

SOCIO-ECONOMIC CONDITIONS OF BU TRABA

A SETTLEMENT ON THE COASTAL STRIP OF CYRENAICA*

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The Area

The Bu Traba settlement is situated on the coast of the Mediterranean Sea between Tolmeitha and Tocra, some 75 km. northeast of Benghazi. It is approximately 10 km. long and has a breadth of 2 km., thus covering an area of about 2,000 ha. To the south the settlement is bounded by a spur of the Jebel Akhdar.

The coastal strip has an almost level surface and is intersected by four major wadis which descend from the hills. The general contour rises gradually from sea level to a height of about 40 metres, before merging into the foothills which range from 40 to 100 metres. Further south, the hills continue to rise and reach a height of 250 metres.

The annual rainfall varies from 250 - 350 mm. (10 - 14 inches) and allows only dry farming of wheat and barley. Precipitation occurs during the winter months, the summer is dry. The natural vegetation of the area consists of bushes, most of which had once been cleared but have reappeared in the last few years, thus covering the area which could otherwise be planted with wheat and barley.

* This article is based on the results of a survey of rural life conducted by the author. For more detailed information see the report "Socio-Economic Conditions of a Libyan Village and Proposals for Future Development" issued by the Institute for Foreign Agriculture, Technical University Berlin in 1964.

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The greater part of the plain consists of heavy reddish-brown calcareous soil, the only exception being a few lithosols together with rock outcrops and the sand on the sea-shore. The humus horizon which is 15 - 25 cm. deep is sometimes mixed with gravel which in some parts restricts agricultural use.

There are 76 wells most of which were built during Roman times. They provide water for drinking, watering and irrigation and are situated within a distance of 200 - 400 metres from the sea-shore. A few wells which were built closer to the sea supply salty water and have therefore been abandoned. On the other hand, it is rather easy to dig new wells and this has been done in recent years by 5 farmers.

At present, 44 wells are in good condition and supply non-saline water, the rest are out of use, partly because the stones lining the well-shaft have fallen in, and partly because they were filled with clay after inundation through the wadis. The capacity of one well has been estimated as being sufficient to irrigate an area of half a hectare under vegetable production during the dry season.

The most eminent features of Bu Traba are 50 farm-houses which were built in 1942 when Libya was under Italian administration. Unlike the major colonisation projects of the Italian government, which were created to settle Italian farmers in Libya, Bu Traba was one of the five projects set up for the Arab farmers. Whereas 4 of the projects were officially handed over to the Libyans between 1936 and 1942, the settlement of Bu Traba was never completed, 50 houses were built but not distributed.

In the middle of the settlement a large square, surrounded by buildings, which was intended to be the market-place, called Jedida, still remains in the same unfinished condition in which it was left some 20 years ago.

The transport and communication system also could not be completed because of the outbreak of the war. Bu Traba lacks a road linking it with a larger city. [*Editor's note.* In 1966, after this article was completed, an asphalted road between Tocrá and Tolmeitha was opened. Thus, Bu Traba has direct access to motor vehicle transport and this should have an influence on its economy.] The only asphalt road close by is on the eastern side of the settlement and leads from Tolmeitha to Merj, a small town with about 10,000 inhabitants. It is an important administrative and marketing centre, for Bu Traba too, although it is 30 km. away from Tolmeitha. Farmers who want to sell their products have to take them on donkey to Tolmeitha where they can load their goods on to a lorry which drives to Merj. The farmers living in the middle or the western side of Bu Traba go directly to Merj, crossing the hills on foot.

Population.

The number of inhabitants in the area is subject to constant change, since some people living in the foot-hills change their place of residence in search of fodder for their animals and move to an area still close to the settlement but no longer part of it. Their mobility is greater since they are accustomed to living in tents.

In October 1963, the area of Bu Traba was inhabited by 423 people who were living in 68 households. Exact figures on the age structure of the population are rather difficult to get as most farmers do not know either their own age or that of their family members. Analysing the figures given by the heads of the family and arranging them in groups of 10 years, we get the age pyramid shown in Figure I.

