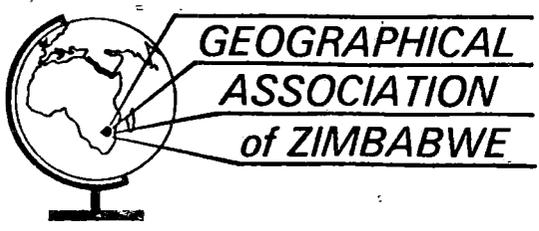




GEOGRAPHICAL EDUCATION MAGAZINE

A. G. R. C.



Produced by the Geographical Association
of Zimbabwe

Edited by: R.A. Heath
Department of Geography
University of Zimbabwe
P.O. Box MP 167
MOUNT PLEASANT
Harare

Free to paid up members of the Geographical Association.
Price to non-members Z\$ 2.00.

CONTENTS

	<u>Page</u>
Editorial	ii
A Ballad of Ecological Awareness	1
A Glossary of Synoptic Analysis Terms and Abbreviations Used in the Zimbabwean Meteorological Service	4
Primary or Background Atmospheric Circulations	15
*The Changes That Have Occurred in Industrial Development Strategy in the U.S.S.R. Over the Past Sixty Years	20
Eastern Highlands Tea Estates: A Case Study of the Historical Development of a Tea Estate	26
An Introduction to Spatial Statistics for Advanced Level Geography	39
Simple Field and Laboratory Work in Physical Geography (Part II)	50
Human Geography: Fieldwork Suggestions for Classes and Individuals	56

HISTORICAL DEVELOPMENT OF A TEA ESTATE

by

S Nyaruwata

St David's Secondary School

Introduction

The aim of this study is to give an economic and historical resume of the development and expansion of the Eastern Highlands Tea Estates. It is hoped that the study will throw some light upon the intricate organizational problems that are faced by estate tea growers and at the same time reveal the changes that have taken place in the relationship between labour and management. Further, political changes in Central Africa have had a profound effect upon the nature and sources of the labour force. Finally, changes in the world economy with regard to tea prices have recently forced the estates to diversify their agricultural production.

Situated at the foothills of the Inyanga mountains, (figures 1, 2 and 3), the four estates, Luleche, Zindi, Mruwa and Nyawamba cover an area of 4 047 hectares. The estates are owned and administered by the McLeod Russell group of companies who bought them from James Finlay and Co. Ltd. The company owns other estates in Kenya, India, Australia and Papua New Guinea. Initial development in the area commenced during the 1951-52 season. Since that time the estates have changed their name several times. Initially called the Aberfoyle estates, the name was changed to Eastern Highlands of Rhodesia Tea Estates in 1956. In 1969 the present name was adopted.

The first settlement was located on the north eastern corner of the property close to the border. Whilst the site at Mugayi was favoured due to the presence of a flat area which was suitable for the establishment of tea nurseries - it was however also dictated by distance. The first settlers had travelled from Glen Eagles farm on the other side of Mt Inyangani near Chief Tangwena's area (see figure 2). By the time they reached the Mugayi area their animals as well as their porters were exhausted. It needs to be noted that near to the border of the property was a dense settlement of Mugayi people, some of whom were squatting on the property. When the estate was fully established the Mugayi people found it expedient to migrate to the south into the Zindi Communal area.

During the early 1950's tea growing in Zimbabwe was still very limited. As a result the first seeds were imported from Ambangula and Kangani estates in Tanzania (1). The importation was expensive for it meant air lifting the seeds into Zimbabwe. From Harare the seeds were transported by road to Glen Eagles farm and from there by donkeys to the settlement at Mugayi. The seeds proved to be worth the trouble the group had taken. During the 1952-53 rainy season the first field - section eight - was planted at Luleche estate. This was the beginning of a development which at present boasts four estates, each with more than ten sections averaging ten hectares per section.

