme 1957 are as under:

1. It was compulsory for the tenant not only to cultivate the land himself but also to reside forever.
2. The new allottees would construct his house at the already decided village site.
3. The authority would receive Malikana from the tenant.
4. The tenant needed to plant the tree throughout the agricultural land.
5. The authority would receive the prince of the land from the tenant according to the market price.
6. The price of land would be made in twenty easy instalments (Abbas, 2015).

Table 7. Fixed Price Scheme 1957 Allotted Lots Statement

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of the District</th>
<th>No. of Allottees</th>
<th>Total Land in Acres</th>
<th>Total No. of Allotted Lots</th>
<th>Total No. of Cancelled Lots</th>
<th>No. of lots Under Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Khushab</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Mianwali</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Bhakkar</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>Layyah</td>
<td>1585</td>
<td>40043</td>
<td>926</td>
<td>-</td>
<td>659</td>
</tr>
<tr>
<td>5</td>
<td>Kot Adu</td>
<td>2351</td>
<td>45475</td>
<td>1446</td>
<td>-</td>
<td>905</td>
</tr>
</tbody>
</table>


Garden-Nursery Scheme 1958
Thal Development Authority allotted lots each of fifty acres for twenty years to different people including
military officials vide Notification No. 8, January 24, 1958, and Notification No. 14, April 15, 1958. The rate of tenancy for each acre was six rupees per harvest, and the tenant had to maintain gardens and nurseries. In the same year, this scheme was changed by the authority, and the land was sold to the same tenants to whom the land was allotted earlier. In the start, the price of each acre was seven hundred rupees, but later it was reduced to four hundred rupees per acre because of huge dunes in the area (Abbas, 2015).

Table 8. Garden-Nursery Scheme 1958 Allotted Lots Statement

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Number of lots</th>
<th>Land in acres</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>150</td>
<td>7500</td>
<td>In whole Thal</td>
</tr>
</tbody>
</table>

Source: TDA Record File, Housing Department, Bhakkar. P. 38.

**Tube Well Scheme 1963**

TDA allotted 247 lots under Tube Well Scheme 1963 vide Notification No. 629-63/CII, Dated February 15, 1963, on behalf of Punjab Government. This scheme was introduced again in the history of Thal Canal Colony because vacant and cancelled lots land of Tube Well Scheme 1952 was available. The terms and conditions of both tube well schemes were different. The period of lease for this scheme was twenty years (Abbas, 2020). Following are the terms and conditions of the scheme:

1. A lot of one hundred acres was awarded to every tenant.
2. The tenant would submit his application along with a fifty rupees court fee stamp.
3. The tenant would pay an amount as security in advance.
4. Amount of security would be refundable to the tenant when the agreement was ended.
5. The allottees would use their land only for agriculture purpose.
6. On the desire of tenant, the time of allotment would be prolonged from ten years to twenty years.
7. The allottees would be responsible for installing a tube well of his own within two years of his allotment, and he would also keep it operational during his who tenancy period.
8. The rate of tenancy would be six rupees per acre for the first ten years, whereas it would be nine rupees per acre for the next ten years.
9. The allottees had an option to pay the amount of land in instalments or lump sum.
10. The tenant would be responsible for bringing half of his lot into use within five years of his tenancy.
11. The tenant would plant at least one tree per acre.
12. When the property rights of the lot would be handed over to the tenant, the land rights of the residential plot would also be handed over to him (Colony File, 1969)

Table 9. Tube Well Scheme 1963 Allotted Lots Statement

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of the area</th>
<th>No. of allottees</th>
<th>Total land in acres</th>
<th>Total No. of allotted lots</th>
<th>Total No. of cancelled lots</th>
<th>No. of lots under process</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Khushab</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Mianwali</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Bhakkar</td>
<td>195</td>
<td>31849</td>
<td>148</td>
<td>31</td>
<td>16</td>
</tr>
<tr>
<td>4</td>
<td>Layyah</td>
<td>52</td>
<td>7658</td>
<td>42</td>
<td>-</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>Kot Adu</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Free Grants of TDA Land

TDA allotted 14941 acres state land to Moeens and Lamberdars as a free grant for two decades temporarily. It is very important to clear that Moeens were skilled persons of the society such as cobbler, carpenter, blacksmith and potter etc. whereas Lamberdar was a very important figure of a village because he was responsible for the collection of revenue from the landowners (Statistics File of TDA, 1969).

Table 10. Free Grants of TDA Land

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of Grant</th>
<th>State Land in Acres</th>
<th>TDA Land in Acres</th>
<th>Total Land in Acres</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Moeens grants</td>
<td>5879</td>
<td>2978</td>
<td>8857</td>
<td>In whole Thal</td>
</tr>
<tr>
<td>2</td>
<td>Grand Total</td>
<td>9809</td>
<td>5132</td>
<td>14941</td>
<td>In whole Thal</td>
</tr>
</tbody>
</table>

Source: TDA Record File, Housing Department, Bhakkar. P. 40.

The process of settlement had continued for twenty years in TDA era. Census reports of District Muzaffargarh, Mianwali and Sargodha, show a big increase in the population of Layyah and Kot Adu region whereas to a large extent in the population of Khushab, Mianwali and Bhakkar regions. The following graph shows the population increase in Khushab, Mianwali, Bhakkar, Layyah and Kot Adu regions during twenty years of TDA:

![Population Increase of Thal](image)


TDA not only settled the people but also provided all basic facilities of life such as health, education, electricity, roads etc. TDA loaned amount to the farmers for the purchase of seeds, equipment and to build their houses in villages. Agricultural experts provided training to the new settlers so that they could be able to survive in the new atmosphere of Thal desert. The authority set up two main livestock farms for the delivery of meat and low-priced labor for farming. Besides, eight dispensaries for animals were also established to treat diseased animals. Main cities of Thal were connected to all newly established towns and villages through link roads. The authority established Mandi Towns, textile mills, sugar mills and woolen mills for the sale of agricultural products. In a nutshell, TDA ensured a balanced and equal development of the area just in twenty years of its working.
Conclusion
The desert of Thal was famous from centuries for wastelands, harsh weather, wind storms and scarcity of rainfall. The British introduced Thal Canal Colony in 1939, but the project could not be completed due to the Second World War and partition of Subcontinent. Keeping in view the weather conditions and land characteristics of desert, the Government of Pakistan initiated the settlement process of Thal for the settlement of refugees and the people whose lands were destroyed due to waterlogging, saline and river action. TDA completed settlement process successfully in twenty years from 1949 to 1969. All basic and modern facilities of life were also provided to the new settlers of the area for permanent and equal development. The people of Thal are happy and full of confidence in their future.
References