PROBLEMS OF INFANTS: PARTICIPATION IN THE ORPHANHOOD OF THE SUDAN

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I would like to take this opportunity to express my profound gratitude and deep indebtedness to the Government of the Netherlands for extending the following grant to me in September, 1967 and thus enabling me to follow profitably the "Advanced Course leading to Degree of Master of Social Sciences" at the Institute of Social Studies. Equally, I highly cherish the hospitality and friendship of the Dutch people which made my studies and stay in Holland very beneficial and pleasant.

My thanks are also due to the Government of the Republic of the Sudan and in particular to the Ministry of Local Government for approving the extension of my leave from office to pursue my studies.

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I will be failing in my duty if I do not think Professor J.P. Classen van Loon, Chairman of the Faculty of 'Social Science' and Rector of the Institute and other members of the academic staff whom I often dashed into their offices without any previous appointment or 'coughed' them in the corridors of the Institute asking for their kind advice in connection with my studies.

In the initial stages of this work I had the great fortune of meeting and discussing with the distinguished Professor Irich R. Jacoby, of Stockholm University, Sweden and former Chief, Land Tenure and Settlement Branch of the U.N./P.A.O., who professed keen interest in the subject and made some concrete suggestions for which I am highly thankful.
1. Statement of the Problem

The Gezira Scheme of the Sudan is often praised as a highly successful agricultural undertaking in Africa. Accordingly, the Scheme is not only considered as an example of the development of irrigated agricultural projects in the country, but it is also recommended by international agencies as a model meritng "the serious consideration of developing countries for possible adoption...". Yet the scheme has developed weaknesses, in its structure which are continuously striking at its very foundation. These weaknesses arise out of the growing socio-economic problems. By and large, the social problems in particular have not yet received due attention, as far as the rapid and self-sustained development of the Scheme would require.

It is perfectly true that the Scheme has already reached a stage where it is necessary to 'look into' it again. As is known, the trends of development policy of the late sixties have greatly changed since the early twenties, at which time the Gezira Scheme was just born. There is a real need - as events show - for an overall re-consideration of the basic structure of this complex organization. This need calls for its re-examination of all main relationships in the Scheme, such as land tenure system, administration, cropping patterns, labour problems and the like. In other words, there is a need - as we will expound - for a new and deliberate policy, which will be much more conducive to the building of a healthy and self-reliant agrarian community, i.e., involving the tenants in the development process. Such an alternative policy must have as its main objective that the cultivator is a key factor and a pivot on which the future of the country's agricultural development revolve.

2. Purpose of the Study

Before pursuing the main objective of this work, we must point out that the present study of the Gezira Scheme is based on

CHAPTER I

GENERAL INFORMATION

1.1 Geographical Information About the Area

Geographically, the Gezira Scheme is situated in the Blue Nile Province - one of the nine provinces into which the Republic of the Sudan is administratively divided.

The Gezira plain, within which the Scheme operates, is a triangular fertile, hilly, clay land, lying between the Blue and White Nile rivers. The confluence of these two Niles at Khartoum - the capital - forms the apex of this triangle, the base of which is made by the Semna–Kosti rail line (Figure I).

The total area of the great Gezira plain - two hundred miles long and eighty miles across - amounts to five million acres. The irrigated area so far brought under the Gezira Scheme and its new extension (Upper Extension) is about two million acres.

The Gezira plain is considered to be among the first class soils. It is high in minerals and very low in organic content, and it contains adequate amount of all plant food except nitrogen. Certain leguminous plants e.g. lablab, among other technical measures, have been made compulsory part of the agricultural system in the Scheme, in order to cure the disadvantage of the nitrogen deficiency.

Geographically, the Gezira is a considerably flat plain, but it is smoothly and gently sloping imperceptibly in the right direction, viz., downwards from the Blue Nile, from whose water the plain is easily irrigated by gravity. This favourable geographical

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2. 'Gezira' - Arabic - is equivalent to 'Island.' As a matter of fact, the alluvial plain to which the term 'Gezira' refers is not an island but a peninsula. Many theories have been advanced about the origin of the name. Some called it 'al jisr.' However, the name 'Gezira' is commonly used to describe the vast land peninsula lying between the White and Blue Niles.

Sufficient information about the origin of the name may be found in E.H.B. Sanderson, 'Sudan Republic,' (London, 1963), 'Footnote' on p. 64.
1.2. The Gezira People and Their Way of Life

The Gezira people, like other inhabitants of the northern Sudan, are mainly of Arab origin. They are universally Muslims and culturally Arabised.

The Arabisation of the region took place many generations ago. The coming of the Arabs into the area started on a large scale especially after the rise of the prophet Mohammed and the foundation of Islam in Arabia in the seventh century. According to Sir Harold Neve Michael, the Arabian element has existed in the Sudan even in the pre-Islamic period. He added that, 'long before the Islamic period, Arabian races had been crossing over into Egypt and the Sudan'\(^1\) mainly for trading purposes.

The infiltration in the Sudan, and the Gezira in particular, was the result of a steady migration of the named Arab tribes from their ancestral homes in Arabia.

"During these centuries there was a process of cultural revolution caused by the Arabisation and Islamization of the people. Two parallel processes are apparent in the Arabisation of the Sudan: one linguistic and cultural, by which the people of the land acquired Arabic as their language and Islamic cultural conceptions and became connected with the Arab tribal system, and the other social, by which the incoming Arab stock was absorbed in varying degrees by the people of the land... The cultural Arabisation of the people was the more profound because it also meant their Islamisation. The other process would be more correct to call the indigenisation of the Arabs, though, undoubtedly, Arab blood has modified the racial characteristics of the Hamitic and Negro tribes to a greater or lesser degree..."\(^2\)

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alignments between smaller and bigger tribal groups were accentuated by the frequent conflicts among tribes over water-gathering places, grazing and cultivating lands. So minorities had to seek the protection of stronger tribes.

Under the tribal leader there was a hierarchy of assistants, starting from the heads of big sections (Ondas) down to the village headmen (Sheikhs).

Although the social status of families was considered in the selection for these offices in the tribe, the offices were by no means hereditary because other tribal members had also equal chances. The tribe was, so to say, democratic or egalitarian.

The image of the tribal structure is not that of stratified higher and lower families. The society conceives itself rather in terms of concentric circles on a horizontal plane. In the vital centre lives the tribal chief. In his all vital forces are concentrated, and spread from here over the surrounding circles. The clan chiefs in their turn are such centres with surrounding families, age and sex groups. The individuals have their 'own' place in the clan, but they are not fixed by it. They can move through all tribal circles by their participation in the vital forces.

Although the authority of the tribal leader covered all aspects of social life, he was neither a dictator nor autocratic. He was, so to say, a prime inter partes or 'first among equals'. His authority was counterbalanced by the 'idea man' of the tribe who constituted what was known as the 'Council of Elders'.

The 'Council of Elders' had the biggest say in the selection for all offices in the tribe, including the chief himself. In such traditional, isolated communities, age was crucial. It was believed that 'age brings wisdom' and those who lived longer acquired more experience. "Who is one day older in age is one year older in knowledge." These elders acted as a check on the authority of all offices in the tribe.

The Gezira Scheme in the Sudan

THE SUDAN GEZIRA BOARD

Scale 1:1,500,000

Miles

10 6 12 20 30 40

15 30

Drawn by A.B. St. John

Dept. No. 5, Nov. 18
the Turkiya (1821-1831) and the Mahdiya (1881-1898) periods. For example, during the Mahdiya the Khalifa summoned to his capital (Omdurman) the leading tribal personalities in the Gezira region, such as Aaraq and Barack, because they refused to pay taxes. As a consequence, the Khalifa sent an armed force which destroyed and looted their property. Moreover, during the year of serious starvation, as we shall see in the subsequent section, the Khalifa ordered more of his people to settle in the Gezira. The result of these political developments was that the Gezira population at the time of the inception of the Scheme was found to be mixed and to include large immigrant elements from other parts of the country. The heterogeneity of the population has tremendously increased after the initiation of the Scheme. The composition of the Gezira population today contains immigrants from inside the country, as well as from across the borders (see Table 1).

Table I
The Table Indicates the Structure of the Gezira Population by Ethnic Group, and Nationality Group.

<table>
<thead>
<tr>
<th>Group</th>
<th>Numbers</th>
<th>Group as % of Total</th>
<th>Regional Group as % of the Sudan Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Arabs</td>
<td>579,369</td>
<td>77.60</td>
<td>34.30</td>
</tr>
<tr>
<td>2. Miscellaneous</td>
<td>10,309</td>
<td>1.50</td>
<td>14.72</td>
</tr>
<tr>
<td>3. Nuba</td>
<td>6,196</td>
<td>0.86</td>
<td>1.10</td>
</tr>
<tr>
<td>4. Beja</td>
<td>10,952</td>
<td>1.51</td>
<td>1.70</td>
</tr>
<tr>
<td>5. Subiya</td>
<td>22,797</td>
<td>3.16</td>
<td>7.70</td>
</tr>
<tr>
<td>6. Central Sudanese (Truly Nilotic)</td>
<td>2,036</td>
<td>0.28</td>
<td>0.43</td>
</tr>
<tr>
<td>7. Eastern Sudanese (Truly Mero-Hamitic)</td>
<td>273</td>
<td>0.04</td>
<td>0.05</td>
</tr>
<tr>
<td>8. Western Sudanese (Truly Sobaic)</td>
<td>1,927</td>
<td>0.27</td>
<td>0.40</td>
</tr>
<tr>
<td>9. foreigners</td>
<td>16,822</td>
<td>10.62</td>
<td>5.35</td>
</tr>
<tr>
<td>10. Foreigners with Sudanese Status</td>
<td>1,564</td>
<td>0.27</td>
<td>4.75</td>
</tr>
<tr>
<td>11. foreigners without Sudanese</td>
<td>20,774</td>
<td>2.87</td>
<td>10.75</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>722,609</td>
<td>100.00</td>
<td>7.11</td>
</tr>
</tbody>
</table>

were known and recognized, but subject to certain conditions. For instance, the grantee/carer was supposed to behave himself and to put the holding to beneficial use. He had also to fulfill certain obligations to his corporate social group. On the other hand, it was also the obligation of the tribal group to give to it that everybody had sufficient land and that his land was properly utilized. But if the individual failed to fulfill those specified conditions, his property might be reverted to the wider group which reserved manipulation and ultimate control over the land. "In its traditional customary setting, the African had a complete security of tenure and a secure usufructuary right in his land. He was not a tenant, nor the tribal authority the landlord. The African had in fact not only an inalienable security of occupancy, but practical, in all tribal law he has an actual right to the occupancy of as much land as he requires to support his dependents and responsibilities. Only failure to cultivate this land.... can forfeit this right for him. The land is thus reserved by the tribe for the common benefit and for the use of other members needy."

We are not sure how low, with external life on corporate ownership prevailed in the Central region. But the best evidence indicates that at a certain stage in latter a medical change in the land tenure occurred when the communal property collapsed and individualization and absolute occupancy emerged. This individualization was based on customary and religious grounds: social, customary laws of succession and possession of inheritance. In many large, the process of individualization was characterized by the growth of a class of landless antecedent. Probably, the families in the class were those of "special social standing" to which most of the tribal officers reverted - as we have mentioned in the section on some aspects of social life. We shall come back to this subject in subsequent chapters.

Talling of individualization, land issues have been advanced as to the reasons and forces that led to its establishment and the enforcement of communal ownership. For instance, Ben Bally in his Introduction to "Land Law and Custom in the Colonies", "
were known and recognized, but subject to certain conditions. For instance, the group as a whole was supposed to believe himself and to put the holding in beneficial use. He had also to fulfill certain obligations to his corporate social group. On the other hand, it was also the obligation of the tribal group to use the land in a way that everybody had sufficient land and that his land was properly utilized. Even the individual failed to fulfill these specified conditions, his property might be reverted to the under groups which resented manipulation and ultimate control over the land. In his traditional customary tenure, the African had a complete security of tenure and a secure usufructuary right in his land. He is not a tenant, nor is tribal authority the landlord. The African has in fact not only an indefensible security of occupancy, but practically in all tribal law he has an actual right to the occupancy of as much land as he requires to ensure his foodstuffs and responsibilities. Only failure to cultivate this land... can forfeit this right for him. The land is thus reserved by the tribe for the common benefit and for the use of other members reading it. [12]

We are not sure how long, with communal life and corporate ownership prevailed in the terra region. But the best evidence indicates that at a certain stage in history a radical change in the land tenure occurred when the communal property collapsed and individualization and absolute ownership emerged. This individualization was based on customary and religious grounds, e.g., social, customary laws of succession and rules of inheritance. Hence and large, the process of individualization can characterized by the reduction of a class of land aristocracy. Primarily, the families in the colonies were users of"special social standing" to which most of the tribal office reverted - as we have mention in the session on new aspects of social life. We shall come back to this subject in subsequent chapters.

Barring of individualization, any theories have been advanced up to the reasons and forces that led to its establishment and the abandonment of communal ownership. For instance, Left Halley in his introduction to "Land Law and Custom in the Colonies" [13]
sec. later, constituted a most intricate and acute problem for the
originators of the Gorée scheme.

1. Urban Economic Activity

The impact of the geographical characteristics of the Gorée on the economic way of life of the people there may be
seen as follows. Before the settlement brought by the migratory
project, the Gorée people were leading a subsistence and semi-
nomadic life dictated by the season, and instability of natural
resources. On entering the Gorée zone of the Senegalese, like the
Boudj or originally nomadic, gradually relinquished their purely
nomadic life, and settled as cultivators and traders along the
Blue Nile. The bulk of the population, however, being sedentary
or semi-sedentary, went on with the traditional nomadic code of living
on the 

plain. But both groups - those living in villages on the
Blue Nile and those wandering on the plain - continued close
contact with each other. Sometimes people from the riverine
villages would move to the mainland, either for field cultivation
or grazing purposes. Also, people from the plain would go back to
the riverine settlements for water and other necessity of life,
when natural conditions on the plain had become unfavorable.

In the earlier times, as we have already noted, resources
were exploited in a communal way. But later, due to the growth of
market economy and establishment of private ownership, economic
life was re-organized on other bases. Landlords, as we have earlier,
enjoyed large groups of slaves as their tenants. Other people, who
could not afford to buy slaves or to live individually with
other productive land, resorted to various forms of cooperation.
by far the most important system of cooperation was the partnership.
Here, different partners pool their resources e.g., land, labor,
stock and water etc. Each of these partners was entitled to a
definite share of the crops. In other words, net remunerations
were allocated to the various partners according to indigenous
covenants. This native system was a partnership in which each factor
of production had definite shares of the crops allotted to it,
according to the following covenants
used to grow dups (morphium vulgarum) for their peopled diet and excess
ry was even on land for which they built earth clifes (dunes) to re-
tain the rainwater. As the rainfall was sparse, the rain-fallers
had to digress their holding’s “so that a failure in one locality,
might well be counteracted, through the erratic incidence of rainstorms,”
by bounty in another. The tribal family, for instance, owned five
not only in the feudalistic neighborhood of the present village of
Hay bhad, but also near the Paluca, a Ghansa and Seraina.”

It good raining seasons such people could harvest large quantities of
grain which they stored in granaries (kutheks) for their domestic
consumption and yearens.

During the Mughal’s, the Deosa became a granary for
Oudhman - the capital of Sutan during the Mughal’s. In order to
reduce the heavy relative pressure in his capital, the Deosa, dug wells
in the northern part of the Centre and settled population from
Oudhman to cultivate there.

Talking all in all, the way of life in this region was
insouciant. As mundane was the dominating sector, both cultural
and agricultural activities were predominated. The local history
of the area is predominated by miserable famine and war.

For instance, during the Mughal’s, a severe tax was levied on
the inhabitants. They had to pay ten percent per Sutan whether
there was rain or no rain. This rate is still remembered by the
inhabitants as “the year of the salmon”, as a consequence, many
people abandoned their homes and resettled to other provinces, such as
slave trade. Tubman’s description of this situation reads:

“Where is the folk on the bank of the river, which just a few
years since been highly cultivated, and been abandoned....
villages once crowded had totally disappeared. The condition was gone.
Extraction had ceased. The light formerly distinguishable with the
breaking of the evocative waterwells, were now extinct as deaes....
industry had vanished. Depression had driven the inhabitants from
the soil. The greater portion became to the slave trade of the White Idle....
(Shenni’s had four tens their homes.)

Similarly, during the Mughal’s family was seriously disturbed, expe-
17) Doreen Brand and others, Agra and its Vicinity, [1855 - A
3d. ed.], Ghantia, (Indian Development in the North, Delhi: Oxford
30. Quoted by Calvi, 236.1. p.5.
CHAPTER II

CHAPTER II

CHAPTER II

CHAPTER II

1. Background of the scheme.

The Sudan in general, and the Gezira region in particular, has for generations been known as a favourable place for cotton-growing. As early as 1890 cotton, among other commodities, was exported from the Gezira to Khartoum and to other parts of the Sudan. 21) So, the British rightly conceived the idea of cultivating the crop in the alluvial plain of the Gezira, soon after its re-occupation of the country in 1906 by the joint Anglo-Egyptian forces. The re-occupation led to the establishment of the Sudanese rule (1906-1936) in the Sudan under the leadership of the first British 'Governor-General', Lord Kitchener.

It seems that the first wish to suggest on locally the cultivation of cotton in the country was Sir Henry 'Angate', the successive Lord Kitchener as 'Governor-General'. He wrote in his annual report of 1903 that, "There can be no doubt that cotton of good quality can be produced. The Sudan is, indeed, the original home of Egyptian cotton. Verletrie built the, that, in 1900, first introduced cotton cultivation on a large scale into Khart, produced the first ideal from the garden of an official who had resided in the Sudan, and who brought more cotton from here to Khart. The results of the experiments at the small quarter of cotton now grown in different localities are distinctly favorable. Cotton is grown, however, for the raw material, not the market. Cotton is required to be cultivated in the area of irrigated land." 22) In the same year, experiments in cotton cultivation were carried out in the flood-irrigated delta of the Gezira and Dongola River.

In 1903, a healthy the next, Sir Leigh Hunt, visited the Sudan and discussed with the British authorities on the possibility

21. Ibid., p.4.
self-supporting. The general conditions of the area—namely, the existence of a very large area of rich level plain, partly cultivated under semi-arid conditions—would seem to be just those under which the introduction of irrigation is most likely to produce great development. (23)

To prove experimentally that both cotton and other
commercial oil could be grown satisfactorily in the Deira, the
Government started in 1924 the first pilot scheme called  
Shibam on 500 acres of land, rented from the local owners and run on
the basis of tenancy system. The Government guaranteed the manage-
ment of this pilot scheme on the basis to the 3 partners, which had
already gained a kind of experience and had shown most success at
Zaidah.