1. Personal communication with E.H.T.E. Management.

LOCATION OF EASTERN HIGHLANDS TEA ESTATE
(E.H.T.E.) IN ZIMBABWE

0 kms 200

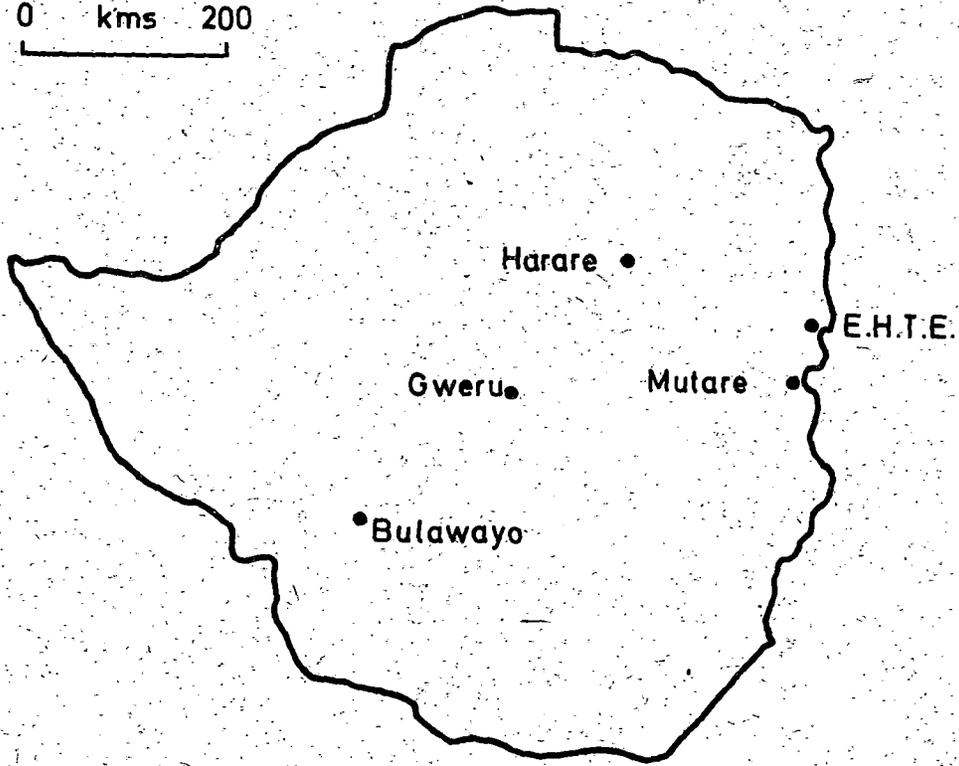
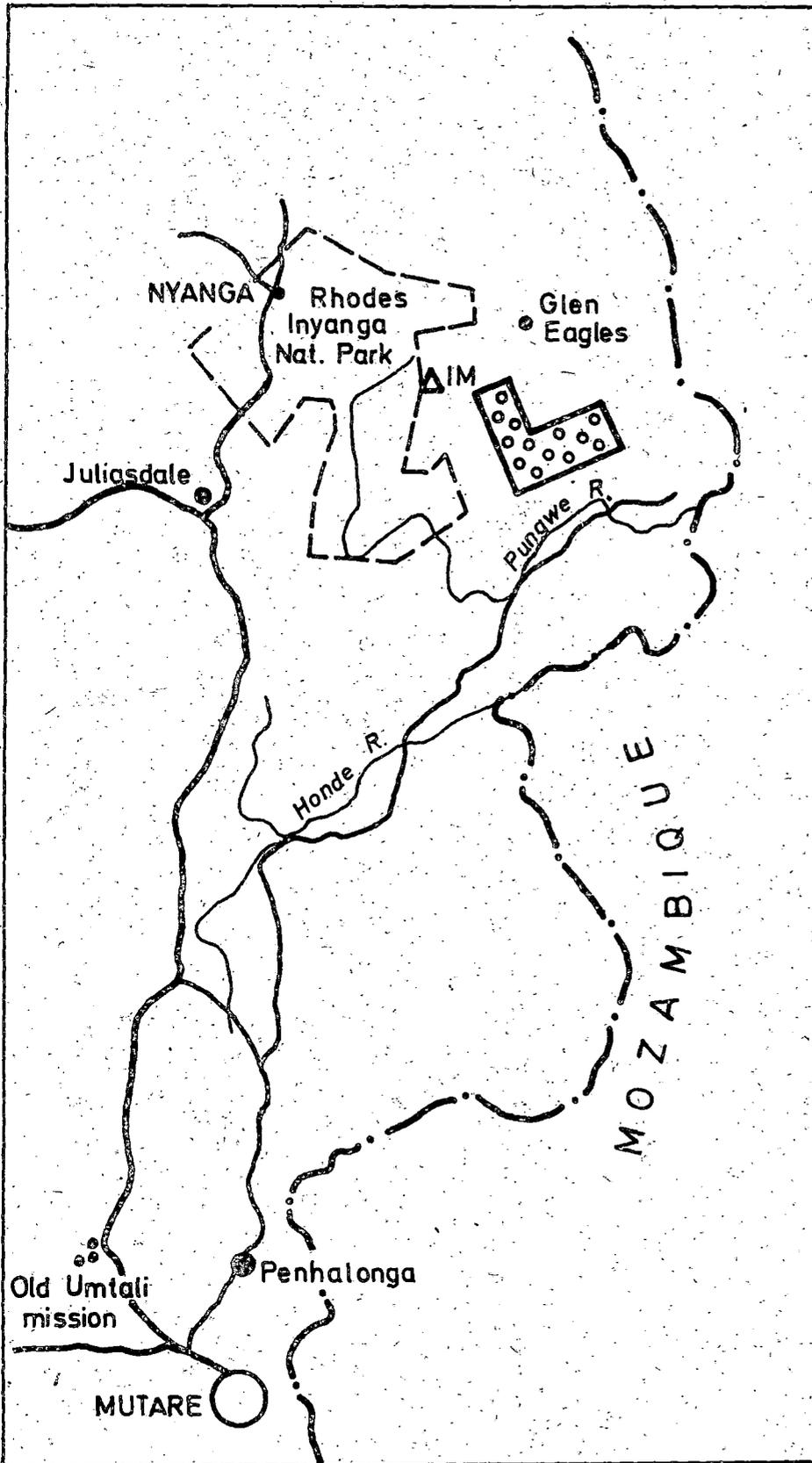
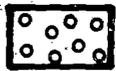
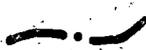
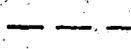


Fig.2 LOCATION OF E.H.T.E. IN THE EASTERN HIGHLANDS



KEY

-  Study Area
-  Main Roads
-  Rivers
-  International Boundary
-  National Park Boundary
-  Inyangani Mt.