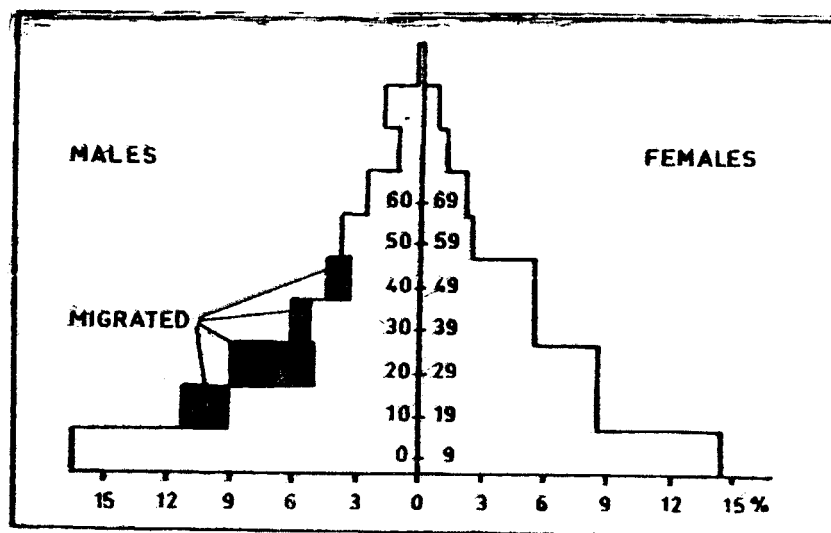


FIG. 1

AGE-PYRAMID OF BU TRABA

Inexact though the figure may be, it still shows a very high percentage of young persons. More than half of the population, i.e. 52% of the inhabitants, are under 20 years of age. Besides this, it indicates a low percentage of men in the age-group of 20 to 29. The reason for this is that in the last 10 years 18 men of this group have left Bu Traba and moved to towns. Altogether 38 men migrated from the settlement.

The phenomena of population movement must be dealt with in more detail. The author was able to get the figures of the census carried out in 1954 which, however, were not complete.¹ In order to get an idea of the various changes of population, the calculations have to be based

1. As Bu Traba was part of a large unit in the census, the people living in Bu Traba had to be selected from the census book for the Tolmeitha district, which consists of approximately 3,000 inhabitants. For reasons unknown to the author, only a part of the families living in Bu Traba today could be found in the books, although others not registered in 1954 claim not to have changed their place of residence during the last ten years.

on those families registered in Bu Traba in 1954 and still living there in 1963. As there was no major migration of families to or away from Bu Traba during these 9 years, the following calculations show — at least in the families surveyed — a trend of recent developments.

Out of all the households living in Bu Traba in 1963, 36 were registered during the 1954 census. As shown in Table I, 12 persons moved to the area and all of them joined an existing family. They either returned to their own family after divorce or went to the family of a relative after the death of the father. Twenty-two persons migrated from the settlement. The annual increase in the households under investigation was 2%, the birth rate being 39/1000 and the mortality rate 19/1000.

TABLE I

Population changes of 36 households registered in 1954 and 1963

Group of persons	No. of persons
Persons registered in 1954	214
Persons born since 1954	73
Persons moved to Bu Traba since 1954	12
Persons married into Bu Traba since 1954	14
Persons died since 1954	35
Persons left Bu Traba since 1954	22
Persons married away from Bu Traba since 1954	16
Persons living in Bu Traba in 1963	237

Whereas in general the number of males and females in Bu Traba is almost equal, the women dominate in the age groups above 17. In October 1963, 105 men and 116 women over 17 years were counted. The majority of them are married (see Table II), only 16 men and 7 women are single, but as 15 are under 25 it may be assumed that they will marry soon².

2. The minimum age for marriage is 18, although two girls who have left the settlement married at the age of 12.

TABLE II
Married Status in October 1963

Group of persons	No. of men	No. of women
Persons above 17 years	105	116
Married	72	87*
Married, living with 2 wives	7	—
Single	16	7
Divorced	6	4
Widowed	4	18

* The husband of one woman is not residing in Bu Traba.