The Shibam pilot scheme was a great agricultural success.
In average years on a holding of 30 fadams produced good quantities
of cotton, "Turk [Ghadrin], wheat and fodder. It happened as that
since rain cultivation outside the "Shibam treated area had failed,
so, when the initial area was extended to 2,000 fadams, people
from all parts of the Deira region came to the management of this
oilot station, one from the local owners, gold merchants and all
kinds of businessmen, in order to be accepted as tenants.

In order to accumulate still more experience and
take a profound insight into the whole Deira region, before embarking
upon a large-scale agricultural scheme, the pilot schemes were
established in different parts of the Deira. In 1914, the
Syndicate started another pilot area at "Al Mahali (now the head-
guests of the Deira Scheme), which is an oilot area near the
base of this cotton station, where the Syndicate constructed
the major and minor dams, provided irrigation canals to
the cultivation in an area of 5,000 fadams, which is 2,000 were
anually under cotton crops. In the ensuing years the Syndicate at
its own expense, in order further pilot scheme at Abu Shidda
(1921-22), extended an area of 35,000 fadams and at "Al Mahali
(1923-24) one station in an area of 30,000 fadams.

All the results of these experiments were promising
and convinced both the government and the
Syndicate, to enlarge.

23. Ibid., 102.
It is possible in this historical survey of the Scheme to say a few words about another problem that was encountered in the inception of this project. This was the Nile Water's problem — an it is called — between Egypt and the Sudan. Needless to say, the Nile, for time immemorial, had been the source of life to Egypt. It is understandable that Egypt might have worried that any project associated with the Nile waters. The Nile of Egypt partly to originate from two sources. First, it occurred to the Egyptians that the construction of a dam in the Sudan might cut the Sudan in potential position to control the Nile waters and that this would endanger the very existence of Egypt. Moreover, the police to develop the Sudan Centre would jeopardize Egypt's present and future requirements of the Nile waters, especially in the season. Secondly, the Centre Scheme was mainly designed for the cultivation of extra-long staple cotton, the same variety grown in Egypt. This newly grown crop would at such future date be non-competitive and turn out to be detrimental to the Egyptian interests in the world cotton market, like Professor Arnold Toynbee stated. "And, therefore, strongly opposed to the Cotton Scheme." 

The dispute, however, was settled by the Nile Waters Agreement, signed on the 7th of May 1922. One of the nations: Partisan of this Agreement was the Sudan, and so the recommendations of an earlier had, known as the Nile Project Committee 1909. The new arrangement allowed to the Sudan a specified quota of the Nile waters (32 million cubic meters per year) rather than to irrigate a fixed area of only 300,000 hectares. 

2.4. Origins of the Scheme:

The Sudan Scheme was mainly started as a commercial enterprise. Yet, its primary objective was two-fold. In the one

26. Similar details about the Nile Water's problem will be found in D. C. North, op. cit., and especially Ch. G. "Nile Water: The controversy", also see, "For a peaceful solution", op. cit., Chapter VII, "The Control and Allocation of Nile Waters". Also see I.A. Diamond (ed.), Agricultural to the Sudan, Churhill 1922, "The Irrigation of the Sudan", by D.B. Allan.
have two consequences. First, they would be deprived of their traditional authority. Secondly, they would be brought down to the level of the average man. In the same sense that they would be subjected to the same close supervision and direct control of the new scheme. Mr. M. Clark, who has the first government commission to make contact with the local people for the introduction of the scheme, described this unfavourable reaction as follows:

"The kind of argument against it [The Genie Scheme] which were advanced, especially by the older and more intellectual type of native, were: 'The Genies will be subjugated. The tribal inspectors will be the like of the country. I may own and control large areas of land land; under the new scheme, I shall have only 30 feddans, just like any other slave. In both these straight lines, we could neither be hungry nor be ever on the verge of freedom to range with our cattle throughout, nor have full freedom and be fined if we go outside these harmful lines squared. Our children and our slaves will become slave-headed and no longer regard our authority.'"

The resistance to the scheme was manifested in an armed revolt, urged by all landowners who were dissatisfied with the new land settlement. In 1903, the revolutionary patriot M. M. Shalabi, who felt that the government had done injustice to himself and his people by the requisition of their land, led these war-genre local people in a revolt which killed a British administrative officer and an Egyptian novice, together with the administratives of their people of armed forces."

As for the favourable reactions, it seems that the introduction of the scheme has produced positive attitudes among the lower layers of population, namely, ex-slaves, small landowners and landless people. Under the new regime, slavery was abolished. Ex-slaves in the Genie and elsewhere in the country were no longer beholden to their former masters. Moreover, during the introduction of the scheme these slaves and landless inhabitants were treated reasonably, allocation just like his landlords. The small landowners who previously owned, say, two or three feddans were given
agriculture, since there are only little differences between tenants. But on the other hand, the control was highly centralized in so far as the position of the tenant vis-à-vis the assessment of the Scheme is concerned. We shall see later in this work how this central control has resulted in less participation by the cultivator.

2.4. Summary:

In this Chapter we have discussed several aspects which are relevant to understanding some of the implications of the inception of the Scheme.

1. The historical development of cotton-growing in the Sudan and its success due to geographical and natural factors.

2. The objectives of the Scheme were:
   2.1. Guaranteeing a reliable source of raw material for the British textile industry.
   2.2. Encouragement of attractive capital investment.
   2.3. The development of the country.
   2.4. The development of the Chiefs region.

3. The actual structure of the Scheme was built in such a way that the first and the second objectives got the main attention, which - we hope to show in subsequent chapters - was the cause of several difficulties concerning the position of the cultivators.

4. The introduction of the Scheme was met by two reactions - positive and negative. Favourable reactions were probably located among landless people, small land-owners and ex-slaves, while the unfavourable reactions seemed to be on the side of big land-owners and traditional office-holders.
in the country and the intention of running the project by themselves. But due to financial and technical reasons they were unable to realize their purpose. Naturally, they had to think of the Syndicate, which had been since the earlier days involved in experimental farming of cotton growing at Zeila and in the Gezira region. The Syndicate was able to provide the extra required capital for minor structure, such as digging of subsidiary canals, clearing and levelling of the land, building of houses, offices, stables etc., together with the ability to provide the supervisory staff, transport, grading, marketing of cotton and the like. But at the same time, the British, as rulers of the country, were reluctant to involve the commercial enterprises in the Scheme, because they were afraid that the private financing would entitle the Syndicate to an absolute power and control over the Scheme. Such a situation would mean the creation of "State within a state" and thus probably deprive the rulers of pursuing the policies they would deem necessary in relation to the Scheme as an integral part of the country. In other words, the Government was afraid of finding itself in a flagging position vis-a-vis the private companies with direct government finance and enterprises; the situation could be lost under control, but as long as a government loan was uncertain, dependence on commercial capital posed always the problem of the repercussions of enterprises on the Government's position and policy. 22)

In the words of the Governor-General of the Sudan then, "It is quite clear that had the Government (the British Government) refused to come to our aid, it would have been better to have resorted to the help of a Company rather than not develop the Gezira at all, but in that case the Sudan would have eventually become something like Chad in today, namely, the company would have acquired such power as would probably have resulted in its eventually being given a Charter.23)"
The functions are allocated and the benefits and risks of execution are shared proportionately between the partners. Thus the three partners share in good or bad seasons. In this partnership, "the state, the people of the nation and the private shareholders (not the Board) had an identity of interest. They sank or swam together."

The specific obligations undertaken by the partners are as follows:

(a) **The Government** - In return for its share of the net proceeds, as indicated below, the Government is responsible for the provision of land comprising the Scheme area and its extensions, whether Government or private land compulsorily hired on long-term lease from existing holders for which it pays specific annual rent. It is the duty of the Government to provide for irrigation; it has built the major irrigation principal structures, such as the dam and major canals; and is responsible for their maintenance. It is also responsible for the control of the main water supply. The Government exacts no water or land tax. It is also the obligation of the Government to provide Agricultural Research, i.e. study of plant-breeding, soil chemistry, control of pests, etc. Moreover, the Government is responsible for the general supervision of the Cegisa administration.

(b) **The Tenants** - In return, for their share of the net proceeds of the cotton crop, the tenants are responsible for the whole of the agricultural work on their holdings, including the preparation and tilling of the land, sowing, cultivation, weeding, picking of the cotton crop and delivering it to the Board at the local


buildings necessary for the proper management of the Scheme. Not
in the least, it is its duty to finance and ensure the cotton crop.
Financing includes, among other things, the provision of seed,
fertilizers, pest control measures, transport, ginning and storage
and the large ginning factories, the Light railway, workshops and
other installations and equipment with their necessary spare
and supplies. The Board also advances to the tenants much loan
as may be necessary to finance their own obligations.

Under the terms of the Oelim Ordinance, the Board is
obliged to contribute Rs. 75,000 (equivalent to USD 225,000) per
annum to the Government for Agricultural Research.

113. MODE OF DISTRIBUTION OF PROFITS

In return for the performance of the various functions
enumerated above, each partner is entitled to a definite share of
the net proceeds of the cotton crop.

In this connection it is interesting to see, that the
initials of the scheme had constructed the partnership system on
the basis of the already existing traditional custom of allocation
of profits among the concerned partners.\(^{41}\) According to the first
arrangement, division of profits resulting from the sale of cotton
crop amongst the tenants received 40%, the Syndicate 20% and
the Government 40%.\(^{42}\)

Then applying the traditional custom to the scheme, it
can be seen that the modern substitutes of capital assets, e.g.
IASP, could have been made available to the other two
partners, while the tenant was taking his traditional role of providing
the agricultural writing labour. For each 5 day, he received

41. See Chapter 1, section on 'Other Economic Activities'.

42. The sharing arrangement was revised in July, 1956. It
became tenants 40%, Government 42% and Board 10%. Again, the
Tennant's share was increased to 55% in February, 1964. To
shall not being that the tenant's share was further increased
to 60%.
expenses are defrayed by the Board on behalf of the joint undertaking. The proceeds are then apportioned among the three partners in accordance with their statutory shares. The tenants' shares are only made available to them after the Board has repaid the loans advanced to them individually.

The Joint Account is a General privilege enjoyed by the tenants. The relative costs of the items comprising the joint account are allocated evenly to each tenant; so that, unless of receiving more or less ploughing, fertilizers spreading and the like, each tenant pays an identical sum to the Board. All tenants have shares in the costs of these operations, whether or not their land has been so treated in proportion to the quantity and quality of their individual crops, and the tenants who have benefited from good land and favourable climatic and other conditions they shall part of the burden of the less fortunate tenants.......

The allocation of profits among the three respective partners, as already indicated, has been subject to revision and readjustments from time to time. The present day arrangement is in the following proportions:

1) Tenants 50%
2) Government 35%
3) Land Development Board 10%
4) Social Development in the area 2%
5) Local Government Council in the area 3%

It is seen from the ratios indicated above, that there are, apart form the three partners, others who benefit from the net proceeds of the cotton crop. So we think it may be useful to have an idea about some of these beneficiaries.

(a) The Tenant's Share. The individual tenant is credited with the exact value of the cotton delivered by him at the collection stations. The Board reserves from the tenants' share the taxes paid out to him for agricultural operations. The tenants' share is paid to the in instalments over the twelve months following the harvesting of the cotton crop. The raising and proportions of these instalments have been fixed by the Minister of Finance and Economics, after consultation with the Board and the Ceylon Tenants' Union.

(b) Including 5% for the Tenants' Reserve Fund.
par of cotton cultivated in the Scheme areas, the balance
(if any) of its share 'giller' is divided equally between
the Government and farmers.

4. The Local Government Councils' Share: It is now
clear that a division of profits, from the Local Government Councils
in the area receive a share as well. There are not, even if five
per cent local authorities covered by the Scheme. Local Councils
in the area not only rely for their revenue, among other things, on
taxes from land and crops. Tax rates these councils are not
allowed to charge the farmers. They rely on rent or the cotton
crop, another source of revenue is needed in order to discharge
their functions and render services to the people concerned. Be
20 of the net proceeds of cotton is allocated to these councils.

3. Tenant Management Relationship

In the beginning, I would like to specify that our main
purpose in this section is to review the position of the tenant
amount only in so far as the process of decision-making is concerned.

From the beginning, the tenant-cultivators in the Scheme;
though called partners, have in fact been no more than mere agricul-
tural labourers. They have been taught to carry out obediently
all plans and entrepreneurial decisions concerning their farming
activities and otherwise made for them by the Syndicate's (now the
Board's) field staff. Thus, the system of central control and remaining
of a high degree of authority in the hands of few had an
adverse effect on the tenant. It has considerably limited the
scope for individual initiative, creativity, incentives and inde-
pendent action. Mr. Arthur Mitchell, an ex-manager of the
scheme, writes, "When I first went there, the British administration
was blindly direct. We were the 'masters' and the people were the
children in the nursery." And again, "They are still as issuance
insulted and a habit of waiting for orders." [57]

[57] Mitchell, Arthur, "The Sudan Cotton Scheme", in African Affairs,

per fields of cotton cultivated in the Gahama area, the balance
(if any) of the area 'well-over' is divided equally between
the Government and Tawam.

(4) The Local Government Councils' shares. It is seen
from the division of profits, that the Local Government Councils
in the area receive a share as well. There are two. Laikoum Local
authorities operated by the Lauptao and Laikoum Local
Councils in the area used to rely for their revenue, among other things, on
fines from land and crops. But since these councils are not
allowed to charge the desired people taxes on land or the cotton
crop, another source of revenue is needed in order to discharge
their function and render service to the people concerned. So,
3% of the net proceeds of cotton is allocated to these councils.

3.3. "Teacher-Teacher, Motherteacher"

In the beginning I would like to emphasize that our main
purpose in this section is to review the position of the Gahama
tenant only in so far as the process of decision-making is concerned.

From the beginning, the tenant-cultivators in the Scheme
were de facto more than mere agricultural laborers. They have been taught to carry out objectively
all plans and entrepreneurs' decisions concerning their farming
activities and otherwise made for them by the Syndicate's (or the
Board's) field staff. This system of central control and retaining
of a high degree of authority in the hands of few has led to
an adverse effect on the tenant. It has considerably limited the
scope for individual initiative, creativity, incentives and inde-
pendence action. Mr. Arthur O'Neill, an ex-manager of the
Scheme, writes, "Then I first went there, the British administration
and Malachy almost. To save the tenant of the people were the
children in the happy."

Bureaucratic machinery starting from the Headquarters down to the junior field staff.

At the local level there are the towns' institutions. These have been mainly created for managerial purposes, i.e. to assist the field staff to implement the agricultural policy and related activities decided up at the top. The towns' institutions are mainly the village and block (earlier union*) councils. Both of these are elected.

To start with, the village councils themselves are classified in the order of responsibility, into three categories, namely, classes One, Two and Three:

1. **Class I Village Councils:**
   
   These are unattached official bodies. They belong mainly to local Government and are affiliated to the local Government Councils operating in the Gaunless region. The local authorities delegate some of their civic responsibilities to such councils. On Class I village councils function under the auspices of the Local Authority from which they derive their power to render services to the village community. Apart from their local duties in each of these village councils, there is an agricultural committee which deals with matters concerning agriculture under the direction of the field staff of the Board. These are at the heart about 30 such councils.

2. **Class II Village Councils:**
   
   These are mainly agricultural councils administered by the field staff of the Board. In addition to their agricultural responsibilities, they are also entrusted with some civic duties. The power granted to Class II councils is less than that of Class I. The number of these councils amounts to 350 councils, in both the main schemes and its extension.

3. **Class III Village Councils:**
   
   These are the Councils of villages (Gaunless), based on the traditional set up of the pre-scheme era. They are unattached * Ask an expert for a tribal administrative unit.
Probably one of the reasons for this central control were the control over a steady and reliable source of raw material for the British textile industry, and the fact that the local population were not used to the required kind of agricultural operations and management.

It can be said that such tutelage and direct control of the individual by the field staff was necessary in the earlier stages. But it would have been better if such control was accompanied by a conscious and systematic agricultural policy aimed at educating and guiding the tenant farmer to manage his own affairs. "In the British scheme, the need for a highly centralized system of agricultural control and the concentration on the efficient production of cotton in the interests of the country severely limit the opportunities for individual initiative and enterprise by the farmer. He cannot out of his own account try out combinations of arable and pasture and mixed farming..."

In one directive to the colonial governor, it was clearly stated as early as late July 1938, in a directive to the colonial governor, that eventually it was hoped that all agricultural and civil duties would be devolved from the Board on to the people through their local institutions and that in this way a paternalistic society will gradually become a democratic one. Point 4 of that directive reads: "In agriculture, just as in local government, the aim is devolution in to devolve on to the Board (local agricultural foreman) and the village council varying agricultural responsibilities so that in the end they can functionally manage the responsibilities of their agricultural affairs, and the long-term view is that the Field Inspector will very gradually lose his role as a direct controller and emerge as a co-ordinator and adviser."

There is no shadow of a doubt that the ultimate object of devolving responsibilities of higher echelons upon lower ones is novel in itself, since it also as inspiring a mental regeneration.

CHAPTER IV  LAND TENURE SYSTEM IN THE SOUTH

4.1 Considerations and Decisions on Land Tenure at the Institution of the Scheme

4.2 Main Conditions of Tenancy Today

4.3 Summary

CHAPTER V  LARGER PROBLEMS IN THE SOUTH

5.1 Physical Factors

5.2 Factors Mainly Influencing the Supply of Labour

5.3 Economic Factors

5.4 Social Factors

5.5 Summary

CHAPTER VI  POLICY RECOMMENDATIONS

APPENDICES

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I wish also to express my appreciation to all my friends in the "Sudanese-Dutch Friendship Association" in the Netherlands. Among whom I owe much to Mr. W.J. van Santen, deputy legal adviser, Ministry of Foreign Affairs, Holland. I benefited a lot from the talk about the Gezira Scheme made in the said Association by Mr. Kees van Schalk, of the International Agricultural Institute, Wageningen, who was working in the Gezira for several years.

I would like to place on record my appreciation for the considerable help I received from the staff of the Library and the Documentation Section of the Institute. Similarly, my thanks are also due to Mr. Nejat who helped me in neatly producing this thesis.