Scale 1:500 000

Physical factors

Whilst the area is composed of several types of soil, ranging from deep black loamy soils to latosols, the most outstanding advantages of the area are the abundant rainfall (which averages 2 500 mm a year) and the hilly topography of the region. This makes an ideal tea growing area for it prevents water from accumulating in the fields which would hinder the growth of tea. However, like most parts of Zimbabwe, the rainfall is seasonal and this has affected productivity. Whilst it is true that rainfall is seasonal there is hardly any month which is completely dry as can be seen from figure 4. Figure 5 shows the mean annual distribution of rainfall between 1955 -1969 and figure 6 shows the mean rainfall for the fifteen year period and the variation about the mean during the period. It is worth noting that the majority of these years are below the mean. This trend helps to explain the need for experimenting with irrigation. Rainfall totals affect the total production of tea and this in turn affects labour organisation in the estates. The table below shows total tea production figures from the estates from 1965 to 1974. There was a general increase in total production which in most cases has been a result of an increase in the planted area, but it is worth noting that in the 1969/70 period total tea production increased by over 7227 kg as compared to the 1968/69 season. The main reason was that 1969 was one of the wettest years in the estates. This resulted in a longer plucking season as well as a shorter return period to the fields.

Tea Production at the Estates 1966 - 1975 (2)

<u>Year</u>	<u>Total Production (kgs)</u>
1966/67	32 152
1967/68	32 436
1968/69	33 176
1969/70	40 403
1970/71	42 614
1971/72	41 608
1972/73	36 528
1973/74	41 474
1974/75	54 946

The Pioneering Days

Communication

Arriving at Mugayi the early settlers found themselves almost cut off from the rest of the country. The only route was the donkey track to Glen Eagles farm from where one could join the Inyanga road. The company entered into negotiations with the government and in 1956 the group was promised a road link to Mutare through the Honde Valley. This was constructed in due course.

Labour Mobilization

Whilst in the country as a whole the system of "proletarianisation of the African labour force" (3) had become fairly successful with regard to the urban areas

2. E.H.T.E. Tea production record books.

3. Arrighi in D. Clarke: Agricultural and Plantation Workers in Rhodesia, p. 16.

this was not the case within the farming areas. The indigenous labour shied away from farm employment. The company found itself with a critical "labour shortage". This problem was not unique to the Eastern Highlands Tea Estates but was prevalent in the whole country. The theory of labour shortage that pervaded government thinking as well as that of farmers and miners from the early forties onwards was without any real foundation. It was claimed that the African's refusal to work on the farms was because of his idleness. But in reality the lack of interest was due to the meagre wages that the farmers offered. The indigenous workforce was aware that it was more profitable to till one's own land than to be employed as a farm worker.

Surprisingly the lack of insight into the significance of wages in attracting workers continued in the farming community into the 1970's. For example in 1971, a farmer advertising for workers made the following appeal: "I have a six thousand acre farm to run. I am offering free accommodation, free rations - 16 lbs of mealie-meal a week, 11 lbs of fish, 21 lbs of beans, 41 lbs of meat and \$8,00 for a month's wages, which is really spending money" (4). He got only five responses in four weeks!

Within the country as a whole the solution to the "labour shortage" problem was to turn to a foreign workforce. The major national institution which recruited workers for farmers and miners was the Rhodesia Native Labour Supply Commission which was established in 1946 and became operative in 1947. Instead of relying solely upon the R.N.L.S.C. the Eastern Highlands Tea Estates developed its own strategy for securing labour. Initially an agreement was reached with the Native Commissioner at Inyanga to provide labourers. The normal practice was that each headman provided a specific number of people for a given period to work on the projects that the Commissioner was undertaking. This was locally known as the "madiga system" (6). The Madiga system was very similar to the "Chibaro system" (7) which was operative in the mining sector. The madiga system like its counter part in the mining sector was on a compulsory basis and was detested by the indigenous people. To them it was a form of slavery. The Native Commissioner was therefore in a position to divert some of his workers to the Estates. But the system was not very suitable for the estates, for besides the fact that the numbers depended on the Commissioner's own needs, the labourers only remained on the estates for their mandatory period.

Early in 1956 the company approached the Native Commissioner and requested permission to set up a labour recruiting office at the Pungwe/Ruda road. The aim here was to try and intercept Africans from Mozambique. The request was turned down. The company then decided to employ a labour recruiting agent. For some time a Colonel Strong, who was based in Mutare, recruited sufficient workers for the estates. Most of the migrant workers came from Malawi and they were on a two year contract. The Malawian source proved to be bountiful. For example, in February of 1956 out of a total labour force of 256 only 16 were Malawians, but by April of the same year out of a labour force of 346, 96 were Malawians. The number kept increasing until the early sixties with the result that between 1957-1964 the Malawians dominated the labour force of the estates (8).