If a man loses his wife through divorce or death, he usually marries again. Eighty-nine men living in Bu Traba are or were married to altogether 125 women. Twenty-four men have wedded more than one wife (see Table III) and are or were married to a total of 60 women.³ Comparing the figures of these two groups of women, we see that almost one-half of the 125 women who were wedded to men still alive, were not the first wives of their husbands. But despite this only 7 men are at present living in bigamy.

In Bu Traba marriage is more or less an economic union. The bridegroom has to pay a dowry to the father of the girl he wants to marry. This may be considered as compensation for the loss of a working hand. A further payment is made to the bride herself for her wedding dress and jewellery. Besides this, the bridegroom also has to bear the expenses of the wedding festivities. In more well-to-do families, an additional sum has to be set aside for a dancing girl performing the "kishek", the traditional wedding dance.

3. Of these 60 women, 15 died, 13 got divorced, 17 are at present the sole though not the first wives of their husbands, and 14 live in bigamy with 7 men. The fate of one woman is unknown.

TABLE III

Number of marriages contracted by men

Category of husbands	No. of men
Men who are or were married	89
of which :	
with 1 wife	65
with 2 wife	19
with 3 wife	1
with 4 wife	1
with 5 wife	3

The dowry for the bride depends on her age, the reputation of the family, and whether she has married before. It may be paid in cash, in animals or both. Out of the 125 marriages concluded by men living at present in Bu Traba, the majority, that is 71, were paid for in cash, 11 in animals only and 29 in both, animals and cash. In 14 cases the men did not remember the kind of payment.

The dowry-prices for brides are very high (see Table IV) and amount on the average to £L 185. During the last 10 years no woman's dowry was formed with animals only. Some farmers paid half of the average amount in cash and gave 30 goats and 1 camel or 50 goats in addition. For the people in Bu Traba marriage involves the expenditure of a large sum of money which they would never spend for some other purpose. This being so, it is no wonder that there is one family in Bu Traba who, without having any other source of income, lived in 1963 on the money it received through the marriage of a daughter.

TABLE IV

Cash prices paid for brides in marriages concluded in 1952 - 1963

Year of marriage	Prices in £L.
1952	no marriages
1953	150, 150, 200, 300
1954	no marriages
1955	120, 150
1956	110, 250
1957	190, 230
1958	100, 130, 150, 200, 200, 250, 300
1959	150, 180, 180
1960	200, 200
1961	100, 125, 180, 200, 250
1962	200, 230
1963*	70, 230

* Until October

Housing and Sanitation.

There are three kinds of living facilities : stone houses, tents and barracks. The houses consist of a building, 10 by 10 metres large, with three rooms and a courtyard. They have neither running water, nor electricity, nor facilities for disposal of wastes. Having been constructed 20 years ago, they show signs of age. The ceilings leak and the walls have cracks and other faults. These defects are not of a serious nature and could be repaired by the farmers themselves if they wanted to. In fact three of them have done so recently. But as a whole one may say that there is no great desire, on the part of the farmers, to live in the houses. Three merchants use them as shops and 18 farmers sometimes store their grain and straw in them. One of the main reasons for keeping away from the houses is the fear of an earth-quake like the one in February 1963 which destroyed several houses in neighbouring Merj

and allegedly killed 300 people. Although there was no major damage or casualty in Bu Traba, the fear of earth-quakes remains. At present out of 50 houses only one is inhabited regularly and that, because the owner of the house is so poor that he does not own a tent. There are 7 families who occasionally live in the houses but prefer avoiding them in summer.

The houses were distributed to the farmers by the British Military Authority in 1947. Farmers who through tribal rights owned the piece of land on which the house was built, were allowed to move into the house. Nowadays they belong to the government, and the State Property Department charges a rent amounting to the trivial sum of 680 milliemmes a year.

At present only 37 officially registered house-owners are living in the area. Thirteen have left the settlement and found jobs outside, 6 of them however have given their houses to friends or relatives who do use them occasionally, so that there are now 43 families possessing houses.