Least but not least, my grateful acknowledgdegments are due to all my relatives, friends and colleagues in the Sudan, particularly in the Ministries of Local Government, Finance and Economic Development, Department of Cooperation, Institute of Public Administration, the Gezira Scheme, "Sudan-India Sons' Association", and all those who helped in making this study possible.

It goes without saying that all errors and short-comings in this work are my own and I am responsible for them.

The Hague,

HARIHAN MERYANI
the literature available in the Netherlands on the project. This was a strongly limiting factor to the present study.

We have already mentioned that the Gezira Scheme, requires careful studies into all of its various aspects. In this paper, however, we are focusing, as we have hinted at the end of the first section, on the position of the tenant; and we are arguing that an improvement in his position could give a new stimulus to the Scheme as such.

To do this, we thought it to be appropriate to deal with the subject in the following manner. After a historical survey of the development of the Scheme, we will attempt to analyse its organisational structure; namely, the relation of the tenant to the management, the relation to the land and the labour problems in the Scheme. These topics indicate the main direction of our approach.

The Gezira Scheme seems to have an ambiguous set up: on the one hand it is organized as a centrally managed plantation system, on the other, at the bottom of the organisational pyramid the tenants carry by themselves much financial and operational responsibilities and risks.

This paper is in a plan to develop the second aspect of the system to the extent that a much larger say in decision-making and a greater amount of individual freedom and self-management will be granted to the tenants, who shoulder much of the risks of policies and decisions that are made for them.

The policy recommendations made in this study are all directed to the above mentioned objective. The tenant should be given the full opportunity to develop a whole range of responsibilities and competences, with the hope of developing himself into a true independent farmer.

It is submitted here that the policy suggestions made in this study are implying a radical change in the existing arrangements, e.g., tenancy conditions, managerial relations, the labour position and the like. Needless to say, the aim is to promote "a developmental process in the future."
pattern and the levelling of the plain have considerably facilitated
the organization of holdings and crop rotation, together with low
irrigable costs compared to similar projects. The total capital
investment for supplying water was reduced to the relatively low
figure of £1.9 - 10, i.e. between U.S. $ 27 - 30 per feddan (one
feddan = 1.028 acres).

In short, the Desira will have many advantages and few
disadvantages.

The Gezira climate is generally dry, most of the year
round. The rainfall is scanty and erratic. It falls only during
summer time, i.e., between July and September. The rest of the year
is completely dry. The rainfall varies, from the north of the plain
to its southern limits, between 10 to 25 inches annually.

(Figure 1 shows the map of the Gezira region and
irrigated area covered by the Gezira Scheme – black patch – with a
general map of the Sudan showing Scheme’s location – top corner).

\(1\) The Sudan Gezira Board, What It Is And Why It Works, a booklet
released by the Ministry of Information and Social Affairs and
The Administration of the Sudan Gezira Board, (Sudan, Government
inhabited by indigenous negroid tribal groupings, such as 'Amsa' and the 'Kerwa'. But we know about the indigenous population in that their tribal system broke down and merged into that of the Arabs. This was the result of the intermingling, mixture and inter-marriages between the Arab and the indigenous tribes. For, as Sir Arthur Keith has said, the 'Arab has an evolutionary relationship to all surrounding peoples."

1.2.2. Aspects of Social Life

Before we pursue further the analysis of social life of the Decima people prior to the Scheme, we must warn the reader that those are, so far as is known, no reliable and concrete studies pertaining to this period. "Climax of life in the Decima came to us from the shadows."

So we must admit that our study of this period, which is only based on fragmented statements made here and there, may not give a comprehensive picture of the socio-economic life before the introduction of the Scheme.

The social life of the Decima population was organized, since long ago, on typical tribal structures. Although the system had survived over the centuries, yet it was subject to certain modifications and adjustments. The reasons for such modifications might be attributed to socio-economic changes that took place in the region during the different periods in history.

In the early times each of the several tribes had a system of government for the administration of the tribal affairs. Each tribe had a tribal leader ('Caizir') whose authority covered all tribal segments, viz., clans, lineages, extended and nuclear families. It also covered non-tribal groups who for security purposes or otherwise had affiliated or allied themselves with the tribe in question.

6. Ibid., p.18.
Another characteristic of the tribal organization was the
geographic social solidarity. All members, as well as those who
affiliated themselves to the tribe, paid strong allegiance and
loyalty to it. The social solidarity, among other things, stemmed
from a web of kin relationships, e.g., relationships of descent,
filiation and marriage.

The members of the tribe, as in the case today, socially
attached their descent on both sides of the father and mother: cultural
descent. But generally, people tended to attach themselves to the
father's side.

Generally speaking, the tribe, as opposed to other
tribes, was a closed system. In anthropological terminology the tribe
was exogamous, i.e., marriages were conducted and concluded among
the members of the tribe, especially among those such as cross cousins.
But sometimes, not as a general rule, marriage might occur outside
the tribe [exogamy]. This could happen when a車r tribe, or we
have seen, willingly attached itself to a stronger tribe and the
members adapted themselves to the conditions and the way of life
of the latter. In this way there was the possibility of inter-
marriages between the protecting and the minor tribes.

Although, as we said, the tribe seemed mainly to be
structured on democratic principles, it also had internal undemocratic
social characteristics. In each tribe there was a social
category of slaves, who were relegated to a lower and subordinate
social status. It seemed that the social value of slavery had
developed in the region as a result of changes in values and social
attitudes away from the concept of communal life towards
individualization and absolute private property. At the time of the
inception of the Scheme, there were large groups of such slaves
employed by absentee landlords to cultivate the crops on their
estates. Agricultural labour was despised and considered as 'slave
labour' - an aspect about which much will have to be said later.

Another element of social inequality will be handled in the next
section.

Tribalism in the Colony has suffered considerably from
the political unrest of the nineteenth century, especially during
3.3. Some Aspects of Economic Organization: Given the Geographical Characterization of the Area

e) Land Tenure System

One of the most important aspects of the historical development is that of land-ownership in the Basin. From the very few and scattered statements made about the region in the earlier phase we arrive at the conclusion, that the customary land tenure had developed from the communal or tribal property to individualization proper.

The evolution of land tenure in Africa and elsewhere has well been described by Lord Lugard in the "Dual Mandate in Tropical Africa". He writes, "In the early stage the land and its produce is shared by the community as a whole; later the produce is the property of the family or individuals by whose till it is won, and the control of the land becomes vested in the head of the family. When the tribal stage is reached, the control passes to the chief, who allocates unencumbered lands as will, but is not justified in dispossessing any person or family who is using the land. Later still when the pressure of population has given to the land an exchange value, the conception of proprietary rights emerge and sale and mortgage and leases, of the land apart from its use is recognized."

Originally, then, land-ownership was based on the conception of communal right in the land, of which the ultimate ownership was vested in the community. In other words, the land was the patrimony of the tribe or the community as a whole. In the famous words of an African Chief, "Land belongs to a vast family of which many are dead, a few are living, and countless numbers are still unborn."

Within this corporate system of land-holding there were individual rights. Everybody was entitled to obtain land for specific purposes, e.g. raising food crops for his own or family's subsistence. These individual rights were most commonly secured through membership in tribe, local kinship group, village, tribal relationships, political allegiance, etc. Such proprietary rights


Influence of economic factors in that land unity; in the manner in which rights are evolved and in the use which the right-holders make of these rights.\textsuperscript{14)} Another authorizing on the one hand: "the clash of ethical changes with time-honored values has undermined the visibility and reduced the integrated authority and discipline of the tribal system. And finally, the changes from subsistence to a growing, pursuit of land with the increase in population have created pressure for alternative land arrangements, toward forms of tenure which recognize the value of land for the individual and also the individual's contribution to the value of the land.\textsuperscript{15)}

As historical evidence reveals the process of institutionalization of private landownership in the Selma area, was characterized by serious clashes between the various actions over the ownership and the use of lands. The dispute was brought before the Rung Kings at Semar (1586-1621), who formulated the existing land rights by issuing documents specifying the limits of the disputed areas.

Apart from the social and economic forces, leading up to proprietorship and exclusive titles to land, the foundation of private ownership was enhanced, together with the social condition and custom, by Jainsa cardinal principle which signifies private ownership, succession, and system of subdivisions. \textsuperscript{16)}

In the wake of the inception of the Scheme the authorities found out that absolute land ownership had been well-established and far-fetched. This system of absolute ownership, we shall

\textsuperscript{14)} \textit{ibid., p. 821.}
\textsuperscript{15)} \textit{ibid., pp. 821-822.}
The ownership of land entitled a claim to one-tenth of the crops.

Leasehold and rights of watercourse entitled a claim to one-tenth of the crops.

Ownership of cattle (used for driving the watercourse) entitled a claim to one-tenth of the crops.

Supply of cattle food entitled a claim to one-twelfth of the crop.

Supply of seed and implements entitled a claim to three-tenths of the crop.

The total of these shares on behalf of the above capital was one to six-tenths of the crop, leaving the working-tenant four-tenths of the crops. 17

This traditional practice had prevailed in the Khoi-Selv valley in the Gerson long before the British took possession. We shall see later, and this native system was the basis on which the initial planning of the Gerson Scheme built the partnership arrangement. 18

The economic organization associated above relates to those living in riverine settlements. But we have already mentioned that there were large groups of people on the plain. These large groups were living under much more ecologically conditions. Though they too had close touch with the riverine villages, they depended mainly on rainfall and hard-living, walls of 100 to 150 feet long, to water and to domestic animals - cattle, goats, sheep, chickens, etc.

The uncertainty and variability of this compelled these people to move and move over a wide area throughout the year in search of grazing grounds and water holes. Among these seasonal movements people lived in camps of movable dwellings, i.e. tents or grass huts. These dwellings were known as 'rond' villages.

Their stay in one particular place would continue as long as they could find enough water and grass.

Even as the plain, however, agriculture was an economic activity. Though pastoralism was the main occupation, the inhabitants

17. Unless otherwise indicated, data is from Development under the British (London, Feller & Feller, 1900), p. 18.
18. See Chapter Three.
stilly when the Travilla troops entered the area in 1898, and destroyed the remaining villages of the population, such as Jhanklal, Motin and Madhuch, and took many people as captives. At this time in 1902, the people in the region were allowed to take back the land, where thousands of people settled.

The region's people also still remember the famine in the years 1914, the year when India had to be invaded from India, 1929 the famine S. India (author 1930) and many died in great numbers.

1.1 Summary

1. In this chapter we have given some geographical information about the area. We have also shown how the Gangetic region became populated.

2. At the moment of the inception of the Scheme, the usual system of religious, social, etc. existed in the area, and the people were already in existence.

3. In the socio-economic organization the main aspects, important for the scheme, came to the fore:

4.1. The distinction between settled and nomadic groups, which were present in the Scheme.

4.2. The general land tenure system and its development to individualization and alienation.

4. Important facts about the evaluation of the scheme were:

4.1. The number of private land-ownership which concerned the whole area at the time of the inception of the Scheme.

4.2. The present partnership arrangements in the Scheme have grown out of the social tradition existing in the area prior to the introduction of the Scheme.
of cotton-growing in the country. As a consequence, he was pressed a succession on the Nile to grow cotton and other crops (sided farming) at Beitat (1916), in the northern province. To develop the Sudanese economy, Mr. Leigh Hunt set up, in 1904, the Sudan Experimental Plantations Syndicate, calling for the cooperation of some British merchants in London.4

The Sudan pilot project was important. The experience gained there played a great role later in the structure and running of the Gezira Scheme.

The achievements of Gezira encouraged the British authorities to think of exporting the cotton-growing. As a matter of fact, the attention of the authorities to the possibility of irrigating the Gezira plain was drawn by a prominent British hydraulic engineer, Sir William Darell, who was working at that time with the Public Works Ministry of Egypt. Mr. Darell made three expeditions up the White Nile to the source in the great equatorial lakes; while the assistant, Mr. Dunstan, sailed up the Blue Nile to its source at Lake Tana in Ethiopia. In 1904 Darell published his comprehensive "Report on the Basin of the Upper Nile", in which he showed the technical possibility of linking the Blue Nile at Khartoum to irrigate part of the Gezira. He emphasized in the said report the cultivation of winter corns (mainly wheat) in the Gezira area.

The irrigation of the Gezira had become the great concern of the British authorities, especially when in 1906 Mr. Dupain, director of the Sudan Tourist and Irrigation Service, reported on the possibility of the construction of a canal scheme in the Gezira which would serve an area of 3,000,000 acres. The conclusion of his report was as follows:

"The Gezira canal may be regarded as the great hope of the Sudan, and it is, and will be, an economic matter to ensure the execution of such a work, as now or later, the country is ever to become satisfactorily

... In 1907, the very company was re-organized, the Sudan Plantations Syndicate. It was to this company that joined later in 1929 by a

mister Company, Annables Bunting Company - what the execution of the Gezira Scheme was granted (1929-1950). For the sake of convenience we shall refer to these companies as "The Syndicate".
intently taken a large-scale project for river-gauging in the
delta. The interest of daybreak was keenly, representatives
of the British Cotton Growing Association visited the site in 1916...[20] and fully agreed with the idea. The significant success of
the pilot project had also prompted the Sudan Government to start
building a dam at Sennar on the Blue Nile (Sennar Dam—1.669
meters long).

Money was needed to start the building of the dam and
other works. At the people of Sudan were then, their taxation was
voted out. So funds had to be obtained from another source.
Sir Kington applied to the British Government, requesting for a
loan to be granted. The British Government received the application
immediately, because it was also interested in the scheme. So, in 1913
the British Parliament passed the 'Act on the Government
of the Sudan Loan Act, [12]'. As a result the funds needed for the
major capital structures—about £4 million—were made available through a loan floated in Britain and guaranteed by the
British Treasury. Other expenses were met by the Sudan
Government, the British Government, the Sudanese Government,
The outcome of the First World War put a stop to most
of the major works pertaining to the project. It was only in
October, 1923 that the contract for the building of the dam and
construction of canalization was secured by Thomas, Smith, and Sons.
The work was completed in July 1929, the year in which the Sudan
independence was officially granted.

The outbreak of the war, however, had affected a Brazilian
nurse, during which valuable experience during the war was
accumulated. It also served to notify the attitude of the
people towards the war scheme. By and large, this nurse had exposed
the Government to decide from the medical profile of local boys to
serve and to accept it from the local medical council. One of
the first steps to be taken in this regard was that of land
settlement and registration in order to prove and secure the proprietary
rights as that existed (See Chapter 3).

need to serve the economic interests of the "British colonial powers," and on the other to introduce "civilisation" in the Indian. A war of elaboration, this two-fold objective may be further stated as follows:

1. To guarantee a reliable source of raw materials (cotton), which the British desire, to the important textile industry.
2. To serve the economic interests of the British capital investors.
3. To provide developmental assistance to the Indians.
4. To invade, more specifically, for the development of the cotton production.

In his Viceroy's address, in 1868, in reference to a meeting of the British Cotton Growing Association (B.C.G.A.), Sir H. J. M. Herries, then Viceroy of India, said:

"We invite you to bring your influence to bear through the Cotton Growing Association, upon the British Government, to induce it to move without delay, and to do its part in the development of the Subject... you will have the opportunity of supporting it (the Indian) even from a personal interest. But, looking forward to the possibility of enormous increase in the growth of cotton in the territory under the joint ownership and exclusive control of Great Britain, you will also feel pride and satisfaction in your part in removing the handicap that rests so critically on the industry of India..."

Yes, however, experience will widen our estimation, in showing that you will help forward a great work of civilisation, in bringing to the native races of the Indian, the love of freedom, the right of it, and the rights of freedom, in teaching the benefits of freedom, justice, peace, and order, the benefits of order, peace, and industry, ordered government, and continuous prosperity. The same policy was clearly in 1868 in a meeting convened between the British Prime Minister and the representatives of the B.C.G.A. and it is another matter to interpret..."
List of this policy was as follows:

1. Exclusion of Scheme—One of the purposes of earlier pilot projects was to show practically the benefits that the original inhabitants could actually derive from such a scheme.

2. Land Purchase—Land was not expropriated. Titles of chief-holders were retained in their land projects. As it was not in a booklet issued by the Sudan Government that "The case, whether the majority of the land has been nationalized. ..." 1 Edward were received as coronet were for their land bought under the Scheme. They were also given priority to access to cultivation. In fact, all tenants were required to raise their and foster crops which had been cultivated entirely to them without payment of any new rules or the irrigation supplies.

3. Partnership—The inhabitants were told that they were taken in the Scheme as partners and not as laborers. This was dealt with considerably in a subsequent chapter. 2

4. Compensated and Limited nationalist. The British personnel went down to the villages and explained to the people all their traditional authorities. The importance of the Scheme for their future.

5. Force was also used against those who resisted.

We have reached the beginning of this section in which there were two reactions—unsupported and sympathetic—both against the initiative of the Scheme. Toallah, the assistance to the Scheme from outside the group, mostly, the lead authorities, and the traditional office-holders. The M. Did not, however, the Scheme become their larger estates were acquired and distributed to small and uncertain people, including their reeves. At a consequence, the "lower people" were brought almost at the same level as the "upper people" and even former slaves.

The traditional office-holders, e., Teachers, Church and Church were also against the Scheme. Their position centered on the fact that his coming of a new authority in the area of

1. See Chapter Two.
2. The Sudan: A Record of Progress 1920-1927, (Kharouf, 1927), p. 32. Further information on the indigenous reaction may be found in Chapter Four of this study.
3. See Chapter Two.
techniques to large-scale agriculture. I shall return to this topic in the next chapter. In the meantime, I will focus on the different social dynamics that shape the Lao land reform system.

Despite the overwhelming economic conditions at the introduction, we can state that in contrast to its situation when initiated before the Korean War, Laos was a great social achievement. The project has brought about tremendous growth in agricultural output, not only in the entire population of the country, but also in the whole Lao state system.

Regarding the tenants, the project has critically undermined their role of life. Flight has been a major factor behind the decrease of the tenant. In many cases, the tenant with an customary food supply did not have enough to support his family. Tenure was held or lost without having the chance of building a productive and steady household, or of searching for a better land at the main.

For the nation, the project is at the heart of the national economy. The cotton grower is the main source of foreign exchange income. Cotton and its products provide over 65% of the country's textile exports, and 95% of the groundnut's domestic product and approximately 40% of the money income generated in the Sudan.