-
4. D. Clarke: Contract workers and underdevelopment in Rhodesia, p. 23.
 5. D. Clarke Ibid p. 31.
 6. Personal communication with people in Zindi Communal Area.
 7. C. von Onselen: Chibaro.
 8. E.H.T.E. Minutes of the directors meetings.

Fig. 3 THE EASTERN HIGHLANDS TEA ESTATES

KEY

- 1-11 Workers compound
- Tea processing factories
- Estate offices
- Estate and factory managers residence
- - - Estate boundaries
- X Mugayi area

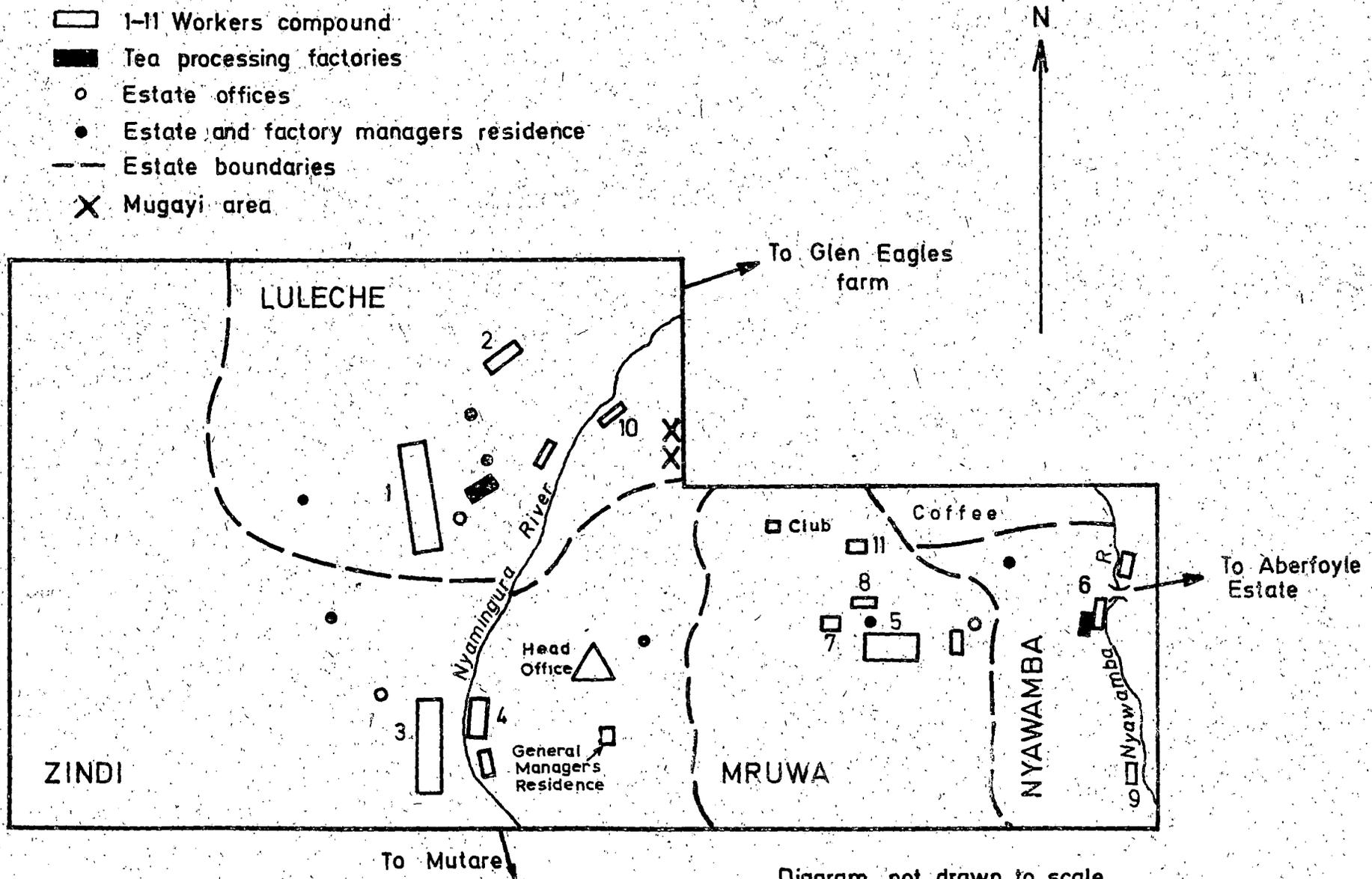
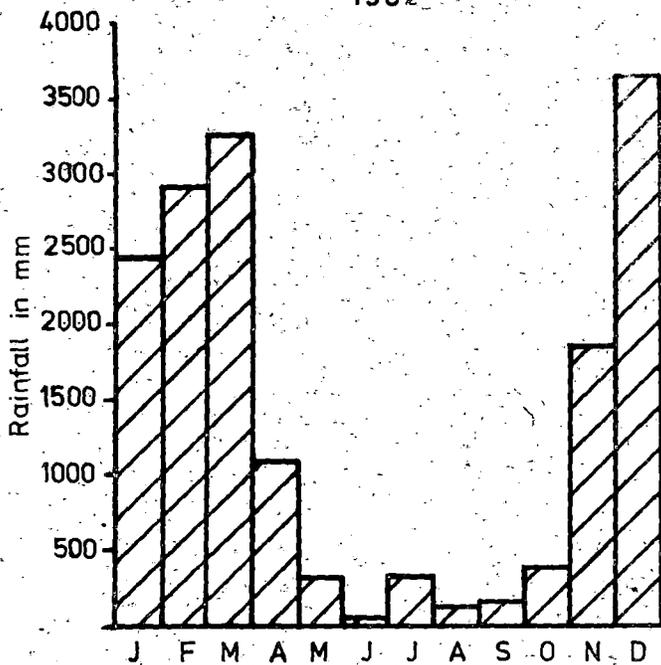