The kind of housing most preferred is the tent. It consists of a single blanket of about 7 by 5 metres, manufactured by the women of the family. The better ones are woven out of goat hair, but there are some which are made out of old rugs and cloth. One advantage that the tent has over the house is that a flap can be opened on the side the wind blows, so that there is always a cool breeze.

Of all the 65 households residing permanently in Bu Traba, only 1 does not own a tent. Forty-seven households are living in 1 tent, 13 have 2, and 4 even 3 tents. Besides this, there are 6 barracks. The barrack is a very simple wooden construction, built mainly from planks and other pieces of wood washed on to the sea-shore. Despite this, its prestige value is higher than that of the tent. Unlike the tents, it is possible to stand upright in them and to lock them, and that is why most merchants own barracks as they make good shops. For the farmer and his family however, a tent is more suitable to their way of life.

Education and Extension.

Bu Traba has had educational facilities from the beginning of the century. Until about 30 years ago education was given in a religious school where the pupils were taught the gospel of the Koran. Eighteen men still living in Bu Traba went to this school. Their knowledge of reading and writing is, however, limited as most of them have forgotten what they learnt for lack of practice.

At present there are two schools which boys in school age may attend. One is situated in Tolmeitha and used by those living in the eastern part and the other consists of a tent erected close to Jedida. There is no school for girls, and as the women who married into the settlement from outside also lack school education, not one woman in Bu Traba has had any schooling whatsoever.

Although education is compulsory for all children in the age from 7 to 14 years, only 29 out of 42 boys in school age go to school. The other 13 help in the household or work as shepherds. The school curriculum extends over 4 years, but generally the boys attend school for only 2 to 3 years. Those willing to study further have to join a school outside the settlement after completing the 4-year-course in Bu Traba.

The present system of education has little direct effect on agricultural practices. Extension work is also limited as the officer appointed by the Ministry of Agriculture lives in Tolmeitha and has no means of transportation. His activities are more or less limited to occasionally distributing seeds and trees which are provided by the Ministry of Agriculture, and assisting the Mudir in carrying through agricultural taxation. No instructions on ways and means of improving farming methods are given by him, nor do the farmers approach him for advice.

Occupations.

Economic life in Bu Traba is based on agriculture and lies mainly in the hands of the men. Women do their housework, some of them spin rough wool and weave it into straps for their tents, most of them

keep chickens and the wives of farmers help their husbands during harvest time. The men are also helped by their children who sometimes act as shepherds since this can be done without supervision.

There are 48 farmers who live mainly on grain and vegetable cultivation, one land labourer, 4 shepherds and 3 men who work both as farmers and shepherds. Another major subsidiary occupation carried out by 24 farmers is charcoal burning. The bushes of the plain and the trees in the foothills supply sufficient raw material for this purpose. Charcoal burning is usually done during the off-season in agriculture. It requires great physical strength and can therefore be done continuously by young men only. The farmers who burn charcoal are the most active ones in the settlement. Since charcoal gives, within a short period of time, a relatively high income, some charcoal burners neglect their irrigated farms and concentrate on charcoal and dry farming.

The group of part-time farmers in Bu Traba is made up of 8 merchants, one policeman, one teacher, one unskilled labourer and one watchman. Furthermore, there is one gardener working for the government, one telephone-operator and 4 unskilled labourers who work in Merj and come occasionally to the settlement to do some dry farming.

Very few men are engaged in purely non-agricultural professions. Bu Traba has one miller, one medical dresser and one lorry-driver.

In 1953, 7 land-labourers were working in Bu Traba. They worked for other farmers, since they did not own land and could not find a job outside agriculture. After economic development started in Libya these 7 land-labourers left the settlement and moved to the towns. Only one land-labourer has entered Bu Traba since then.

About 10% of all men in working age are unable to work. This group is composed of 10 men older than 75 years, one blind man, one man with only one leg, and one man who has a very weak constitution.