Socially, the project has disrupted the tribal order. It has led to the fragmentation and the breakdown of the tribal social structure. The organizational division of the land authority has altered the traditional 'balance' of the tribal society, whereas the relationship between the land and the tribal authorities has been altered various ways. Instead, the area became fragmented into a number of tribal areas... The tribal authority of the tribal head was assigned to a result there being more social structures that were disrupted by this change.

In a word, therefore, the new situation in the project is getting more and more important for the economic situation and the social situation. The project has been successful in improving the economic situation of the Lao people and has contributed to the development of the country.


CHAPTER III
THE POSITION OF THE CENSUS IN THE SOUTH

3.1. Postwar Police in French-Territory

3.1.1. Historical Reasons for the System

The Census Scheme is run on a system of triple partnership, based on profit-sharing. The partners involved are three, namely, the Government, the tenant-cultivators and the Sudan Census Board. The latter Board has replaced the Syndicate since the nationalization of the Scheme in July, 1950. This partnership is the unique characteristic of the Scheme. The Scheme has been described as "a half-way house between absolute state ownership and complete free enterprise, between individualism and collectivism," due to the part in experience and background of five of the original partners on the one hand and the third (Syndicate) on the other, it is questionable whether the tenant is a 'partner' in the fullest sense of the term. Aside from this, the term 'tenant' itself, according to Professor H. Jacoby, "does not cover the complex relationships between the Scheme and the Census cultivators" (see Appendix II).

However, I do not desire here to strain the linguistic stage, or to accept the legal connotation of the term 'partner', or whether or not it applies to the cultivating-tenant in the Scheme. For all practical purposes let us, like those who have so far written about this project, employ the same term 'tenant'.

Returning to the partnership we have already indicated that the system has passed through two stages. The first stage coincided with the British private enterprise (the Syndicate), i.e., from the granting of the Scheme's concession to these companies in 1925, until its expiration in 1950. The second stage, which is still prevalent, began with the nationalization of the Scheme and the birth of the Sudan Census Board, in 1950.

35. "The view of the Egyptian intimate association with the Government, the prevailing relationship is sometimes alleged to be 'participating Board and Government on the one hand, the population on the other"—Van der Kloot, The Social Aspects of the Census Scheme in the Sudan, (Amsterdam, Royal Tropical Institute, Dept. of Cultural and Physical Anthropology, No. 56, 1951), p. 5.

The situation was critical indeed. The authorities were caught between two fires: the inevitable need of private capital, and the fear that the companies might become too absolute a master. Nevertheless, the directors of the Scheme had to react to the companies. After serious consideration of the affair, they decided to take in the Syndicate as a partner. The idea was that the adoption of partnership could remove their fear, in the sense that the Syndicate would not find enough room to swallow itself as an absolute master. Although the model adopted had fully succeeded in carving one of its purposes, namely, the utilization of the Syndicate's know-how and financial abilities, it did not succeed in serving the second purpose, i.e. curbing the Syndicate from having absolute control and enjoying a privileged position. A glance at the terms of the Agreement of 1929 between the Syndicate and the Sudan Government concerning the Scheme, shows us that right from the beginning the Syndicate was authorized to have a free hand in all matters pertaining to the construction area. Article three of the said Agreement reads:

"During the continuance of this Agreement the services, rights and functions in respect to the said area and the cultivation and crops thereof and the financing of the tenants and otherwise hereby extricated to be undertaken by the Syndicate shall be exclusively rendered, exercised and enjoyed by the Syndicate."[40]

We have examined this aspect of partnership in order to show later that this absolute control enjoyed by the Syndicate, and later by the Estates Board, was detrimental to the tenant to the extent that it has stifled his initiative and enterprising abilities.

1.1.2. 

Disputes of the Participating Partners

The duties and rights of the co-partners are clearly stated in the Estates Ordinance of 1956 which was superseded by the

[40] Ibid., p. 344.
collecting stations spread over the Scheme area. Supplies made to them in kind, such as seed, and work done on their behalf, such as ploughing, are debited to their account. Advances of cash, without interest, are made to them at suitable periods by the Board to meet their expenditure on seeds, weeding, sickling, etc.

The tenants carry out these operations under the close supervision of the Board's field staff.

(c) The Sudan Estates Board. The Estates Board, a public utility, is a corporate unit. It has come into being, as already noted, when the contract of the private companies was terminated on 1 July 1930, a year of great significance in the history of the Scheme. Since then the Board has replaced the contracting Companies as a third partner, in the Scheme.

The directors of the Board are appointed by the head of the State, but they are responsible to the Council of Ministers through the Minister of Finance and Economics.

Broadly speaking, the Board is responsible for the main duties:

1) The maintenance of the Scheme.
2) The promotion of social development by any means, having as main object the benefit of the tenants and other persons living in the Scheme area.
3) The promotion of research to further the productivity and stability of the Scheme.

By way of elaboration, the Board is responsible for clearing and levelling the land and the provision of water at subsidiary cost (or gratis, as they are locally called). As manager of the Scheme the Board is responsible for the provision of administrative, field and accounting staff, together with building offices, houses, stores and other.

An 'Abu Fatma' is a Six-Channer, as opposed to an 'Abu Luhroom'. A Twenty-channer - the numbers indicate the difference in size. There is a difference that these names come from the amount paid in planters to the Egyptian fellahin (fallahin = tillers) who dug them as such, as the invention of the Scheme - the Sudan Estates Board, 1934-35, 527-28.
Four-tenths of the yield, almost the share a tenant-cultivator would have received according to the customary formula. The system introduced, therefore, had the merit of being already understood by the local people. ... and it provided a practical method of doing the same between the Government and the Syndicate by passing on some of the Government's six-tenths share in return for technical management and for relief on some of the capital obligations. "The 60% paid out to tenants in the Goana irrigated area thus conforms to a local custom." But there is a rather significant difference. According to custom, the tenants only obligation is to do the agricultural work, but in the Goana, in addition to his labour he has to pay the costs of supplies sent to him in kind, such as seed. So, if we are to rely upon the customary practice, the tenant's earlier share (40%) was rather small. But perhaps this was compensated by other provisions enjoyed by him, as we shall presently see.

As regards the actual landowners, it seemed that the earc custom was not applied to them, since they only received initial rent rather than sharing proportionately in the total yield of the land. It can be argued that from the social point of view, the inapplicability of the custom with regard to landowners was rather fair as far as the whole society was concerned. If all landowners, still retain the ownership of the land (in theory) were entitled to share in the actual yield, they might have become very rich, and this would have created too great class differentiation without any effort from the landlord's side, too.

However, this amounts to saying that by and large the local customs were observed, and even used as a ground for building the partnership.

After the cotton crop is harvested, the crop receives all proceeds thus generated. For this it covers all costs of services, debited to the partnership as a whole in the "Joint Account". The expenses debited to this account include, among other things, costs of ploughing, fertilisers, anti-pest spraying, seeds and baling materials, transport, plowing, and insurance. These:

44. Castells, op. cit., p. 70.
The tenants, in addition to their share, participate in the "spill-over" from the Board's share, as indicated below. This share of the "spill-over" goes to the "Tenants' Reserve Fund" as long as that fund falls short of its statutory minimum of 66.3 millions (equivalent to US$17 millions), but thereafter it is distributed in cash together with the tenants' own share of the net proceeds.

In addition to these financial shares, each tenant is permitted to raise some crops e.g., maize (Zea mays var.), for his personal diet and wealth (Polishes latte) or fodder for his domestic animals. Such crops belong entirely to him without payment of tax or water rate for irrigation supplied.

(b) The Tenants' Reserve Fund (TRF). The Fund started in 1933. During the World-wide slump (1929-31) the tenants were unable to meet their commitments and there were many "bad debts" amounting to Rs. 600,000, which were jointly borne by advances made by both the government and the companies. To prevent the recurrence of a similar state of affairs, the Fund was gradually built by transfers from the tenants' collective share in past years. The main objectives are: to provide security for the loans advanced by the Board to the tenants and, more importantly, to serve as an equalization fund to subsidize the tenants collectively in lean years.

With effect from July, 1956, a ceiling was set to this fund at Rs. 25 (about US$ 5) per median cotton crop. If the TRF falls short of this amount, then up to 5% of the tenants' collective share, as well as from the "spill-over" of the Board's net share may be fed into the said fund.

(c) The Tenant's Share. After meeting its obligations in respect (i) of administrative costs and charges, (ii) the contribution to the Government for research, (iii) business profit tax, (iv) interest on temporary loans and on the initial capital provided by the Government, the Board is allowed 33. 1/3 (US$10.10) per acre.

For further details see: The Genetic Scheme from Village. A Collection of Articles by Members of Departments of the Genetic Board. Edited by the Press and Information Officer, (Sarbat, Indian, 1963), p. 91.
It can be said that from the start the freedom of action for individual tenants was highly restricted. The tenants have been firmly trusted by the management as a unit in the overall production line. The Syndicate personnel in their typical manner were not to speak of the tenants as their sleeping partners and in 1933, Mr. Wogan had written of the Gesira Scheme, "no partner (the company) is active, one (the Government) is largely dormant and the other (the tenant) is active but, for the present such."

To give an idea of the tenants-management relationship it is worthwhile to describe briefly the spread of control to which the tenant is subjected.

Administratively, the scheme has been divided into larger and smaller units. These are called the 'Groups' and 'Blocks' respectively. There are at the moment about 12 Groups (6 in the Main Scheme and 6 in Kapsay Extension) and 101 Blocks (51 in the Main Scheme and 50 in Kapsay). The Block has an average area of 15,000 Feddans. Each Group has a master of Blocks, which vary from one place to another.

Each Block is supervised by an inspector known as Block Inspector (B.I.). He is assisted by two to four Field Inspectors. Similarly, each Group is under the supervision of an inspector known as Group Inspector (G.I.). He is also assisted by other inspectors. The Block Inspector is directly responsible for the management affairs to the Group Inspector. The latter, in turn, is responsible to the headquarters, at Bahr Dar, to which the day-to-day management of the scheme is executed. The Headquarters is composed of several departments: Administration, Agricultural Department, Finance, Technical and Civil Engineering Departments, Supplies, Sales Department, Social Development Department, Gestra Light Railway, etc.

At the top of the ladder of such power structure there is the Gesira governing Board of Directors. The Board, as already noted, is a statutory body, which is responsible for the formulation of the general policy, the details of which are decided by the other two or three departments involved.

mostly in the newly developed phases of the extension of the scheme, with a view to train the tenants for agricultural work. When the training is completed, these councils will be dissolved and in their class since II village councils will be set up. Like Class II, councils Class III Village Councils are administered by the Grama field staff.

As a source of finance to Class II and Class II Village Councils the Local Government gives some financial grants.

Block Councils:

In each block there is a Council composed of representatives of tenants in the block. The members of this council are elected by Village Councils. Such councils are mainly administered by the field staff of the Board. The Block Inspector is its Chairman ex-officio and usually the Ends (government employee) is elected as vice-chairman.

Having seen the various tenants' institutions, we think it is necessary to give the reader a general evaluation of all these institutions.

"..." To start with, it must be pointed out that the tenants' institutions such as Village and Block Councils are only seen as instruments of production rather than as a training ground for a future true independent peasant society. In a recent United Nations publication, the Green Revolution has been described as follows:

"It was less a Science for the guidance of independent tenants than a centrally directed enterprise which employed labour on a credit-sharing basis. The tenants worked under the close supervision of field inspectors who planned their irrigation, planting and harvest schedules and provided the materials ... if the tenant in default in his harvesting, field inspectors have the right to hire labour for the task and charge the costs to the tenant's account. A recent observer has said that the tenant is not a farmer in the fullest sense of the word, but a producer of agricultural commodities on a conveyor belt of land supplied to him by the manager at..."

through the stimulation of the people's initiative and sense of responsibility. But the fact still remains that the people have to be translated effectively into actions.

...[Further discussion on the scheme not yet being implemented. The tenants are still not as keen as the children in the nursery, and the scheme's authorities are 'silenced'. The tenants have become a sort of cotton growers but have still far from being real peasants.]... Only that, but also the tenants, after such a long time, have been ignorant of the war in which the Scheme has run. "One of the striking ironies is... in the ignorance of the general run of the tenants about the Scheme. They have been taught how to grow the crops in the way the System requires, they know their routine inside out... But their general lack of understanding of the Scheme and its working as a whole is nothing short of shocking at this late date."

The deprivation of agricultural decision-making and lack of managerial autonomy are among the strong reasons that have considerably intensified the dissatisfaction among the tenants. The tenant-cum-managers have repeatedly expressed their abhorrence and disgust for getting a dead voice in their own affairs. This has been reflected in protests and strikes waged by tenants collectively. In 1926, when the tenants discovered that a fund of £1,100,000 was accumulated in the 'reserve fund', of which they knew nothing, they went on strike and swore an oath not to plant the cotton until they had had all the money out and the profit-sharing management had been revised to their advantage. The strike, however, was settled through the mediation of a special committee of the Advisory Council for the Northern Sudan which recommended the payment of £2,600,000 (equivalent to US$ 5,000,000) out of the "reserve fund" to supplement the year's profits. "This strike reflected the inadequate relations between the management and the tenants. The latter claimed bitterly that they had no idea of the size of the fund, nor any knowledge or say in the administration of the Scheme."

9. £2,1,200,000 is equivalent to about US$ 3,000,000.
through the stimulation of the people's initiative and sense of responsibility. But the fact still remains, that the words have so far been translated effectively into action.

It can be said that the tenants in the Scheme have not yet been welded. They are still more or less like the children in "Lamb's" nursery", and the scheme's aimlessness the "banjo*. They probably have become so much cotton growers but look still far from being real growers.24* Not only that, but also the tenants, after such a long time, have been ignorant of the way in which the Scheme was run. "One of the most striking impressions... is the ignorance of the general run of the tenants about the Scheme. They have been taught how to grow the crops in the way the system requires, they know their routine inside out... But their general lack of understanding of the Scheme and its working as a whole is nothing short of shocking" at this late date.22*

The perpetuation of agricultural decision-making and lack of managerial autonomy are among the strong reasons that have considerably intensified the dissatisfaction among the tenants. The tenant-cultivators have repeatedly expressed their agitation and demand for getting a real voice in their own affairs. This has been reflected in protests and strikes waged by tenants collectively. In 1946, when the tenants discovered that a fund of £1,300,000 was accumulated in the "Reserve Fund", of which they knew nothing, 90 percent of them, on the one of getting back some of these money, refused to plant the cotton and held out until they had had all the money out and the profit-sharing arrangement had been revised to their advantage. The strike, however, was settled through the petition of a special committee of the "Agricultural Council for the Northern Sudan" which recommended the payment of £2,400,000 (equivalent to US$ 1,200,000) out of the "Reserve Fund" to supplement the year's profits. This strike reflected the inadequate relations between the management and the tenants. The latter claimed bitterly that they had no idea of the size of the fund, nor any knowledge or say in the administration of the Scheme.26*

24. [Footnote]. See above. p.76.
25. Gulick. op. cit., p.419.
26. $2,400,000 is equivalent to about US$ 1,200,000.
The tenants' movement continued. The most direct organizational result of it was the birth, in 1947, of the Tenants' Representative Body. This organization developed into the Gezira Tenants' Association in 1952 and further into the "Gezira Tenants' General Union", the constitution of which was passed by the Council of Ministers in 1954. The Union is organized into a General Assembly, an Executive and Local Committees at block levels. The members of these committees are elected annually by secret ballot and proportional representation. The General Assembly, which meets in July every year, decides the general policy and supervises the functions of the Executive Committee. The latter is responsible for the implementation of the Union's general policy. On the other hand, the local committee studies local issues and makes/recommends to the Executive Committee. Moreover, it serves as a link between the tenants on the block and the Executive Committee.

The Tenants' Union, in contrast to the village and block councils, may be regarded as representing the tenants' interests to some degree.

In later years the tenants, again, collectively repeated their demands concerning the increase of their share in the total profits, the readjustment of some production costs and, most important, their participation in the decision-making. "To have a proper say in our affairs and policy-making we should be represented in the Board. The tenants' share to be raised to 50 percent of the total profits. The adjustment of production costs per head as a base for account. Also, the costs of ploughing and picking up of cotton to be charged against the Joint Account." (57)

Though the year 1950 - the year of nationalization - was a landmark in the history of the Gezira, to the tenant it did not mean much in so far as the power relations are concerned. Administratively speaking, a foreign bureaucracy was just replaced by a national one, which has maintained the previous power structure. The tenant still occupies a subordinate position and complies with the orders and policies conceived at the higher echelons. Like the

land and water as well as providing for agricultural research, the
cultivating - tenants are to supply the agricultural labour and
the Horde (earlier the Syndicate) in to provide the management,
financing and technical know-how with regard to the growing,
processing and marketing of cotton.

4. Notwithstanding the fact that the Sudanese Government
took over in the year 1950, essentially, there was no change in the
existing relationships.

5. Although the tenants are partners in the Scheme, they
are actually not partners in the real sense for the following
reasons:

5.1. The high degree of centralization of the management to-
gerther with compulsion and close supervision did not allow for an
independent development of the cultivator.

5.2. There is a low degree of development of tenants'
advertisements. These institutions e.g. tenant organizations like
Block and agricultural councils, are more efficient communication
channels for the central management rather than a real expression
of the tenants' interests.

6. As a result of the present organizational set-up of the
Scheme, the tenant is reduced to the position of an overseer. In
other words, the tenant is more a unit in a production line than a
creative tenant developing his own initiative and farming skills.
Against such a background, it is quite understandable if difficulties
like strikes come to the fore.

7. In spite of the degree of security offered by various
existing financial institutions (e.g. Tenant's Reserve Fund, Swell-
over and communal sharing of the costs of ploughing, spraying the
crop etc.), the basic position of the tenant in this respect is that
of a risk-taker. Which financial position contrasts sharply with
his lack of autonomy and managerial freedom.