Diagram not drawn to scale

EASTERN HIGHLANDS TEA ESTATE

Fig. 4 MEAN MONTHLY RAINFALL

1962



EASTERN HIGHLANDS TEA ESTATE

Fig. 5 MEAN ANNUAL RAINFALL

1955-69

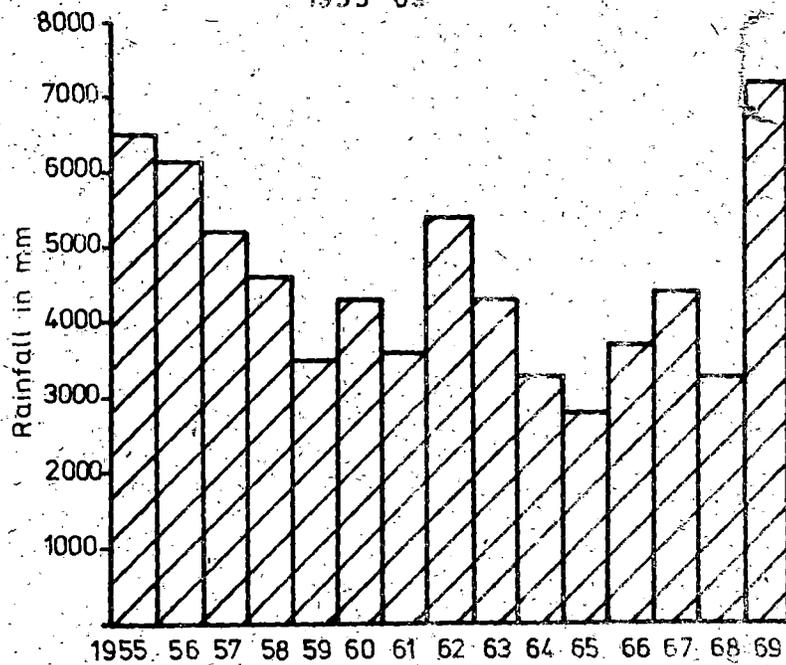
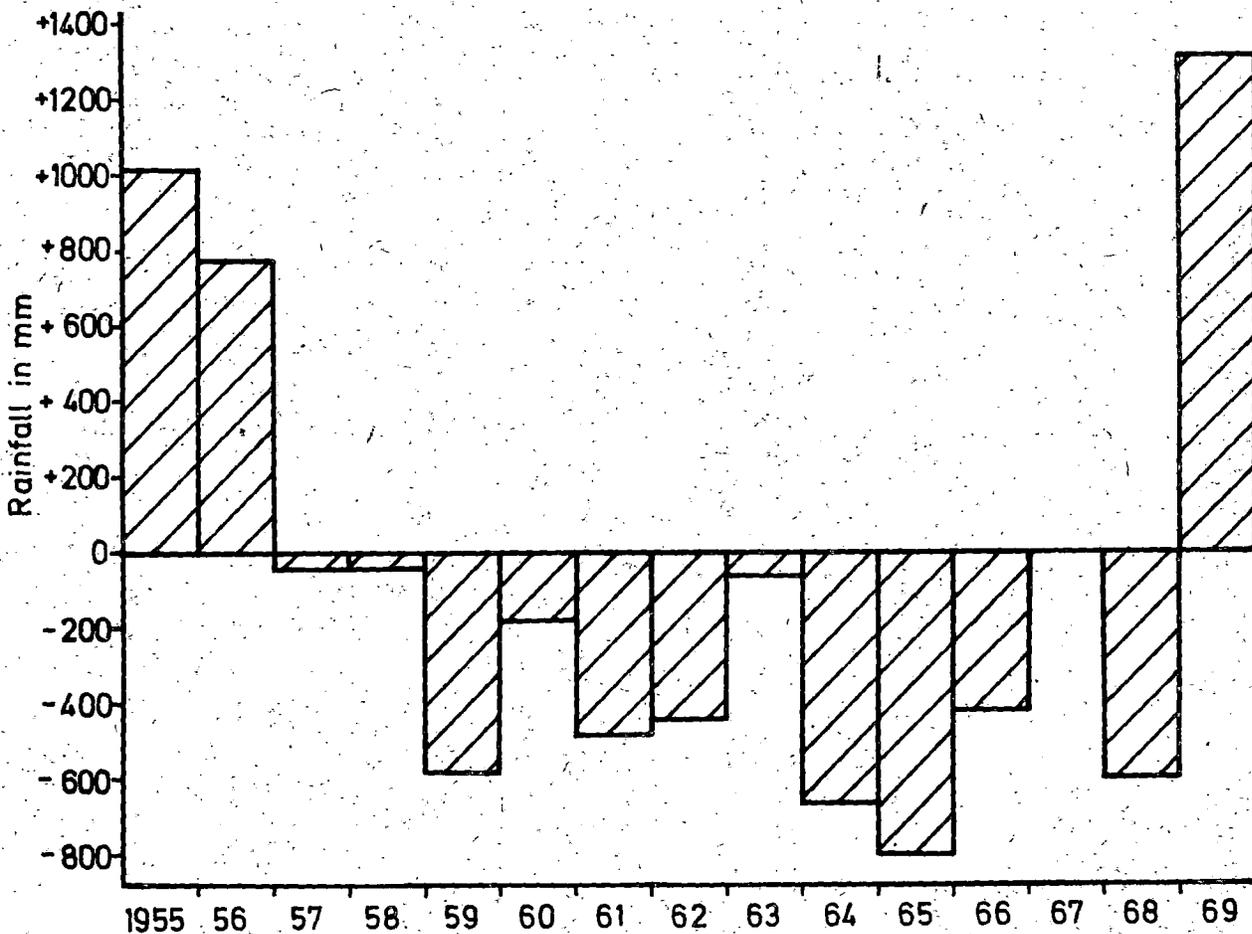