TABLE V

Occupations of men 14 years and older

Occupations	No. of men
A. <i>Mainly agricultural</i>	
Farmer	48
Farm-labourer	1
Shepherd	4
Farmer and shepherd	3
Farmer and coalburner	24
Farmer and carpenter	1
B. <i>Partly agricultural</i>	
Merchant and farmer	8
Unskilled labourer and farmer	5
Government employee and farmer	5
C. <i>Non-agricultural</i>	
Medical dresser	1
Lorry-driver	1
Miller	1
D. <i>Others</i>	
Pupil	4
Disabled	13
Total	119

Another change of occupation through migration has been mentioned before. There are 31 sons of farmers who do own land but who

nevertheless have left the settlement. Nine men, among them the most capable one of Bu Traba, went to the towns to continue their studies and will probably not return to their families after graduation, sixteen have joined the army or defence force and six have found jobs in other non-agricultural fields. It is unfortunate for Bu Traba's future agricultural development that 19 out of these 31 men who have left the settlement have had school education and could otherwise have been utilized for future improvement schemes.

The migration of altogether 38 men has had its bad effects on agricultural production in Bu Traba. It is difficult to give exact figures on the decrease in production, but the shortage of manpower is illustrated by the fact that there are 43 land-owners who could cultivate more land than they cultivated in 1963 if they had more manpower.

Tribal Patterns.

Tribal organization in Bu Traba, though similar to that of other Arab countries, has its own peculiarities. All the inhabitants of the settlement belong to tribes which are under the guidance of a Sheikh. Unlike other Arab countries, however, the Sheikhs in Bu Traba do not receive any tribute from their tribesmen, either in cash, or in kind or in the form of services. On the contrary, the Sheikh, being one of the rich men in the area, generally helps and supports the needy in his sheikhdом. His financial means allow him to marry more than one wife. Thus, when he takes over the title from his father, he usually has several sons in working age and is not forced to work for a living himself. He therefore has time for other activities, such as dealing with government officials.

The Libyan government respects the Sheikhs as local leaders and recognizes the rights of the tribes to a certain extent. For instance, settling disputes on land or water rights between tribal people is done by committees which do not adhere to the Civil Code but base their decisions on tribal laws and customary rights. Within the tribe the Sheikh has from the very first remained the highest judicial authority. He has

the power to settle disputes arising from trespass or animals grazing in the fields of another member of the tribe, which could not be done by government authorities living far away.

In Cyrenaica the chief tribe is called Qabila. It is generally subdivided into several units called Ailats, and the Ailats are again split into Biyout (singular: Bait).

In Bu Traba 52 heads of households⁴ belong to the Qabila Dres, 7 to the Qabila Arafa and 4 are Misamir⁵. The remaining 5 men are non-indigenous in Bu Traba and have come from Tripolitania. Unlike other tribal areas, the tribes of Bu Traba are not concentrated in their own particular areas but live, irregularly mixed, on the same tract of land.

Living in a tribe has one great advantage. The tribal members help one another in times of emergency. Even those who have migrated to the towns still maintain their tribal affiliation and can always return if they are in trouble. On normal daily work the tribal structure has, however, little effect. There is no cooperation between members of a tribe in good times.

The tribe which was founded primarily as a military organization has changed in structure. The Sheikh, formerly the supreme authority, has now lost a great part of his prestige. The reason for this is the spread of education and the infiltration of the influences of modern society which have created new elites. The Sheikhs of Bu Traba to-day are the wise old men who are asked for advice when problems arise, but their sons have other interests. Instead of preparing themselves for the task of taking over their father's functions, the sons of Sheikh Abdul Salam, for instance, have left the settlement and moved to Benghazi.

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4. Membership of a tribe is received through birth. Women always remain members of their tribe of birth even if they marry men from another tribe. They may thus return to their original tribes in case of divorce or death of their husbands.
 5. Whereas the first two tribes are said to have conquered Cyrenaica during the 11th Century, the origin of the Misamir tribe is not known. They claim descent from the Prophet and are considered to be holy by the other tribes.

Land Tenure and Land Use.

The present tenure system in Libya is based on the Ottoman Land Law and on a Land Tenure Law enacted in 1921.