8. We hope that our subsequent chapters will make this
position of the tenant more clear.
"Settlement Officers" was appointed to carry out a detailed local investigation so as to adjudicate systematically upon all existing claimants' rights to land. The result of this investigation and cadastral survey conducted between 1907-1912, was that almost all rights on land amounted to full ownership and, not as had been expected, merely rights of rain cultivation, which would have been easier to extinguish. However, land had to be acquired since it was needed for a 'public' purpose. The problem posed at that time was, how could this land acquisition be accomplished? Should it be done by expropriation irrespective of the probable unfavourable consequences, or should another alternative be worked out. The latter course was adopted. Thus expropriation was ruled out. It was conceived as being completely detestable, "because the local land-owners, whose goodwill and cooperation were essential to the success of the Scheme were just as jealous of their land rights as any other community in such circumstances; they were naturally suspicious of a project which took their land for a Scheme the advantages of which were by no means obvious or certain..."[60] Bearing these circumstances in mind, the existing rights were to be kept, but some necessary modifications had to be introduced. The alternative land tenure system was found in the compulsory hiring of land from its original owners at an annual flat rate of ten shillings, i.e., two shillings per shede, for a prolonged period of forty years -- started in 1921. At the same time the owners' titles to the land were retained, and the owners were given priority in cultivation.

This land policy was affected and is regulated now by a special ordinance known as the "Cedara Land Ordinance 1927", which amended and repealed earlier legislation published in 1921 and 1923.

The most salient features of this policy are as follows:

1. Owners of land would not be deprived of their ownership and their present liberty to transfer or mortgage their rights.


61. DuBosek, A., op.cit., p.84.
the government. Again, owners of the land were given titles only in terms of a share in the total area, that is, not in terms of a specific plot. Consolidation meant, that the government conceived of the whole area as one holding in which the original owners, so to say, "owned a share". As for quantitative limitations, they will be elaborated below.

After consolidation, the land was divided up into holdings among those tenants who were in the opinion of the government competent to manage it. The optimum size of a holding which could be cultivated properly by a tenant was estimated at 30 feddans (enlarged later to 40). "For the rule is that an owner's personal allotment is confined to what he can manage and it is strictly adhered to." (62)

Previously, some people (landed class) e.g. the heirs of Said 'Ali Tarefi in Falah village, owned up to 700 feddans, (63) some owned less, while still others were landless or had no access to the land. The procedure adopted for limiting the quantity of land each should have, was as follows: As a rule, an owner of 30 feddans or less would be eligible to become a headholder of one holding and an owner of 100 feddans would be eligible for two holdings and so on. Owners of over 200 feddans would be eligible also for only two holdings but would have the right to nominate tenants (usually among his relatives, sons, brothers, servants or villagers) for another two holdings. Those 'nominees' were not headholders, but practically as long as they properly cultivated, their tenancies went on. The nominees, however, became tenants belonging not to the owner but to the Governor's (earlier the Syndicate's) resident inspector. The excess land, of which titles were kept in the name of its original owners, was distributed by the government to landless people in the area, or from outside. The holding(s) allocated to a tenant is not necessarily that registered in his name, but may be any holding elsewhere in the locality.

In tenancy allocation and as far as property rights were concerned, four classes of tenants were differentiated, namely, the tenants 'as of right', nominees, preferential and ordinary tenants. "Those who owned 40 feddans or more, called 'right holders'"
growth of big absentee landlordism. Consequently, the independent and actual landowners would be reduced simply to mere agricultural labourers or exploited tenants. "The situation had provided a golden opportunity for far-sighted people with capital to speculate on buying up native lands and selling them at an appreciation. This gave rise to a fear that the only people who would later be able to afford to buy the land from the speculators would be wealthy landlords and companies, with the result that an independent peasantry might be converted into agricultural labourers or renters of tenanted tenants. The first necessity was to stop land being bought for a song from people who had no idea of its relative value with money."  

Strict measures taken by the government brought this evil trend to an end. The disposal of land either by its actual owner or speculators was brought under stricter control. The British concession companies (the Sudan Plantations Syndicate) were not allowed to own land. On the other hand, land was compulsorily leased while at the same time demanding the titles of its owner. In this way land speculators, whether native or foreigner had the ground cut from under their feet. "The result of this policy has been that practically the whole of the land in the Gorsa remains in native ownership divided into comparatively small holdings, so that it may be said that not only has the foreign land speculator been kept out, but also the wealthy native absentee landlord, and the whole of the land remains in the ownership of the actual cultivators that work upon it."  

The traditional household system furnished the state with absolute control over the land. It enabled the state to ensure the economic use of land. The system had also provided the state with a patent instrument to avert the increasing threat of excessive land fragmentation or fractionalizing due to demographic pressure and the decrease in available land coupled with the Hindu Law of Succession. For instance, on the death of an owner his holding shall not be partitioned out among his appropriate heirs, but it shall be registered...
majority 'owned' one holding. In this connection, it is worthwhile to cite a case of land distribution among the various categories of cultivators. Mrs. Gulick furnishes as with such a case. She found out among 1144 tenants in one of the Grecian regions (the 1st Nau) in 1923, that the land was distributed in the following proportions:

1. Tenants 22%
2. Pensioners 26%
3. Previous tenants of the area 11%
4. Tenants of adjacent areas 13%
5. Non-tenants 4%

It can be seen from these proportions that 38% of the tenants went to people not formally supported by a landlord. Moreover, landlords had been excluded from any share, other than the initial rent, in the proceeds of development, as landlords. As landlords and their families had been treated almost on equal footing like common individual tenants. So far, so good.

But at the same time, the disadvantages of the System, should not be overlooked. In the following section, which deals with the present conditions of tenancy, we shall also try to point out such disadvantages. Before we pursue this analysis, we can already point out that the present tenurial arrangement has greatly intensified the disinterest of the tenant to invest in the land. This may be, among other reasons, due to the fact that the landlord has lost intimate contact with the soil. Indeed, the present system has deprived him of most of his original rights.

4.2. Main Conditions of Tenancy Today

If most of the points are descriptive, some evaluation will enter here and there.

(a) Size of Tenancy

The size of the tenancy is uniform throughout the entire scheme (in the Yaramil Extension it is much smaller). Originally, tenants were granted ten fields in addition to a three-course rotation, that is, thirty fields each. The system was later on changed to four-course

The quality and quantity of each tenant's crop determined
his part in the total of all the tenants' communal surpluses.
After deduction of loans advanced, his part is paid out in weekly
installments. This means, that the tenant carries the operational
and financial responsibilities for execution of his own level,
although managerial control is highly centralized; directives are
stringent, permanency of holding is absent and his share is paid
out as to a wage-earner.

\( \text{(a) Investment.} \)

The level and kind of investment is decided on and
executed by the Board. As the tenant is not permanently assigned
to a specific plot and as he is unable to liquidate possible
investments made, there are no incentives for the tenant to invest,
to preserve and improve soil fertility. The land is not divided
into a set of small holdings in which tenants can have pride of
occupation, nor can they make long-term improvements to the land which
are inspired by the tie between man and the land he farms. To be
fit into the complicated rotation system of land use, a tenant
may have his cotton in one place, his grain in another, and his
beans over in yet a third, all may be fairly widely separated.\( \text{[2]} \)
Furthermore, it has recently been observed by a United Nations
Agency that "As the Scheme (Cassie Scheme) is at present run, there
is almost no scope for a tenant to invest in his land. Capital
improvements are the primary concern of the management. The tenant
thus has no incentive to make savings out of his earnings, and
the nation is losing a potential source of investment, which
autonomous farmers might have used for agricultural improvements.\( \text{[2]} \)

1.1. \text{Remark:}

The introduction of land tenure system was done in such a
way that it to some extent took into account the existing property
rights. On the other side, it took into consideration equality of
rights for everybody, as far as the cultivation of the crops was
concerned.

71. \textit{Progr. in Land Reform - Fourth Report, p.116.}
CHAPTER V

LABOUR PROBLEMS IN THE SADAR

Labour as a problem has several sides:

1. The natural cycle determines the need for a large number of labourers in specific short-term peak periods in the year.

2. The problem as such is situated in the wider context of the system of the existing and future labour supply (and demand); which point, in turn, is largely determined by the extension of the area of the scheme, seasonal conditions in other parts of the country and the development of the Indian economy as a whole.

3. Economic factors, like the yield and price of cotton, influence the tenant's capacity to hire labour.

4. The tendency of the tenant to use hired labour in excess of necessities generated by considerations (n.b.) and to the limit, and even over it, of his capacities (n.b.)

We shall try to analyse some of the labour problems, giving our main attention to the tendency of the tenant to rely on hired labour, instead of developing a real interest in agricultural labour, but at the same time keeping the inter-relations, especially between points (3) and (4) above, in mind.

To start with, for convenience's sake, we shall examine the factors influencing the problem of demand for labour under three main groups, namely: the physical, the economic and the social. Factors influencing the labour supply will be handled just after the first of the three above-mentioned groups.

5.1. Physical Factors:

The seasonal conditions, as well as the cycle of farming, influence the demand for labour in the scheme throughout the year. The agricultural year in the Sadr, as shown in the calendar (Fig.1), is divided into the twelve months of the year. It begins in July and ends in June and is divided into four seasons:
In fact picking is one of the major problems facing the Estate Board and the tenants.12). During these peak periods almost all hands are needed for agricultural operations, and the tenant, as the partner in the scheme, is obliged to provide the required labour force.

The timing of rains and the amount of rainfall can result in a serious growth of weeds which have to be cleared from field channels and furrows. Heavy rains also tend to bring good yields of rain-fed corn (maize) in many parts of the Colony and this requires extra labour inputs. If the rains are late, or come after the crops have been sown they can result in wash-outs, which necessitate re-sowing. Terraces located in low-lying areas often require more labour inputs during this time of the year due to water-logging. Also, when the crop is heavy more labour inputs are needed.

1.6 Factors Affecting the Supply of Labour

Favourable climatic conditions and sufficient rainfall in these parts of the Colony may influence to a considerable extent the labour supply in the Scheme. This is because the influx of such casual labourers in the Scheme depends on the success or otherwise of the rain cultivation in their home areas. Such rain will keep these migrant labourers at home, where they can cultivate their own crops. Thus the Scheme may be put in a precarious position if it continues to rely largely on such unpredictable and fluctuating variable.

The expansion of the main Scheme to twice its former size, has created greater demand for more labour inputs. The main Scheme used to rely considerably on the supply of the labour requirements drawn off from its immediate vicinity i.e. from the local modern Aksum just living outside the boundaries of the Scheme. It is said, that 61.3% of the picking labour forces in the 1955-56 season came from the Konso area.13) Now these people who used to constitute a

12) The Sudan Gebelein Board, April, 1964, p.28.
for their work and to ask for more rising benefits (Table II). These
customs have become established rights of the labourers; but the
rents' index is not stable, because it depends heavily on
fluctuations in the cotton yields and the prices on the world market
(Table III and IV). This "...index to depend on outside labour
on the cotton market level of the tenants will allow" has
unfortunate consequences. As it was put, "Once prices are high and
yield above the average, the tenant family's outlook towards farm-
ing can be accommodated.....

### Table II

<table>
<thead>
<tr>
<th>Period</th>
<th>Total</th>
<th>Without Family</th>
<th>Total</th>
<th>Without Family</th>
<th>Mixed Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>1930/31</td>
<td>88</td>
<td>36</td>
<td>13</td>
<td>45</td>
<td>131</td>
</tr>
<tr>
<td>1931/32</td>
<td>82</td>
<td>28</td>
<td>11</td>
<td>34</td>
<td>108</td>
</tr>
<tr>
<td>1932/33</td>
<td>70</td>
<td>40</td>
<td>15</td>
<td>35</td>
<td>100</td>
</tr>
<tr>
<td>1933/34</td>
<td>56</td>
<td>65</td>
<td>21</td>
<td>35</td>
<td>91</td>
</tr>
<tr>
<td>1934/35</td>
<td>46</td>
<td>30</td>
<td>26</td>
<td>20</td>
<td>72</td>
</tr>
<tr>
<td>1935/36</td>
<td>43</td>
<td>30</td>
<td>23</td>
<td>23</td>
<td>65</td>
</tr>
</tbody>
</table>

**Notes:**
1. The rising total costs of Production (Labour) = Column (4) + Column (5).
2. The rising costs of hired labour = Column 3.
3. A nickel for a Sebagas pound (ES. 1 is equivalent to about £2. 23).
4. N.B. - No Data

establishment of recruitment centres in several parts of the country, especially in the West, and for free salary warrants for pickers and tenants (the latter are now issued by the Ministry of Finance and Economics). These items have been granted. Thus, the tenant has been relieved of some costs of labour, which have been taken over by the other two partners. Both concessions are short-term measures, which in part give way to the tenants' own attitudes towards less and more personal work by the tenants and consequently complain that "... the banana (tenancy) acts all the profits."

<table>
<thead>
<tr>
<th>No.</th>
<th>Type of Occupation</th>
<th>Number of Tenants engaged in occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Public Service (Local)</td>
<td>11 (including 3 males, 6 females, and a police constable)</td>
</tr>
<tr>
<td>2</td>
<td>Business at a market centre</td>
<td>1 (at least 1)</td>
</tr>
<tr>
<td>3</td>
<td>Shop in village</td>
<td>16</td>
</tr>
<tr>
<td>4</td>
<td>Fishing, trading and peddling</td>
<td>3 (including 2 fishermen)</td>
</tr>
<tr>
<td>5</td>
<td>Motor transport</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>Donkey carting on market days</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>Animal herding</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>Borong, animal pound</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>Brick-making</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>Plantation</td>
<td>1</td>
</tr>
</tbody>
</table>

Sources: Culwick, op. cit. p. 49.

But it has been found difficult to adjust this attitude in times when prices and yields are low. One answer has been to take up a job which can supplement earnings from the tenancy. Tenants have set up shops, or bought lorries or tractors, which they offer for hire with the returns from cotton in good seasons. Another has been to send a son out to work in the indent or to overseas and earn back remittances to the family in the cotton. Both trends result in a higher demand for hired labour on the tenancy. They also tend to reduce the agricultural efficiency of the holdings, as a tenant's efforts are channelled elsewhere. Over time, they contribute to degrading the design of a vital source of labour, the tenants' sons, who could otherwise have built up experience of agricultural work along the Scheme. In this connection Mrs. Colquhoun in her illuminating study of the social life in three typical villages in the Scheme, discovered that 24% of the tenants men, besides their principal occupation as tenants, had several additional or extra occupations (Table V).

Moreover, there are many events that reveal clearly the dissatisfaction of the tenants in the present system. This dissatisfaction even in the extent of tenants' resignations and taking other pursuits outside the Scheme. For instance, during the world along of the 1920's, for financial reasons, many tenants resigned and their holdings were given to "customers" people coming from western Sudan, from Northern Nigeria, or from former French Equatorial Africa - who had migrated into the Scheme in its early stages to sell their labour. Paradoxically, in 1924, though a good year, more tenants also resigned. The main reasons given for such resignations were, the shortage of labour and its high costs, and that the tenants were taking the opportunity of a good year to get out. Again, because of such rising costs (Table III), tenants have petitioned several times for the revision of the profit-sharing arrangement. They have also asked for the

75. Ibid., p.19.
76. Colquhoun, op.cit., p.102 and 104.
77. The number of tenants resigned in 1942 amounted to 1,100 i.e. 8% of the total (see Shaw, op.cit., footnote 11), p.48.
As soon as action began to put some money into the tenants’ hands, complaints began to appear that they were leaving the work to dependents and paid labour. They were only to be expected in a society in which agricultural work was low in the social scale. ... He that it may, it is understandable that freedom from field work ranks high in the tenant’s scale of economic priorities."

As we have already noted, the tenant is responsible for the provision of the necessary wage labour during the busiest months of the year (weeding and picking). Theoretically, the tenant should resort to hired labour only during such periods when he and his family are physically unable to cope with it. But deeply ingrained social attitudes vitiate such economics, the tenant tends to rely as heavily on hired labour as his income allows, because agricultural labour is synonymous with slavery. "The tradition for slave labour for agricultural purposes had been well established for several generations," the tenant had not yet fully emerged from such an unadorned traditional background. He has all the time the traditional landlord as his frame of reference. "... it is in the calls [sic] Scheme that slavery heritage is affecting economic development most adversely, with because development effort is concentrated there, and because rising houses permit realization of the economic and social gain of traditional values." It is true that these historical antipathies, which are reinforced rather than reduced by the economic development in the region, are increasingly influencing the long-term efficiency and are governing the pace and direction of economic development.

Policy-makers desiring maximum and rapid rates of economic development are thus obliged to consider and undertake carefully all cultural aspects of the society, particularly those efficiency-retarding traditions that conflict directly with economic objectives. "... Social and economic changes can defeat their ends, if the forms of development encourage the survival of negative

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Speaking about the economic factors, it should be noted that the centre scheme is not operating in a vacuum. It is part of the overall reality. Hence its future development, especially for the supply of its labour force, as already pointed out, is largely dependent on the rate of urbanisation development and the continual enlargement of the various sectors of the modern economy. The scheme will be deprived of a viable labour force, represented by the migratory movements, by the increasing competition and the greater employment opportunities created by the developmental schemes launched elsewhere in the country. The centre scheme is no longer the only place for providing employment opportunities for casual or migratory labourers as was the case before 1939.

It is obvious that economic factors play a role in the creation of the labour problem. The situation, as we shall use instantly, is much more aggravated by the social factors.

2. Social Factors

By far the most important in the fact that the labour problem in the scheme is increasingly aggravated by the existing social values and customs, which create an active resistance for field work. It is said, that the most serious problem facing the scheme at the present day, and which causes the second great concern, is the negative attitude of the tenant and his family towards field labour and his heavy reliance on hired labour. It has been observed that the tenant's prosperity to hire labour for social reasons increases as the level of his income rises. This may be explained by the behaviour pattern of the tenant in the pre-scheme environment, which considered, annual agricultural labour as 'slave labour', and socially demeaning.

"The first impression one gets is that family work is the mainstay, hired labour the exception. Before long, however, one realises that one is looking at the picture upside down. Hired labour is the mainstay, family work the exception.... The records show that the tendency to become an employer of labour rather than a cultivator was well marked from the very earliest years of the
traditional values, though output rises initially, its very
increase may then create a network of interrelated resi-
stances to
further growth and the rate of progress will decline. A Mar-
ket might describe such development as one containing the
seeds of its own destruction. (25) Such a situation is well
reflected by the
behaviour of the tenant in the Gesceh Scheme.

The roots for such value system prevailing among the
tenants may be found in the culture or the socio-economic
relationship that existed in the region before the launching of
the Scheme.
In order to understand the present behaviour patterns of the tenant
in relation to the field-work, it is worthwhile to take reference to
the former set-up which we have already hinted upon in an
earlier chapter.