FIG. 6 ANNUAL RAINFALL VARIATION ABOUT THE MEAN 1955-69
MEAN RAINFALL FOR THE PERIOD 2290mm



...of the estates necessitated more labour and as indigenous labour was still reluctant to work on the farm the company had still to rely on foreign workers. Another labour recruiting agent, G.T. Ottow was employed in 1960 to buttress the supply from Malawi. Ottow concentrated his recruitment in Zambia. The company paid him a fee of £16 per head. The contracts were again for two years.

The increase in the number of foreign workers on the estates was a general reflection of the trend that was prevailing in the national farm labour market as indicated by the table below.

Foreign workers in Agriculture 1946 - 1974 (9)

Year	Total	% of total agricultural labour force
1946	84 089	56
1951	114 877	62
1956	137 030	60
1961	135 330	50
1969	130 235	43
1970	114 693	39
1971	119 275	39
1972	120 964	38
1973	118 000	34
1974	119 000	33

It is significant to note that after 1961 the percentage of the foreign labour force begins to decline. This resulted from a shortage of alternative employment for the indigenous population which forced it into farm employment, together with political developments in Central Africa. This will be shown below with particular reference to the study area.

Whilst the coming of the Zambians helped to alleviate labour shortages they also brought a number of problems to the estates. For example, fighting between Zambians and the other groups became rife and their rate of absenteeism was higher than that of any other group - 13 per cent absent daily. But the major problem that faced the management was their social organization. Being predominantly of the Bemba tribe, they formed a clique in the estates. They were able to organize work boycotts until their demands were met. It is worth noting that with Zambia's independence in 1964 the entire group of Zambians left the estate en masse and marched to Mutare. The journey took them several days. With further expansion, the Malawian and Zambian sources became inadequate and the company had to obtain its workers from other countries, such as South Africa and Mozambique as the table below shows.

It is interesting to note that even at this date the labour force was still dominated by foreigners. It should also be pointed out that Mozambiquans formed a substantial percentage of the labour force from the earliest days. But as there was no official recruiting agent the numbers recorded were always under the actual total.