Under Muslim law land ownership comprises two rights: the *raqaba* or right of absolute ownership of the land and the *tasarruf* or right to the usufruct of land. In Bu Traba as in other tribal areas the state legally owns the *raqaba* whereas the *tasarruf* is vested with the tribes. Although no adjudication of *tasarruf* titles has ever taken place, the farmers regard the land they cultivate as belonging to their tribe. They enjoy the right of usufruct during lifetime and after that leave their landed property to relatives in the same tribe.

The fact that no titles were distributed to the farmers, and that no borders of any farm were fixed, has, however, not led to major disputes on land boundaries. All the land owners of Bu Traba seem to definitely know the borders of their lands. They consist of green bushes and foot-paths, and in the irrigated area, of cut thorny bushes which are placed around the plot in order to protect it against grazing animals.

At present only a small part of the cultivable area in Bu Traba is regularly under cultivation. Altogether there are 62 farms which have an average size of 15 ha., of which one half is cultivated each year; the other half is left fallow. When the settlement project was initiated in 1942, it was intended to create 50 farms each with 9 ha. of dry farming land, 0.2 ha. of irrigated land for vegetable cultivation, and 0.8 ha. for trees. In 1962/63, in the whole area 5 ha. of irrigated land and 460 ha. of dry farming land was under crop (see Table VI).

The irrigated farms are all situated along the sea-shore covering the area between the sea and the first row of houses. The dry-farming area starts south of this line and stretches up to the foothills. The house-owners of the second row of houses do not own irrigated farms; that is the reason why six of them left the settlement. On the other hand,

TABLE VI

*Land use 1963 (Area under cultivation)**

Types of farms	No. of farms	Dry-farming area (ha.)	Irrigated area (ha.)	Average per farm	
				Dry-farming area (ha.)	Irrigated area (ha.)
Farms with dry-farming and irrigation	24	170	5	7	0.2
Farms with dry-farming only	38	290	—	8	—
Total	62	460	5	—	—

* Areas left fallow are not included

owning one of the houses in the first row does not necessarily mean also owning a strip of the irrigated area. There are six non-house-owners who own irrigated land, whereas 31 house-owners have no irrigated farms.

Ownership of irrigated land is connected with ownership of a well. But here too, rudiments of tribal structure are still to be found. Everybody has the right to use any well in Bu Traba for drinking or watering purposes. And in fact the non-well owners do so, without paying any fee for this. Water for irrigation is taken by the owners of the irrigated area only and this right is respected by the other farmers.

Just as the farmers respect the tribal rules with regard to ownership of land, they also respect tribal ownership of wells. According to local usage, land and wells may be inherited by men only. The general Islamic rule that sons and daughters share their father's property in a ratio of 2 : 1 is not applied in Bu Traba. The reason given for excluding women from inheritance is that through marriage some part of the tribal land would go to outsiders. Although this custom is of little importance to Bu Traba nowadays, it still has an advantage: there is no major fragmentation of holdings.

Agricultural Practice.

Out of the 68 households in Bu Traba 62 grow wheat and barley in the dry-farming area. In November when rain starts they sow the seeds and later on plough their lands. The ordinary plough is made of wood. It is rather light and can therefore be drawn by a horse or a donkey, but because of its weak construction it has to be replaced each year by a new one. With a wooden plough no weed control can be achieved. Iron ploughs are much more efficient but with the heavy soils of Bu Traba require camels as draft animals. Today, 5 farmers own iron ploughs whereas the number of farmers using a wooden plough amounts to 56. During the last few years ploughing by tractor was introduced in Bu Traba. In 1962/63, 5 farmers hired tractors and got some part of their dry-farming land ploughed.

Five or six months after sowing, the grain is harvested and brought to the threshing floor. Here it is threshed by animals which are driven over the grain. Corns are separated from the chaff by throwing them into the air against the breeze. The grain obtained in this way contains a lot of dirt. Until 1962 it was ground with stone hand mills and then baked into a thin bread which is the staple food of the inhabitants of Bu Traba. About a year ago one merchant installed a mill run by a diesel engine and since then most of the grain for personal consumption is ground there.