The Gesceh society, especially after the institutionalisa-
tion of private property, had a clear-cut socio-economic structure.
A number of people at that time resembled a "landed gentry" or a
class of "gentlemen farmers". Native farmers bought slaves or
hired labour with income derived from sale of their livestock
and employed them to cultivate the crops. The job of these wealthy
people was to form a leisure class who were superintendents of the
agricultural work performed by a cloistered group of subordinate
status. These subordinates were a vital source of consuims for
landlords. Labour was an important asset, since all agricultural
operations were to be performed laboriously by hands and primitive
technology, and an iron wheels (jaggi) and Chaddar. (26) The
existence of a labour class consisting of bought labour or slaves
and of hired labour and tenants was a prominent feature of the
Gesceh and the post organization of labour undoubtedly has repercus-
sions on the present day agriculture. (25)

At the bottom of the scale of wealth - but above the level
of slaves - there were small landlords, share-croppers and
landless people. Small estates were generally owned by the owner
(26) A conduit is a channel or a primitive means of lifting water by
'run-off' through a limited height, usually from a pond, a canal
or river.
Cultural usage of the Sudanese by the colonial regime was used to hire labour, buy slaves, own land or install irrigation works. So, they had recourse either to the already mentioned customary partnership formula among themselves, or with landlords who could provide expensive agricultural technology. However, they also had recourse to another traditional system of cooperative known as 'rafir'. According to this system of cooperation, the person in need of extra hands from outside asks for the help of his fellow citizen who, in turn, voluntarily responds to his request. The people usually take recourse to 'rafir' system in tasks requiring enormous help, such as sowing, harvest, and house-building. According to this arrangement the host pays as wages to his helper; he only serves them with food and refreshments, like tea and coffee.

The Eshara in the plot, especially during the Turkish rule, was an important place for slave trade. So it was full of slaves. Assamblage, a town situated in the centre of the Sudan, was, until the late 19th century, one of the largest slave markets in the Sudan.

But the establishment of the Condominium rules changed the order of things. One of the first reforms of the new regime was the abolition of slavery. This decision brought the "good as grace" to the Eshara economic structure. Landlords lost their traditional manpower, and as a consequence waterwheels and Shadara on the riverbanks fell into disuse, farming was abandoned in many places and people resorted to livestock, which they sold to buy grains or to maintain social prestige for their way of life.

In the initial stages of the Eshara, as we have described, the ex-slaves received tenancy as 'inhabitants' or otherwise. But the attitude of the people towards agricultural labour remained the same. This attitude was increasingly perpetuated by the steady migration movements of different ethnic groups from the west of the country and from West Africa. Political trouble in the south, the spirit of 'rafir' is highly embedded in the Sudanese society today.
The influx of these West Africans, together with other immigrants from other parts of the Sudan, has altered demographically the composition of population in the desert almost to the advantage of non-Africans, while Arab predominance has decreased proportionately. The situation raises the very important sociological question of the integration of immigrants within Sudan society.

27. Mr. L. D. Hargreaves, Land Reform Report, op. cit., p. 15.
<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>43-44</td>
<td>41,361</td>
<td>26,957</td>
<td>5,702</td>
<td>16,109</td>
<td>105,067</td>
</tr>
<tr>
<td>44-45</td>
<td>73,504</td>
<td>31,926</td>
<td>10,449</td>
<td>13,522</td>
<td>151,477</td>
</tr>
<tr>
<td>45-46</td>
<td>63,983</td>
<td>34,281</td>
<td>7,532</td>
<td>15,857</td>
<td>149,659</td>
</tr>
<tr>
<td>46-47</td>
<td>65,500</td>
<td>35,654</td>
<td>9,503</td>
<td>19,466</td>
<td>140,123</td>
</tr>
<tr>
<td>47-48</td>
<td>59,540</td>
<td>42,413</td>
<td>11,726</td>
<td>13,147</td>
<td>127,828</td>
</tr>
<tr>
<td>48-49</td>
<td>94,608</td>
<td>43,043</td>
<td>10,408</td>
<td>21,913</td>
<td>170,072</td>
</tr>
<tr>
<td>19-50</td>
<td>103,652</td>
<td>47,340</td>
<td>14,172</td>
<td>21,084</td>
<td>207,248</td>
</tr>
<tr>
<td>50-51</td>
<td>89,500</td>
<td>52,613</td>
<td>19,274</td>
<td>19,884</td>
<td>201,271</td>
</tr>
<tr>
<td>51-52</td>
<td>93,486</td>
<td>42,616</td>
<td>23,426</td>
<td>24,991</td>
<td>243,919</td>
</tr>
<tr>
<td>52-53</td>
<td>72,409</td>
<td>24,172</td>
<td>32,213</td>
<td>35,631</td>
<td>204,505</td>
</tr>
<tr>
<td>53-54</td>
<td>61,560</td>
<td>44,263</td>
<td>31,672</td>
<td>29,693</td>
<td>196,108</td>
</tr>
<tr>
<td>54-55</td>
<td>77,459</td>
<td>53,390</td>
<td>23,711</td>
<td>24,562</td>
<td>227,133</td>
</tr>
<tr>
<td>55-56</td>
<td>59,233</td>
<td>24,333</td>
<td>23,734</td>
<td>24,774</td>
<td>232,165</td>
</tr>
<tr>
<td>56-57</td>
<td>112,574</td>
<td>32,359</td>
<td>31,757</td>
<td>30,929</td>
<td>276,517</td>
</tr>
<tr>
<td>57-58</td>
<td>52,732</td>
<td>42,043</td>
<td>21,702</td>
<td>20,254</td>
<td>146,131</td>
</tr>
<tr>
<td>58-59</td>
<td>114,143</td>
<td>43,673</td>
<td>41,658</td>
<td>26,929</td>
<td>286,227</td>
</tr>
<tr>
<td>59-60</td>
<td>82,584</td>
<td>79,466</td>
<td>31,640</td>
<td>19,143</td>
<td>259,852</td>
</tr>
<tr>
<td>60-61</td>
<td>51,682</td>
<td>55,683</td>
<td>41,981</td>
<td>17,907</td>
<td>266,952</td>
</tr>
<tr>
<td>61-62</td>
<td>70,354</td>
<td>77,519</td>
<td>16,432</td>
<td>26,457</td>
<td>266,286</td>
</tr>
</tbody>
</table>

Source: The Sudan Census Scheme From Witlin, 24th Edn, p.12.
<table>
<thead>
<tr>
<th>Picking Season</th>
<th>Pickers per 50 C.</th>
<th>Acres per 100 Cents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1939</td>
<td>4.4</td>
<td></td>
</tr>
<tr>
<td>1936</td>
<td>4.3</td>
<td>19</td>
</tr>
<tr>
<td>1937</td>
<td>4.3</td>
<td>13</td>
</tr>
<tr>
<td>1938</td>
<td>4.3</td>
<td>13</td>
</tr>
<tr>
<td>1939</td>
<td>4.3</td>
<td>12</td>
</tr>
<tr>
<td>1940</td>
<td>4.0</td>
<td>11</td>
</tr>
<tr>
<td>1941</td>
<td>4.6</td>
<td>14</td>
</tr>
<tr>
<td>1942</td>
<td>8.6</td>
<td>12</td>
</tr>
<tr>
<td>1943</td>
<td>6.1</td>
<td>11</td>
</tr>
<tr>
<td>1944</td>
<td>5.3</td>
<td>11</td>
</tr>
<tr>
<td>1945</td>
<td>7.0</td>
<td>21</td>
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<tr>
<td>1946</td>
<td>7.0</td>
<td>22</td>
</tr>
<tr>
<td>1947</td>
<td>6.7</td>
<td>23</td>
</tr>
<tr>
<td>1948</td>
<td>5.7</td>
<td>26</td>
</tr>
<tr>
<td>1949</td>
<td>9.2</td>
<td>22</td>
</tr>
<tr>
<td>1950</td>
<td>10.0</td>
<td>26</td>
</tr>
<tr>
<td>1951</td>
<td>7.5</td>
<td>24</td>
</tr>
<tr>
<td>1952</td>
<td>7.4</td>
<td>23</td>
</tr>
<tr>
<td>1953</td>
<td>6.1</td>
<td>16</td>
</tr>
</tbody>
</table>

**Summary (Average):**

<table>
<thead>
<tr>
<th>Year</th>
<th>Pickers per 50 C.</th>
<th>Acres per 100 Cents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1934-36</td>
<td>4.3</td>
<td>11</td>
</tr>
<tr>
<td>1937-39</td>
<td>9.3</td>
<td>11</td>
</tr>
<tr>
<td>1940-42</td>
<td>7.0</td>
<td>16</td>
</tr>
<tr>
<td>1943-45</td>
<td>8.0</td>
<td>19</td>
</tr>
<tr>
<td>1946-48</td>
<td>-</td>
<td>19</td>
</tr>
<tr>
<td>1949-51</td>
<td>-</td>
<td>19</td>
</tr>
</tbody>
</table>

- *3. E. = Standard Unit of Cotton is 10 Pounds.
- 1 Metric or unslashed cotton is 813 lbs.
- Computed from Tables IV and VI.

*Source: Calefick, op. cit., p. 166.*
To sum up, from Tables XIX, IV and VII we can infer that fluctuations from year to year are largely a function of the yield of the cotton crop. From the thirteenth to the fifteenth, however, the change in the number of pickers per hundred bales shows an unmistakable trend upwards (the figure for the period 1929-31 is almost double that for 1934-35). After this high peak, the same trend levels off first and then starts to decrease. A tentative interpretation of this set of data fits with what we have said before, i.e., that the position of cotton on the world market largely influenced the direction of the trend. It had much to do with the financial ability of the tenant to hire labour.

Combined with Mr. Culwick's other findings (Appendix III), we may also infer, that unearthing these trends in ability to hire labour is a constant tendency, or propensity, by the tenant to do so, if possible for social reasons. The last point is strengthened, in our opinion, by the observation, that the trend starts to change direction only some time after the economic peak has been reached; the tenants tried to continue their behaviour from the boom-days for years after the tide had already turned. Additional factors that influence the ignored trend, apart from the withdrawal of the members of the family from the field, may partly be accounted for by the values of output per labour and the fall in productivity at picker.

In the Kanavil Extension, as we have noted, the size of the holding is much smaller than in the Main Scheme. This may relate to less capacity to hire labour from the tenant's part, if the tenant's earnings in the Extension are lower than in the Main Scheme. In any case, also this factor may be interpreted as an economic one determining the extent to which the propensity to hire labour can be realised.

Needless to say, the expenditure by the tenant on casual labour for the satisfaction of traditional social objectives might be detrimental for a long-term growth, efficiency, since it directly affects his ability to form capital out of his profits and to invest it in agriculture (Table VIII). Even worse, tenants, for the same social reasons, may go into debt in order to attract and
held workers and to buy goods and services they feel necessary for their self-esteem.²² In a way this value system has a positive economic effect, in the sense that it redistributes income and diffuses it geographically. Wage-workers come to the Cezira and carry back to their homes, cash, food and other products.

Other important effects of this value system on the labour problem relate to the tenant's family, his females and sons (Appendix III). These effects are here analysed.

The Position of Women:

In many agricultural societies, women constitute an important source of labour force in the field - family labour. The woman, apart from her domestic role in the home, (role differentiation) often takes an active part in the field work. Women in the Sudan and in similar situations undertaking on the field the light agricultural operations, while all the heavy work, such as sowing, clearing new lands and sowing is undertaken by men: Division of labour.

The position of women in the Cezira society further complicates the issue and intensifies the labour problem. Generally speaking, there is a strong reluctance to go out to the field to work at all. "The men themselves felt that a wife's place was at home. Unique times became very bad indeed...."²³

In the past the Cezira women contributed her share of the family labour force for agriculture. She worked in the field alongside her relatives.

²² In a small preliminary enquiry it was disclosed that, 54 out of 72 tenants said they were indebted, but only 23 out of 50 non-tenants (see Colwick, op.cit., p.192).
²³ Geltwell, op.cit., p.315.
TABLE VIII

The Profit—which an average tenant should have made if he and his family worked. (See p. 124)

<table>
<thead>
<tr>
<th>Operations</th>
<th>Family working</th>
<th>Not working</th>
<th>Profit that no hired labour which can be invested elsewhere ( \times )</th>
<th>( \times )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cotton (10 feddans)</td>
<td>100</td>
<td>105</td>
<td>5</td>
<td>£6.5</td>
</tr>
<tr>
<td>Seme (5 feddans)</td>
<td>50</td>
<td>55</td>
<td>5</td>
<td>£0.5</td>
</tr>
<tr>
<td>Lobis (2.5 feddans)</td>
<td>2.5</td>
<td>7.5</td>
<td>2</td>
<td>£0.2</td>
</tr>
<tr>
<td>Gordan (5 feddans)</td>
<td>40</td>
<td>20</td>
<td>20</td>
<td>£2.0</td>
</tr>
<tr>
<td>Camel transport</td>
<td>5</td>
<td>4.5</td>
<td>4.5</td>
<td>£0.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>105.5</strong></td>
<td><strong>252</strong></td>
<td><strong>56.5</strong></td>
<td><strong>£6.8</strong></td>
</tr>
</tbody>
</table>

2/ If statistics could be obtained for the years following 1949, the level of realized profits would be extremely high. This is because the periodic of plentiful money (e.g. 1950/51) have intensified the traditional social attitude towards fieldwork.

In fact, the above figures of realized profits should be much higher than they are stated, because they only show wages paid to labourers whereas in addition there, the tenant does all he can to the labourers to himself by debts (10/-4), borrows, advances, food ... etc.

2/ E8, a pound for a Sudanese pound (one Sudanese pound is equivalent to about 38.5 £).

Source: Calvick, op.cit., p.141.
The sugar seasons, 1947-1951 and especially the latter, were one of the unprecedented influences to the whole Ceylon people and prompted the adoption of a new range of social values. Greater qualification of women and their withdrawal from the field were emphasized as new standards of respectability.

It is believed at the back of the mind, that the 'gentleman's' Saman (harem) should not go out to the field. It is considered improper for females to work side by side with strangers or hired labour. It is implied, that the appearance of females in the field is partly a matter of lack of funds, i.e. the need of money, or failure to secure a prosperous husband. The man "... not take a pride in keeping their women away from their tenancies, and the principal value of women's exclusion is still higher than the returns which could accrue from their field work."[92]

It is said, with pride that one could say, "My wife has never set foot in my hamsa (tongue). She only went to borrow how you pick, or how you sow,"[93], or "we have plenty of jemelas from the White Nile, and we have the money to pay them why should our women go out."[94]

Needless to say, attitudes of this kind have deprived the Scheme of half of the potential kum labour force.

The Position of Women

The same aversion towards field work found its way to the women. Like their father, the sons would prefer to accelerate their work themselves. Also, many sons have taken up jobs dissociated with the tenancy or came to form a class of labourers.

"It is also a result of educational policy, which until recently, put little stress on agriculture, so that when a son acquired a little education, he would look for employment outside the Scheme or Left. These has not yet developed a pride in one's tenancy, and a pride in agriculture for the sons make,"[95] for the

It now is difficult to keep their sons at home. The boys are gradually migrating to urban centres, the attraction of the town - 'pull' factors of migration process - but much to do with such forces.

From the foregoing analyses, it is our duty to the labour problem, i.e., it is possible to envisage that the Scheme is bound - in the foreseeable future - to face an acute and intractable labour crisis, unless a deliberate and conscious policy is pursued to rectify the problematic situation.

The Scheme, as we have discussed, can no longer continue to rely on casual labourers from other parts of the country, or from across the Sudan's borders, for the supply of its labour force. Therefore, the labour problem has to be solved within the borders of the Scheme itself. The present "upside down picture" of the labour situation, where hired labour is the minority and family labour the supplement, should be looked at in the right way. The situation should be reversed. Family labour should be the minority and hired labour the supplement.

Tackling also the labour problem, it is my belief that this problem is also natural outcome of the present organizational structure of the Scheme itself. The problem arises not only out of the historical cultural values and a mistrusted educational policy, but also from the entire framework of the Scheme, the land relations, agricultural pattern, the manner of central control and the like. To name an instant, the layout of the tenancy - as we have already noticed - in scattered plots, and from the home of the tenant, influences the demand for labour, because its necessitates unproductive coming and going between the villages and the plots. The labour problem, therefore, is not a separate, but an integral part of this whole complex. So it should be viewed through the perspective of this totality. Thus a permanent solution of the labour problem calls for the re-examination of the overall machinery.
The labour problems in the landlord area to originate mainly from two sources, namely, the organisational framework of the tenant-system and the relative advantage of the tenant towards field work.

1. From the organisational point of view, in the three cases, the tenant has been personal interest and responsibility for field work. This is partly due to the lack of sense of pride, in his holding and partly to the agricultural system and tenure layout. Moreover, the agricultural yearly cycle of one crop culture creates a very high demand for labour at certain periods (reaping and planting) and this necessitates the presence of the tenant to labour force from outside.

2. The tenant has active ability for the agricultural work. He has strong tendency to employ hired labour to the limit, and even over that, of his income. This makes for a reproductive use of the tenant's (and his family's) labour and of his financial resources, including the issue of possible funds for investment.

3. The tenancy mentioned above (sub.2) seems to stem from the fact that the tenant follows a well-defined form of reference, namely, the behavior of the former 'landlord'. In the past landlords hired labourers or brought slaves to perform all agricultural operations on their estates. The landlord's role was only continued to the supervision of such a labour force. This strong 'landlord mentality' among the tenants has produced far-reaching consequences.

1. The tenants tend to rely considerably on hired labourers for agricultural work. By doing so, they see themselves as 'landlords'.

2. The tenant looks upon agricultural work as slave labour.

3. Behaving like a 'gentleman farmer', the tenant takes pride in keeping his men away from his tenancy. The appearance of families on the field along with strangers or hired labourers is considered dishonourable. Moreover, it would mean 'lack of money' or lowering the social status.

4. The same do not estimate themselves to agricultural work.
3. The manager and his sons would prefer to supervise the
hired labour, rather than work themselves. Apart from this super-
visory function, the latter often takes 'line-line' responsibilities, and
drew away much of his time and attention, which he would have other-
wise devoted to his farming activities.

4. Outside the farm as work within the Scheme itself ('Micro-
factors'), the labour situation may be heavily influenced by a number
of external factors ('Macro factors) operating within the wider
agricultural environment. The way in which the problem was solved for
the years based on ample supply of cheap labour. The fluctuations in
climatic conditions in other regions in the country, the development
of these regions and the growth of urbanization in the future, make
this ease increasingly shaky. The influx of migratory labour into
the Scheme may, thus, become uncertain.