9. D. Clarke: Agricultural and Plantation Workers in Rhodesia p. 31.

Zambia	48
Malawi	17
Mozambique	40
South Africa	37
Zimbabwe	22

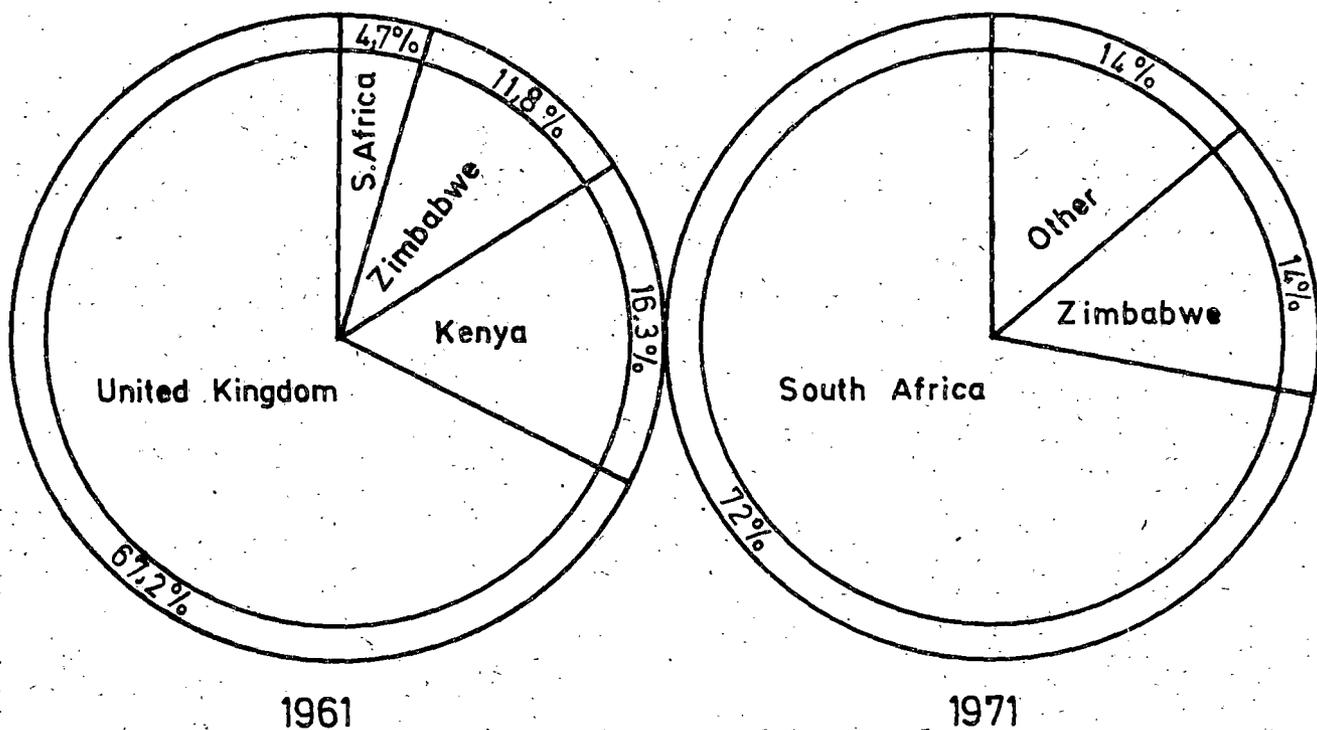
Between 1960-1970 the estates expanded at a very fast rate. New fields were brought into operation every year. Whilst the expansion can be attributed to the buoyancy of the world tea market it needs to be pointed out that the company was also encouraged by the availability of very cheap labour which was not unionized. Further the company had decided to concentrate development in Zimbabwe because it was facing labour problems in India which were retarding progress. By 1963 the estates boasted a workforce of 2452. The labour force was now highly diversified. For example, there were seven teachers, three telephone operators, four medical assistants and a midwife. The estates were fully established and there was an awareness of the welfare needs of the workforce. The expansion had brought with it increased labour demands. Coupled with this was the fact that during the early sixties Malawi and Zambia became independent and a large percentage of the labour force returned home. It became imperative for the company to search for other sources of labor. The emphasis was placed upon attracting local labour, especially people from the environs of the estates. In 1963 the company purchased two new lorries whose specific task was to bring people from the surrounding areas to the estates every morning and return them to their homes in the evenings. Initially the company concentrated upon the nearby areas but as labour needs increased so did the catchment area of the estates. The areas tapped included places like Mandeya, Hauna and Gatsi and, at times, as far afield as Samanga. Most of these people were women, especially adult girls. This type of labour was only brought in during the peak season of tea picking, that is between December and March. This system is still operative on the estates although with some slight variations.

In 1970 the company employed the Green Motor Company as a labour recruiting agent. The company has concentrated its recruiting from within the country. This has helped to bring into the estates people from different parts of the country and has resulted in a more mixed workforce.

From the earliest days the company found no difficulty in disposing of its produce. Besides the internal market, the parent company helped in securing markets in South Africa, Kenya and United Kingdom. For quite some time Britain was the most important market for the company but after UDI the South African market became dominant. Figure 7 shows the tea sales from the estates 1961 and 1971.

10. E.H.T.E. Minutes of the directors meeting.

FIG. 7 EASTERN HIGHLANDS TEA ESTATES: TEA SALES 1961 and 1971



Whilst the land which is suitable for cultivation is now fully utilized it is interesting to note that the new areas have been planted with coffee. The company is responding to changes in world markets, and is aware of the problems that the world tea markets are facing. There is a general belief that on the world market coffee will fare better than tea. This belief is somewhat borne out by the 1982 International Coffee Agreement where Zimbabwe has been assured of a reasonable quota. Whilst the need to diversify has been prompted by world markets it is also possible that changes in management have brought new ideas to the organization of the estates. As noted above the Company has to layoff a large percentage of the labour force during the dry season because of decreased activity on the estates. With the introduction of coffee it is hoped that most of the workforce will be occupied with work related to coffee growing. At present (1983) the total work force is 2289 (1857 men, 399 women and 33 juveniles). This figure is normally highly inflated during the tea picking season when the weather is favourable.