The yields of grain depend almost entirely on rainfall. The present practice of dry-farming by which at least half of the area cultivated with grain is left fallow each year is stipulated by the small amount of rain and is well adapted to the requirements of the water household of the soil.

As the plots cultivated in the dry-farming area are irregular in shape the farmers do not know the size of their non-irrigated farm. They therefore measure the yields per unit of grain by the ratio of seed sown to grain harvested. In 1962/63 this ratio was 1 : 8 which corresponds to a yield of approximately 400 kg./ha. This can be considered as

being little less than an average harvest. In 1962/63 altogether approximately 75 tons of wheat and 120 tons of barley were produced in Bu Traba.

Whereas grain is grown by almost all households, only 24 of them cultivate vegetables. Growing vegetables requires much more manual labour than dry farming and can in general be done only where water for irrigation is available. There are, however, two farmers who own a plot of land in the course of a small wadi in which they may grow vegetables without irrigation. As mentioned already, the irrigated area belonging to one farmer has an average size of only 0.2 ha. Nevertheless a properly managed vegetable garden keeps the farmer busy for almost each month of the year. Besides irrigation, on which a great part of the working time is spent, the farmer has to grow the seedlings, plant them into the soil and remove the weeds. No chemical fertilizer is used, but most farmers collect the manure of their goats and sheep and put it into the reservoir of the dalu where it dissolves. Those growing onions burn the manure before it is used in order to destroy the seeds of the weeds not affected by animal digestion.

Tomatoes, onions, melons, and red pepper are the most common kinds of vegetables grown in the settlement. Besides these, one finds a few plots cultivated with ladyfinger, cabbage and raddish (see Table VII).

Within the irrigated area a few fruit trees are to be found. There are 1500 productive vines which are grown in units of about 100 plants each. Grapes give in good years an excellent cash crop, they are however affected by the salty winds blowing from the sea, especially when this occurs during blossom time. Olive and almond trees have been planted during recent years, but most of them have perished. Twenty trees of each kind remained but do not bear any fruits, most probably because of the salty winds. There are 100 productive fig trees and about the same number of productive date palms, the yield of which is consumed by the farmers.

TABLE VII
Cultivation of vegetable

Kind of vegetable	No. of households growing vegetable	Area under cultivation 1963 (ha.)*
Tomatoes	22	1.6
Onions	19	1.2
Melons	16	1.1**
Peppers	15	0.6
Ladyfinger	6	0.1
Cabbages	2	0.1
Radish	5	0.1
Total		4.8

* Figures rounded

** Of which 0.2 ha. without irrigation.

The present farming practices of Bu Traba – dry farming and vegetable gardening – have little effect on the supply of fodder for the animals. Their feeds are the bushes and wild plants growing in the uncultivated areas of the plain and in the foothills. With the little amount of water available for irrigation and the high prices paid for vegetables, the present practice of feeding is quite suitable to local needs. This, however, is not to say that the animals are well-fed; on the contrary all of them could give higher yields if they were better nourished.

The animal owned by almost all households is the donkey. It is mainly used to plough the land, to carry water and to transport the goods harvested to the market. Besides, it serves the owner as a substitute for a bicycle. The horses belong to a local race of work-horses which has nothing in common with the famous Arab horse. They are used for

ploughing only. There are 12 farmers who own camels; among them are all those who own an iron plough, since they can only be drawn by camels.

The farmers of Bu Traba keep 1,700 goats and 250 sheep. Although the majority of the households own goats and sheep, a clear distinction can be made between those who live mainly on goat and sheep husbandry and those whose main income is obtained through vegetable gardening. All those who own more than 60 goats and sheep do not cultivate irrigated land. On the other hand, out of 24 households owning irrigated farms 20 have less than 30 animals.

Owning more than 30 goats and sheep seems to be enough to keep a family that practices, like all farmers, dry-farming. There are 6 households which own more than 30 animals and which have abandoned their irrigated farms and concentrated on animal breeding. This allows them an easier life than before.