5. Given the dependence of a single cash crop and the existing
techniques, the problem of labour can be solved only partially; it
will always remain an important problem; supply of labour will
determine any of the possibilities.

6. In many of its aspects the present system of the Obrim
Scheme has accommodated rather than taught the farmers' practices
and attitudes (cf. point 1).
In this study we have tried to pay attention to the position of the tenant in the scheme, especially in those madhusudana, namely:

1. The conditions of Tenancy,
2. The position of the tenant in the economic system,
3. The problems of the tenant.

Given the limitations of available time and the data on the subject, it seems feasible to attempt to draw up some policy suggestions. It is hoped, might meet with the surveyed problems. This does not mean that I pretend to present full solutions for all the problems. The present study is by no means exhaustive. As we have already indicated, many more studies are required in order to arrive at testing solutions for all the difficulties. The present study only represents a small effort in this direction.

As the problems discussed in this study are strongly inter-related, we prefer to deal with the policy measures as such, and point out the possible results of each of these - which results could be correlated under either of the three headings mentioned above.

To start with, it is deemed highly desirable to change the existing land tenure system. The cultivator should be attached much more to the land he cultivates, if better results are to be expected.

"...a healthy, self-sustaining, rural society can only be built on a fundamental sense of identity with the land itself. The cultivator must learn to care personally about the land as men, before he can be expected to devote himself to the cultivation of an economic self-sustaining activity. It is submitted here that a change in tenure relations will develop farming interests, initial incentives and encourage the farmer to do more and own field work himself. The prevailing tenural structure, amongst others, may be a strong reason for the development of tenancy towards less personal work and less agricultural interest. Hence it is deemed highly desirable to establish a rational link between the tenant-farmer and the soil.

To one mind, this may possibly persuade the tenant to improve his

76. The Swadesi Board-What it Is and How It Works, op. cit., p.15.
farming skills and put more familial effort on the field. As a consequence, his reliance and propensity to 'hire' hired labour may be minimized. The existing landlord-tailor relationship can hardly "...enjoy..." a sense of pride in holding which is vital for efficient agriculture without supervision from the field staff of the Board. The tenant resents the compulsion he has to endure from the field staff, and sometimes feels that with a change of inspector, he knows more than the newcomer.

Perhaps most serious, from the long-term point of view, is that there is little room for investment in agriculture within the scheme, as far as the tenant is concerned. If the tenant could be given permanent rights to the cultivation of a specific piece of land, he also the right to realize investments made in that particular plot (including the right to liquidate the investments), the result of such a policy might reverse the existing trend of investment by the tenant outside his farming activities only. This would, in fact, not only mean that the fertility of the soil could be maintained and possibly even improved by the men devoted to it - the cultivators - but also that the latter would be induced to make more productive use of his leisure than is presently the case (including his propensity to hire casual labour above).

The new land policy should also take into account the size and shape of the holding. It is desirable to provide an equal and right of the holding to the optimum that can support an average family and that the holding - this is important - can mainly be operated by family labour without recourse to outside labour service (unless it is indispensable).

The reduction in size could very well, at the same time, result in more economical use of the land. The size of the holding in the Main Jute Area, as opposed to the模范 Extension, amount to 16 jollas, based on eight-cow rotation. 15 jollas are for cotton, 5 for jute and up to 2 for labors, with some 20% rotation lost every year. So the total area required every year is less than 50% (see Appendix 2).

97: Shaw, Cradley, p.11.

- It is equally important to prevent rights of cultivation are introduced that the present state measure safeguarding against land fragmentation and the growth of landhoyder should continue.
In the McGill Extension, the system of local distribution is different. The size of the tenancy is only 1/2 faddims, based on six-course rotation: 2 faddims for cotton, 4 faddims for more or 8 faddims for jute and the remainder (5 faddims) fallow. We have put under cultivation in any year is about 60%.

The proposed diminution in the size of the tenancy serves another purpose. The difference in wealth between tenants and others may be decreased, forcing for lower rentals to hire labour or to expand on a redundant consumption. Thus the tenant may be forced to revise his operating habits and priorities and make more economical use of his income and other resources. It is likely that the increasing family labour inputs on the farm will have a negative effect on those large groups of casual labourers already free from their bonds in search of seasonal employment in the town. This is the problem of the country as a whole, rather than of the Scheme. Other opportunities for employment should be provided elsewhere in order to absorb such an enlarged family force. As we are here closely concerned with the Deonar Scheme per se, we are not in a position to suggest solutions for a host of problems existing outside the Scheme.

Returning to the size of the tenancy, it is likely that the reduction in size will provide tenancies to a majority portion of the increasingly military/number of the non-tenant inhabitants of the area. Thus, it helps towards solving the problem of the growing population. As a matter of fact, there is a demographic pressure in the Deonar. For instance, one, George, in her study [2] found that after the inclusion of strangers, 135 out of 100 were not tenants, i.e. about 75%.

Still talking about the tenancy policy, it is necessary to revise its shape, as layout. The tenancy, as seen earlier, is operated in a number of dispersed plots. This has led to unfavorable consequences. So it is deemed highly desirable to consolidate the e. The rate of increase of population for the country as a whole is estimated at 2.0% per annum.

tenancy into one contiguous unit. Such a change will at least have the advantage of saving much time and energy presently used in travelling from one plot to another. Furthermore, it may increase identification with, and pride in holding.

Moving from the tenancy to the cropping pattern. It is recommended that the present cropping policy will be revised. The dependency on a single cash crop (cotton) puts the tenant and the nation in a precarious situation. At the present day cotton is being faced by an increasing competition of artificial synthetic fibres. Moreover, the reliance on one commercial crop exposes the tenant and the country to the hazards of demand fluctuations and price fluctuations on cotton in the world markets. So it can be reasonably suggested that the diversification of crops (mixed farming) and the introduction of other non-cash crops (traditional and marketable) is beneficial for both the tenant and the nation. The idea presented here may be supported by the successful mixed farming experiment already operating in one of the Karen's villages.

Furthermore, the adoption of mixed farming might help counter during the recent labour supply. For instance, the rice above may grow at different intervals and so there may be a time between the harvest of one crop and another. Therefore, the present intensity of 1 hour, concentrated between January and April, may be spread over the spreading out of the labour requirements may evenly over the year.

The identification with the land and the improvement of the tenancy conditions may not achieve the desired objectives, unless there is the need for a sufficient 

971 Village Farming, Experiments (or alternative husbandry) are an

recently. The study of the authors, that of the right initiative and better incentive for tenant-cultivator may come by himself and to the driving force of the future agricultural development. The tenant farmers is now seen as a driving force rather
that, as is the case today, an simply an instrument of production. So it is highly desirable to devolve gradually more responsibilities on the tenant, with the ultimate objective of transforming the prevailing parastatal set-up into sound agricultural communities.

The argument put forward here may be substantiated by concrete examples drawn from the various agrarian activities of the tenant himself in the village. Our reader may remember that the tenant is entitled to grow, besides cotton, certain crops for his own use and that their proceeds belong entirely to him. Moreover, he has freedom of action in growing these crops. That is to say, his activities with regard to such crops are not subject to the same strict supervision and compulsion of the staff of the Board, as is the case with the cotton crop. Experience has proved beyond reasonable doubt, that the tenant exercises greater initiative and shows greater interest in his "own" crops than in cotton.

The proposed changes may be further supported by many examples of successful self-management in other Subsistence agrarian communities, where there is an intimate relationship between the land and the tiller and where the latter has an absolute freedom to manage his holding himself. In one village - Banar Besa - may be a good illustration. Here, the peasants show greater initiative and greater interest in their agricultural operations. They take care of their land by using fertilizers, forsaking casual and exploiting all their resources, including family labour and animal. Besides, they jointly pool their resources, to form their cooperative societies and they provide for excessive agricultural works, such as ploughing, installations, which an individual farmer cannot afford.

Apart from giving the tenant farmer much greater latitude in managing his own plot (self-management) it must be taken into account that many activities can only be organized in the village scheme personally. We do not want to go into details about this, but only mention items like the supply of water and that of pest-control.

Details about the agrarian activities in my village are in my "Community Development in the Village", a circumstantial research paper, submitted in partial fulfillment of the requirements for the Diploma in Social Policy, Institute of Social Studies, (The Hague, Holland, May 1968), p. 5-6.
Practical considerations of execution should largely determine the level of authority to which control over these units should be vested. That is, important from our view, however, is that at all these levels the present tenants' associations should become real instruments for voicing the tenants' interests in these matters. That is, the management should be responsible to the cultivators. A suggestion can be built on, in the sense that a higher authority might always reverse the decision of a lower one; one cannot say subsidiary debts are cleared, because a certain community does not want to spend enough funds on their upkeep. But it should be noted, that also at the highest level - that of the Cazira Board - the tenants should have a veto power.

This system should also apply to other, new, organizations for common purposes. For instance, a better organization for the coordination of some aspects of managing the labour force are necessary, objectives. It can minimize the unnecessary competition among the tenants for hired labour, but also reduce not only the prices for labour but also the overall costs of production of the cotton crop. It may also keep the tenants on their farms, instead of having to travel to another part of the country during picking seasons to contract labour. The present bodies - the Permanent Committee for Finding Labour and the Committee for Urinating Rent and Their Renters - to Pick Cotton - may provide a good basis for the new arrangement.

It goes without saying, that the proposed changes will call for the re-arrangement of the division of profits. The existing division of profits is based on the performance of certain duties by the partners. If the allocation of duties will change, it would only be reasonable that the division of profits would follow in their wake.

Devolution of authority, both in its aspects of self-management by the tenants of his own plots and of participation in the decision-taking in common organizations, can only be achieved, if it is accompanied by the necessary education. That we have in mind here, is not to teach formal schooling, but different ways of implementing adult education, e.g., workshops, mobile cinema, courses, discussion groups and radio and TV-services. The existing Social
Department of Education in the Centre Roay - which is entitled, as we have seen, to 2% of our total proceeds of the Scheme - could be taken as an organisational starting point for the implementation of this idea.

It is desirable, however, that gradually the activities of this department will be decentralised and put under the control of the local councils. Only in this way can this important out of development be properly linked up with the population concerned.

Again, we cannot go into details about the exact way in which the idea could be executed, but we do think it necessary to stress here the two main goals of the proposed educational process. In the first place, it should aim at increasing the townsman's knowledge about government and organisational problems. Only in that way can he become an efficient independent farmer, as well as an effective and co-operative småcoast to his ruler's officers.

In the second place, and this is a much fuller order - education should be geared to try and change the townsman's "sativatulism" attitudes, which are incompatible with the country's needs and resources. It is uncertain, insofar it will be possible to change these attitudes, at least, in the short run. Still, it is not impossible. By making use of the services mentioned above, the tenant in the Centre Roay may be confronted more directly with, for instance, the behaviour patterns in the village, we have mentioned already. By exposing him repeatedly to such successful activities of development, he may be induced - however slowly - to break with his own unproductive attitudes. It should be kept in mind, however, that we do not expect education to do the job all by itself. Education can only be an accompanying factor to that of a change in the town's position, i.e. to a change in the agronomic policy and in the communal relations.

One last word about the possibility of implementing change.
Not only the limitations of this Scheme have been taken into account in forming definite and detailed policy measures. Nor were principal measures we would always favour an approach where policy measures would be tested on to their results in experimental situations.

Within the vast District Scheme it must be possible to try out several possible solutions to its unit problems within designated sites. Only after evaluation of such results steps should be taken which will have their consequences for the whole District and all of its inhabitants.
### APPENDIX

**Tenancy layout and rotation of crops**

<table>
<thead>
<tr>
<th>Period</th>
<th>Tenant X</th>
<th></th>
<th></th>
<th>Tenant Y</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Year</td>
<td>C</td>
<td>P</td>
<td>Q</td>
<td>D</td>
<td>For L</td>
<td>E</td>
</tr>
<tr>
<td>2nd Year</td>
<td>C</td>
<td>D</td>
<td>P</td>
<td>Q</td>
<td>E</td>
<td>For L</td>
</tr>
<tr>
<td>3rd Year</td>
<td>D</td>
<td>C</td>
<td>P</td>
<td>Q</td>
<td>F</td>
<td>E</td>
</tr>
<tr>
<td>4th Year</td>
<td>P</td>
<td>Q</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
</tr>
<tr>
<td>5th Year</td>
<td>P</td>
<td>Q</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
</tr>
<tr>
<td>6th Year</td>
<td>C</td>
<td>D</td>
<td>P</td>
<td>Q</td>
<td>E</td>
<td>F</td>
</tr>
<tr>
<td>7th Year</td>
<td>C</td>
<td>D</td>
<td>P</td>
<td>Q</td>
<td>E</td>
<td>F</td>
</tr>
</tbody>
</table>

*In old Basra area - a six-crop rotation was a sine-cumina rotation of a new area. The principle of division is the same.*

<table>
<thead>
<tr>
<th>Plot</th>
<th>Tenancy layout</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Plot</td>
<td>C = Cotton, P = Bara (Sorghum vulgaris), D = Durra (Pennisetum glaucum), E = Land (Fallow and Habba, i.e.)</td>
</tr>
<tr>
<td>2nd Plot</td>
<td>Follow, Cotton, Bara might also be used to grow wheat, groundnuts and vegetables.</td>
</tr>
</tbody>
</table>

Each Plot is 10 Feddans.

Tenant Farmer X's tenancy contains plots 1 to 4 and tenant Farmer Y's plots 5 to 8. The rotation followed on each tenancy is shown for a number of years. The same period of 5 years is shared between the two tenants, each having 1 Feddan of wheat, 1 Feddan of barley, 1 Feddan of cotton, 1 Feddan of Fallow (or Habba, i.e. fallow land) and 1 Feddan as a reserve plot for the next season. Cotton, Bara and Wheat are grown on the same land in the same way in the same way. Each plot may be divided into 4 so that one season, three other tenants might work on tenant X's tenancy, and then either on tenant Y's tenancy in the next season.

**Source:** Craw, B.T., "Recent Enrolments in the Basra Scheme", in Field, Land Reform, Land Settlement and Co-operation, (London, M. & J. 1941), Appendix 1, P.4.
APPENDIX II

The following letter was very kindly sent to the author by Professor Jan Troost about the possibility of a term "tenant" in the case of the Zemsta system.

Professor Troost, Sweden, in a well-known study on the field of land reform and agricultural methods.


"Thank you for your letter of the 6th October 1966. I am very glad that you will reconsider my lecture last year in the Social Policy course.

With respect to the use of the term "tenant" in the Zemsta System, I always felt that this term does not cover all the complex relationships between the Peasants and the Zemsta cultivators, but the British introduced this term and it has been maintained during all the changes in which the Zemsta system has been involved. If you look in Appendix C of the 9th report to the Zemsta, you will find a definition of "tenant" of land: "The right - dependent on the agreement of a real or juridical person who is (at same level) an owner of the land - to enjoy certain prescribed uses of land. This definition is not directly applicable to the Zemsta situation.

Yet you actually have to consider is that the Zemsta tenant does not cultivate the land which is registered in his name, but almost in all cases other land is given to him for cultivation. In the beginning the Zemsta Scheme was a large-scale land consolidation scheme where the owner was available free land, which was a state of extensive privilege, but recovered from the scheme another well consolidated piece of land. From this point of view he is a leaseholder under this scheme (in place of the owner, in another piece of land) and the British have, strongly enough, termed this type of leasehold "tenant" but certainly from a conventional standpoint this is not correct. I will try in an abstract to end of January to come than discuss this matter with you."
APPENDIX III


Mrs. Cullick revealed in her survey, referred to in the preceding pages, the following interesting labour situation as regards the average labour inputs required for the (Standard Tenancy) - comprising 10 bales of cotton, 5 bales of jute and 2½ bales of hemp - and the average work potential of the tenant family.

After examining the tenancy labour requirements, she found out that each tenant (8.5) needed 1.6 man-units.

Then she examined the family-size potential in the three villages, she disclosed the following work potential among the various social groups comprising the family:

1. Adult males (over 15 years)

   After the exclusion of those who are out of work, ill, disabled or any other reason can't be available for work on the tenancy, she found out that 177 out of the total number of men could participate in the field work of the family tenancy. This sums up to 1.5 man-units per 8.5, or about 40% of the average requirement.

2. Boys (8-16 years)

   The total number of boys in the three villages amounted to 113. After the exclusion of school boys she discovered that what could be contributed by the remaining boys on the tenancy might perhaps be estimated as another 0.8 man-units per 8.5, bringing the total up to 1.35 or nearly half of the average requirement.

3. Women (below and over 35 years)

   The total number in the three villages amounted to 33. Out of the total, 115 were ruled out, 12 being aged or disabled and 14 due to social reasons (village reasons). 96 were left with 74 women; 63 relaxations possible and 11 impossible against 122 definitely non-starters.
47) Girls

All girls of, say, 11 years and over would unquestionably be non-starters for unyielding social reasons. A little bit of pitching which might be done by 1 and 10-year-olds can be disregarded.

So the work possibly available from all the members of the family might probably be reckoned as 0.69 man-units. This brings the total family potential up to half the average requirement, i.e. to 1.8 man-units, as against 1.6 man-units required for 6.

It would not be surprising if further investigation confirmed the existence of groups comprising one-third by the family work and other contributing one-eighth and perhaps lower than these.
2. Duncan, The Sudan, A Record of Settlement (Edinburg and London, Blackwood and Sons Ltd., 1901).
11. Articles.


II. ADDENDA

1. Brauch, George, and others, "Rahema in a Settlement Area: A Case Study in Village Development in the Oasis Scheme" (Kumasi, University of Kumasi, 1964).
17. Sudan Geita Board: The Geita Scheme Upon Valuation. A Collection of Articles by Various Departments. Published by the Press and Information Officer, (Khartoum, Sudan, 1951).


22. Sudan Government: The Geita Scheme Act, 1946 (Ordinance No.16), (Khartoum, 1952), and The Geita Scheme Act, 1948 (Ordinance No.10), in Legislative Development to the Registration of the Sudan Estates No.293, (Khartoum, Sudan Govt., 15th Sept. 1960). Also, the Geita Scheme Amendment Act, 1943 (1960 Act No.20) in Legislative Development to the Registration of the Sudan Estates No.293, (Khartoum, Sudan Govt., 15th March 1961).