Tea Planting

The estates use two methods of tea growing: seed planting and clonal planting.

a) Seeds

Mature seeds which would have fallen to the ground are collected and immersed in a drum of water. The infertile seeds float on the surface and are removed. The remaining seeds are passed over a meshed grid. The smaller seeds pass through the meshed grid and are again thrown away. The remaining seeds are then packed into hessian bags which are kept damp for some time. When the seeds have germinated they are planted in beds in specially prepared nurseries. The seeds are planted fifteen centimetres apart. The seed is planted "eye" down. The planting is done manually and therefore requires a great deal of labour. After some eighteen months the seedlings are transferred to the field. The seedlings are planted 60 centimetres apart in rows, and the rows are 150 centimetres apart.

b) Clonal Cuttings

Besides using seeds the estates also use clones - cuttings from specially selected tea bushes. The main advantage of using clones is that they preserve the characteristics of the mother bush and this helps in the preservation of a given quality of tea. The clones are cut and planted in plastic paper "pots" and this calls for an experienced labour force. After some eighteen months the seedlings are then transferred to the field. The transplanting is undertaken during the early part of the rainy season - December to February. Some irrigation is often practiced if the rainfall is sporadic. This is a critical stage in the plant's life and its water requirements need to be fully met.

c) Preparing the tea bush

When the seedlings are three years old they are pruned. The plant is cut to about 1.5 metres high. The constant pruning gives the tea bush a flat surface which is known as the plucking table. The tea plant will continually be pruned during its life time as this stimulates the growth of leaves. The pruning is done during the dry season and as there is a high rate of evaporation the tea bushes are shielded from the sun by the branches which have been cut from them.

d) Tea Picking

The tea leaves are picked when the bush is about four years old. It is only the last two and a half leaves on each shoot which are picked from the bush. The rate at which the bushes are picked depends mainly on rainfall. If the rainfall is high and consistent the return period to the fields is shorter. In most cases the field is plucked once every week. The old leaves which have grown above the plucking table are picked and thrown to the ground. This is called levelling and it is every field supervisor's or field foreman's job to ensure that his group adheres to strict levelling. As tea plucking is done manually this calls for a large labour force. The workers use both hands to pluck the tea and those who are experienced pluck the tea with an astonishing speed. The leaves are thrown into a basket which is carried on the back of the worker. During the early years the company used to use baskets made of bamboo, but at present the estates are using plastic baskets. The change has been caused by scarcity of bamboo, most of which has been destroyed by the expansion of agriculture in the communal areas.

e) Tea Processing

The estates have two tea processing factories, the oldest at Luleche, and the other at Nyawamba estate. The leaves require processing soon after picking. The leaves are brought to the factory and put into large trays into which hot air is blown. This is referred to as withering. The process reduces the moisture content of the leaves. The leaves are then sifted to remove impurities.

At Luleche factory the heat comes from firewood whereas at the Nyawamba factory the heat comes from burning coal. The estates have a number of areas which are planted with eucalyptus trees, which are used as firewood by the Luleche factory. After sifting, the leaves are directed mechanically to rollers where they are crushed into small pieces. The next stage is fermentation. This is done in a very humid room where temperatures are controlled. This is one of the most important sections of tea processing, for it is during this process that the leaves acquire their colour and smell. This calls for an experienced workforce for the quality of the tea depends on the process. After this process the tea is dried. This is known as firing. The tea is further sifted to remove remaining impurities. The tea is then passed into a number of trays which are perforated at the base. The perforations are of different sizes. The trays are moved mechanically. This process is known as sorting. The tea is then graded into different types. This is done partly mechanically and partly by experienced graders. After grading, the tea is packed in wooden chests. These are then stored in a warehouse ready to be transported to Mutare where the head office of the company is located. From there the tea is sent to its different markets.

Conclusion

It is evident that the development of the estates has been dictated on the one hand by political developments in Central Africa and on the other hand by fluctuations in tea prices. Political changes in Zimbabwe have forced the company to adhere to the minimum wage regulations. As this has come at a time when world tea prices are declining it will be interesting to observe how the company is going to adjust to these financial constraints. Whilst in the past the labour force has been predominantly foreign, at present the indigenous labour force makes up the majority. This, as has been pointed out above, resulted from

reluctant workers into the agricultural sector. It was also a result of the departure of foreign workers after the independence of their countries. This forced the plantation owners to concentrate on an indigenous workforce.

The introduction of coffee will help to stabilize the workforce for, during the dry season, some of the workers will be gainfully employed in work connected with coffee. This will save them from being laid off.

Bibliography

Clarke, D.G. (1974) 'Contract Workers and Underdevelopment in Rhodesia', Mambo Occasional Papers - Socio Economic Series No. 3.

Clarke, D.G. (1977) 'Agricultural and Plantation Workers in Rhodesia', Mambo Occasional Papers - Socio Economic Series No. 6.

Loney, M. White Racism and Imperial Response.

van Onselen, C. (1976) Chibaro: African Mine Labour in Southern Rhodesia 1900-1933. Pluto Press.

E.H.T.E. Minutes of the directors meetings 1952 - 1982.



This work is licensed under a
Creative Commons
Attribution – NonCommercial - NoDerivs 3.0 License.

To view a copy of the license please see:
<http://creativecommons.org/licenses/by-nc-nd/3.0/>

This is a download from the BLDS Digital Library on OpenDocs
<http://opendocs.ids.ac.uk/opendocs/>