7. Van Der Zaff, G.N., The Social Aspects of the Disease Famine in the Sudan, Social Tropical Institute, Department of Cultural and Physical Anthropology, No. 56, (Amsterdam, 1957).

Syndicate, the Board - though 'meaning' and 'revolution' were its proclaimed policy - was reluctant to decentralize authority, because they do not like to take 'risky experiments'. Risks have to be faced however, if long-term objectives are to be achieved.

We have repeatedly expounded our idea as to the fact that the present paternalistic system has highly limited the field of private initiative, which has recently received increasing attention as an effective instrument for self-propelling developmental policies. "In the outset there exists the dilemma of maintaining a highly-disciplined agricultural community in a scheme of great importance to the country and its revenue - a scheme in which the farmer is a unit in a production line - and at the same time trying to ensure the development of a viable agricultural society exercising its own social institutions in a fuller life."52"

3.3. Summary:
1. In this chapter we have explained how the partnership came about. We have seen that it was based on the historical facts:
   1.1. The lack of capital and expertise knowledge from the side of the Government has created a necessity to introduce private enterprise. At the same time, the Government felt the need to control such private enterprise.
   1.2. The partnership structure was based on the existing traditional social custom which made the Scheme more understandable.
2. The existing partnership consists of three parties, namely, the Government, the Zonnts and the Board.
3. In this partnership, each party has specific statutory rights and duties. So, in return for their respective shares in the net returns of action proceeds, the Government is responsible for the infrastructure, entailing the availability of

52. Deer, G.H., African Affairs, 37(148), Nov. 50-51.
CHAPTER XV

LAND TENURE SYSTEM

IN THE SUDAN

This chapter, which deals with the tenurial structure in the Scheme, consists of two distinct parts. The first relates to the considerations and decisions on the system of land tenure to be accepted at the time of establishing the Scheme. The second part presents a running-up of the main elements of the tenancy system as it stands now. The running-up will also refer to some points mentioned elsewhere in this work. The main objective of the latter is to give the reader in short-hand, as far as possible, a complete description of the most important aspects regarding the position of the tenant.

4.1. Considerations and Decisions on Land Tenure

At the Institution of the Scheme

The prevailing system of landownership in the region, at the time of establishing the Scheme, early in this century, was increasingly at variance with the requirements for the new undertaking. This was due to the fact that, as already mentioned, the land was privately owned by the inhabitants, it was either excessively fragmented into minute and scattered holdings, or concentrated in large estates under big landlords. Such a situation would have rendered it completely impossible to carry on the irrigation and cultivation of the land in a rational manner suited to the new agricultural enterprises. Land reform, therefore, was inevitable. At the same time it was deemed necessary to secure the cooperation of landowners. So it was decided that both aspects should be taken into account. The situation posed a serious problem, so the originators of the Scheme deemed it necessary to put over this problem first. In order to find out "who owns what," a

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4. The word tenure, from the Latin tenere - hold, implies that land is held under certain conditions. "As used in rural sociology and agricultural economics, the nature of the property rights under which land is held and utilized." The definition is taken from Henry B. Fairchild (ed.), Dictionary of Sociology and Related Sciences, (New Jersey, Totowa, 1969), p. 149.

ownership to other natives of the same locality would continue."

2. The government would hire all the land within the irrigation area, and pay rent for it, but land required for permanent works such as dams and buildings would be bought outright by the government.

3. The hiring would, in the first instance, be for a term of 40 years, the period laid down for repayment of the loan the government had raised to carry out the irrigation. The government’s intention was that the hiring should cease at the end of the 40 years, but it reserved the right to extend the period if necessary in the public interest.

4. In assessing the rent to be paid for the hiring, both now and on any extension of the 40-year period, and also the purchase price of land to be occupied by permanent works, the government would not take into account any rise in value caused by the irrigation scheme . . .

5. The land in the irrigated area would be let annually to tenant cultivators . . .

6. In the allotment of such tenancies owners of the land hired would be given the opportunity to take up some areas as they were able to cultivate as far as possible in the vicinity of their land.

7. Tenants would be permitted to grow, in addition to the cotton crop, sufficient Sudan (sorghum) for their own requirements, but not for sale.

Before we proceed further, with this study, the land policy just enunciated above requires for clarifications. As a matter of fact, the rights of landowners are highly limited qualitatively and quantitatively. Qualitatively, the owner, as already noted, cannot deal with or dispose of their land as property. For instance, the landowner is not allowed to sell his land to anybody other than

8. Later, dealing in this right was highly limited, and sale of land could only be made to the government. This policy was the consequence of the Great Depression (1930-31), when poor peasants began to sell their land very cheaply to landlords, which would ultimately have led to the growth of landlordism. By such a policy, the government could rig in the bud the re-emergence of a landlord class which had already been uprooted. In this way, the government has acquired the ownership of a sizeable area of the Gezira. See, bt. Butson, p. 25.

Also see Van der Klint, op. cit., p. 13.
... one first as peasants; then their 'nomination'—people nominated by others who possess twice 40 feddans or more, then 'preferential tenants', i.e., people who possess more than 20 but less than 40 feddans, (86) finally, ordinary tenants or landless men.

The allocation of tenancies to rightholders and their nominees is obligatory unless they fail to fulfill the required conditions for good cultivation, as laid down in "Standard Conditions of Tenancy". (87) Preferential tenancy is allocated in preference to landless men. After the claims of these three classes are satisfied, the claims of other suitable tenants are considered.

Another problem arises in tenancy allocation with regard to widows and young people. Some women and young people whose husbands or parents were deceased were found to have rights on the land. But in the opinion of the government they were not competent to cultivate. So, for a woman an adult male relative must be registered as the responsible tenant. For young people an uncle was registered to cultivate their holdings until they are capable to do so by themselves.

In the foregoing analysis we have seen how the land tenure system in the Gezira Scheme was modified and re-adjusted to cope with both the existing social situation and the requirements for modern agricultural practices and market economy.

In relation to the situation, the tenancy system adopted had clear advantages. Foremost among these is the prevention of the growth of big landholders. The conception of such a gigantic irrigation scheme had at that moment generated a land-hunger among the local and foreign people who had capital to speculate. The danger was that such speculators would buy up the land from the poverty-stricken owners and the outcomes, of course, would be the


(87) For criteria of competence whose judgement is left to Board's Inspector, sufficient information may be found under "Standard conditions of Tenancy", in Quickeall, op.cit., pp.40-42.
in the hands of an adult male who can competently cultivate the land. All members of the family work jointly on their holdings. The holdings have been divided out into [family-farm] units.

By retaining the land in the hands of its actual owner, the State could advantageously avoid the onerous task of spending huge funds on compensation to landowners. Compensation payments have posed a multitude of intractable problems, especially for those developing countries which have embarked peacefully upon land reform programmes. By retaining the title to land in the hands of the registered owners, the authorities concerned thought that they could to some extent 'save' the social prestige which, it is said, had long been revolving around the ownership of land. Land has often been a major foundation for social prestige. Various societies have existed where social position was closely related to landownership especially in landholding hereditary kind. The people who owned land and the people who owned land mattered....

Through the prolonged lease period of 60 years, along with the reservation of rights by the State to extend the lease period at the same flat rate fixed earlier, the State had solved the serious problem of land incumbrant value which was generally due to the introduction of agricultural innovations and other capital investments incurred by the State.

Great measures of social justice have been realized by the present land reform (redistribution of land). The excess land of absentee landlords was fairly and widely distributed among a large number of landless members of the community, who had previously no access to land. Consequently, it meant wide redistribution of wealth, of status, of income, of political power. So it can be said, that the equality in distribution of tenancy has greatly reduced the gap between the two social classes i.e. the haves and the have-nots. Only very few tenants 'owned' the holdings.

97. For full information about financing of land reform programmes (Compensation Payments), throughout the world, see UN/FAO, Progress in Land Reform—Fourth Report, 1964-66, Ch. II.

Here we realize that equality in the distribution of tenancies relates only to those who have tenure rights, and their dependents. It does not affect non-tenant residing in the region.
rotation, with forty limans assigned to each tenant. These changes in the System—and all that is incident to the tenant—are left to the Board’s agronomic considerations [See Appendix 4C].

(c) Location of Tenancy

The tenancy is divided up into several parts, which may not be adjacent. These parts are scattered from the tenant’s point of view, but grouped, according to the crops grown on area, from the Board’s point of view. To realize here, that the Board understands commonly some operations, such as spraying and ploughing.

(d) Duration of Tenancy

The tenancy assignment is for one year. Moreover, it is annually renewable provided that the tenant properly cultivates. But he may be evicted, if he fails to meet the required standards of good cultivation, laid down in the standard conditions.

(e) Tenant-land Relation

The relation to the land is such that not only does the tenant consist out of scattered plots, but that in fact the centraliized rotation system has led to the practice of assigning a new holding to a tenant each year. Essentially after the last change—involving two tenants operating together over eight courses—tenants are yearly shifted around, within certain limits, to designated holdings.

(f) Marketing

As far as marketing is concerned, the tenant is obliged to deliver the cotton (called partnership’s crops) he grows in the prescribed rotation system, to the Board. The Board credits him according to the quantity and quality delivered.

The tenant is allowed to grow, in the same rotation system, so called “tenant’s crops” i.e. crops for staple diet and fodder for animals. These are only for his own use, and he is forbidden to sell them—which nevertheless does happen.

(f) Credit

The tenant receives credit from the Board to finance the necessary agricultural operations in so far as they are his individual responsibilities.
labour reservations for the Main Scheme have become demand for tenants in the new Jumail measures. As a result of such enlargement, the Main Scheme has not only lost a main source of rural pool of labour force, but also lost its main tenants, led and rent, are now increasing and competing for labour from elsewhere.

The influx of migratory labour into the Scheme may reasonably arise to adversely affected by the processes of urbanization and the multiplicity of agricultural and industrial development projects in other parts of the country. These projects have become additional rivals for labour. 16

1.1. Gangaigal Projects

The overall costs of labour include, amongst others, wages, transport, food and shelter, and fodder to feed the animals brought by the labourers. These costs have tended to increase (i.e. the cost of labour has risen) for the following reasons: in the past decade, in the beginning of the fifties, the rising level of income of the tenants increased their capacity to hire labour. In these bumper seasons, it is noted in that of 1956/57, when favourable climatic conditions combined with the cotton boom, leading to the outbreak of the Morung war, revenue rose to a level unprecedented in the Gangaigal Scheme. This allowed the tenants to realize more and more of their dislike for agricultural work by hiring increasing number of labourers. 17, which allowed the tenants to increase the yield

1. The Gangaigal Extension is a large-scale scheme, It was developed into two phases in the period between 1957-1962. It occupies an area of over 800,000 feddans (feddan means 25,000 feddans, is the basic unit of land in Egypt). It includes an area of over 1,000,000 feddans, green and about 32,000 feddans, arable.

2. The cotton industry is an agriculture large-scale scheme. It has been developed in the period between 1939-1945. It occupies an area of over 800,000 feddans and 24,000 feddans, is the basic unit of land in Egypt. Of these schemes, the Gangaigal Scheme is the largest of the ten schemes which comprise an area of 1,000,000 feddans and about 32,000 feddans. The extension of the land and the development of new crop schemes along the Nile, the Blue and the White Nile, the enlargement of the Sugar cane scheme at H. Banky, the cultivation of cotton against which was established mainly for the resettlement of small farms people who were displaced as a result of the building of the Aswan High Dam, Egypt, under the 1959 Sudan Water Agreement between the Sudan and Egypt. The Social Security Development Scheme in the Western part of the country, is mentioned only few. Additional labour is required for all these schemes, mostly, the Sudan, the Social Security Development Scheme, op. cit., pp. 3/5-104.

3. Gross returns per feddan in '50/51, ranged between E£ 800-1000 (equivalent to US$400-1000).
2. The system plate to its central control by the Board, has prevented the occurrence of a new class of landlords as well as land fragmentation.

3. On the other hand, as the system was carried out, it has prevented a pool care for the land. This is due to the over-cultivation in tenancy. The system does not encourage the tenant to invest, to form capital, to guarantee the quality of the land or to improve his agricultural practices. The tenant has lost personal interest and responsibility for the land he cultivates.

4. Moreover, a holding is not a compact unit but is operated on several and fairly widely separated plots which, on the one hand, may or may not be adjacent to one another and on the other, may be located at some distance from the village where the tenant and his family live. As a consequence, the tenant and his family may waste much time and energy in travelling from one plot to another and to their residence.

5. The actual conditions of tenancy, as they are exercised, have worked in the same direction as the tendency to centralize the centralized management, it considered the tenant as a labour force for a huge enterprise.

6. The level of will to invest is also from this point of view quite understandable.

7. In the last chapter, discussing the policy measures we will try to indicate some desirable directions for change in the land policy.
(11) The rainy season (Khabir-i-Abad) between July and October.
(12) The winter season (Winta) between October and December.
(13) The cotton picking season (Lagvet) between January and April.
(14) The Summer season (Bakh) between April and July.

The demand for labor is far from being uniform throughout the year. As clearly shown in the agricultural calendar, a distinct amount of work is performed at certain times of the year. The farming year in the Desert is characterized by two seasonal peaks: one, the rainy season, when the crops are planted and weeding is carried out; and the other, much larger peak, associated with the harvest of the cotton crop.

The climax of the Desert year is the picking season. At this time thousands of people, from near and far, converge on this area in the annual struggle to reap the crop during the limited time available.

Figure 2
Agricultural Calendar

<table>
<thead>
<tr>
<th>Season</th>
<th>Month</th>
<th>Agricultural Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I- Rainy</td>
<td>July</td>
<td>Dura and groundnut sowing, Cotton harvesting.</td>
</tr>
<tr>
<td>Season</td>
<td>August</td>
<td>Cotton thinning - Start of pest control -</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Duli sowing - start of vegetable growing</td>
</tr>
<tr>
<td>II- Winter</td>
<td>October</td>
<td>Start of cotton sowing</td>
</tr>
<tr>
<td>Season</td>
<td>November</td>
<td>Sowing, planting and preparation of next season's cotton areas - Harvest</td>
</tr>
<tr>
<td></td>
<td>December</td>
<td>Harvest - preparation for cotton picking and groundnut harvest</td>
</tr>
<tr>
<td>III- Cotton</td>
<td>January</td>
<td>Start of cotton picking and Duli grazing</td>
</tr>
<tr>
<td>Picking</td>
<td>February</td>
<td>Continuation of cotton picking, end of vegetables - Harvest</td>
</tr>
<tr>
<td></td>
<td>March</td>
<td>End of Cotton picking</td>
</tr>
<tr>
<td></td>
<td>April</td>
<td></td>
</tr>
<tr>
<td>IV- Summer</td>
<td>May</td>
<td>Putting out and burning of cotton stalks</td>
</tr>
<tr>
<td>Season</td>
<td>June</td>
<td>Clean up of cotton debris</td>
</tr>
<tr>
<td></td>
<td>July</td>
<td></td>
</tr>
</tbody>
</table>

Source: Information is drawn from a project initiated recently by the Administration of the Sudan Desert Board.
(i) The milky season (Nahr-it-i Awarin) between July and October.

(ii) The white season (Qahit) between October and December.

(iii) The cotton picking season (Luzat) between January and April.

(iv) The mulberry season (i-Hay) between April and July.

The demand for labor is far from being uniform throughout the year. As clearly shown in the agricultural calendar, a sizable amount of work is performed at certain times of the year. The farming year in the Gezira is characterized by two seasonal peaks: namely, the rainy season, when the crops are planted and weeding is carried out, and the other, much larger peak, associated with the harvest of the cotton crop.

The climax of the Gezira year is in the picking season. At this time thousands of people, from near and far, converge on this area in the annual struggle to get the crop during the limited time available.

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</tr>
<tr>
<td></td>
<td>September</td>
<td>Start of ploughing and preparation of next season's cotton areas - Harvest. Cotton harvesting.</td>
</tr>
<tr>
<td></td>
<td>October</td>
<td>Harvest - preparation for cotton picking and subsequent harvest.</td>
</tr>
<tr>
<td>II - Winter</td>
<td>November</td>
<td>Start of cotton picking and Lucina grazing. Continuation of cotton planting.</td>
</tr>
<tr>
<td>Season</td>
<td>December</td>
<td>Continuation of cotton planting, and end of vegetables - Wheat harvest.</td>
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<td>III - Cotton</td>
<td>January</td>
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**Source:** Information is drawn from a pamphlet issued recently by the Administration of the Sudan Gezira Board.
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The influx of migratory labour into the scheme may possibly also be adversely affected by the process of urbanisation and the multiplicity of agricultural and industrial development projects in other parts of the country. These projects have become additional rivals for labour. 1

9.3 Economic Factors.

The overall costs of labour include, amongst others, wages, transport, food and shelter, and fodder to feed the animals brought by the labourers. These costs have tended to increase (i.e. the price of labour has risen) for the following reasons: in the good years, in the beginning of the fifties, the rising level of income of the tenants increased their capacity to hire labour. In these bumper seasons, especially in that of 1957/58, when favourable climatic conditions coincided with the cotton crop going to the outbreak of the Korean War, revenues rose to a level unprecedented in the Ceylon Scheme. 2 This allowed the tenants to reallocate their inputs and acres of their fields for agricultural work 3, by hiring increasing numbers of labourers 4, which allowed the latter to increase the price.

9. The Manural Extension in a large-scale Scheme. It was accomplished into Four Kusuns in the period between 1951-52. It comprised an area of over 300,000 Feddans, gross and 13,000 feddans, compared to the land scheme which comprises an area of 1,000,000 Feddans gross and some 12,000 tenants.

4. Short-fine industry. In agriculture near the large-scale schemes there have either been added very recently or will be opened very shortly. For example, the Upper Scheme in the South of the Ceylon Scheme will be irrigated by the Seydown Dam on the Ely Ponde. It will cover an area of over 1,200,000 feddans. The expansion of the old and the development of new rice schemes along the Wules, the Blue and the Main Niles; the enlargement of the Upper rice schemes at El Kheir, the Alhada El Kheir Project, which are established mainly for the rehabilitation of falls and rice fields, who were dialysed as a result of the building of Aswan High Dam, Egypt, under the 1958 Ely Project Agreement between the Sudan and Egypt, the Middle Lower Development Scheme in the Western part of the country, to mention only few. Additional labour is required on all these projects, see, The Ten Year Plan of Economic and Social Development, op. cit., pp.14-15.

*1. Gross returns per feddan in 1947/48 ranged between L3 to 1000 (equivalent to LBB2400-3000).