TABLE VIII

Animal Husbandry

Kind of animals	No. of households keeping animals	No. of animals*
Goats	45	1700
Sheep	7	250
Donkeys	62	100
Horses	51	70
Cattle	16	60
Camels	12	15
Poultry	54	280
Beehives	3	50**

* Figures rounded

** No. of beehives.

Credit and Marketing.

A large number of farmers in Bu Traba are self-supporting with regard to their main food, bread. Furthermore they usually keep seed from their last harvest. As they do not spend money on improving their land or their wells, nor buy any major farm implements, there is at present no urgent demand for credit. This situation will however have to be changed drastically if a development program is initiated.

Although one half of the households are indebted, the sums owed are not large enough to present a serious problem. Debts usually arise when farmers buy tobacco, tea, sugar or soap from a merchant and are not able to pay. The amount due is then written down and generally paid once a year after the harvest is sold.

Another source of credit is the Agricultural Bank. Its activities are however limited, since according to its statutes credit may be granted only after consulting a guarantor who must be known to the Bank. As only very few of the farmers in Bu Traba find a guarantor, the majority of them are not helped by the Bank. In 1961/62, five farmers succeeded in obtaining credit and in 1962/63 credit was given to one farmer only.

As the merchants in Bu Traba restrict their activity to selling goods which are needed in daily life : cigarettes, copy books, razor-blades, tea etc. and do not trade with agricultural products, each farmer has to get in contact with a merchant outside the settlement when he wants to sell his grain.

Some merchants enter the settlement with a lorry and take the grain; in other cases farmers take the grain to Tolmeitha where it is collected by the merchants. The main problem of transportation is the disposal of the vegetables. They do not ripen at the same time nor can they be stored for a certain period of time until larger quantities have gathered which would make it worthwhile to bring a lorry to the farm. At present the farmers collect their vegetable in baskets and take them on donkey-back to the asphalt road near Tolmeitha where they have

to wait until a lorry or a bus picks them up. In most cases the farmers of Bu Traba do not arrive in Merj before noon and receive a price which is lower than that paid in the morning. If there were an asphalt road connecting the settlement with Tobra and further on with Benghazi, marketing and production habits would change. Farmers would sell their pepper while green which gives a higher income than the dried red pepper; they could sell green onions and grow salad and achieve higher prices for these products than they receive now in Merj.

Another marketing facility by which the farmers could benefit is the selling of wheat to the government. It pays a subsidized price of £ 4 per 100 kg., provided the wheat contains less than 3 per cent dirt. As the usual way of threshing by animals yields a high dirt content, the grain of Bu Traba is not accepted at present. It has to be sold to private dealers who pay only £ 2.5 – 3 per 100 kg.

Income and Property.

Any evaluation of the income of the inhabitants of Bu Traba has to take into consideration that some farmers still live on the level of subsistence agriculture. As most of the farmers do not know how much they consume it proved to be not possible to give information on the income in kind. The following section, therefore, deals only with the income in cash.

On the average the cash income per capita and year in the whole of Bu Traba was £ 23. Out of the total cash income of Bu Traba which amounted in 1963 to £ 9800, 50 per cent was supplied by agriculture, 18 per cent by coal-burning, and 32 per cent by other non-agricultural activities. Within the agricultural sector vegetable and fruit gardening ranked first with an amount of £ 2200. They were followed by animal husbandry with a cash income of £ 2100 and by the income obtained through selling wheat and barley, which was rather low and amounted to only £ 600.

About one third of the total cash income of Bu Traba is earned by the group of fulltime farmers which consists of 24 households. Their main activity is vegetable gardening and to a lesser extent animal husbandry. Their cash income, of which only a very small amount is derived from sources other than agriculture, runs to £ 135 per household. (see Table IX).

Another one-third of the cash income is made by farming households which have an additional income. This group consists mainly of charcoal-burners, but also includes 4 farmer-shepherds. Charcoal-burning gives a high income which in this group is higher than that of all agricultural sectors, amounting to £ 72.6 per household. Those who have another income besides agriculture usually do not cultivate irrigated plots. A few of them abandoned their irrigated farms as they found it easier to live on charcoal, others were forced to look for another source of income as their wells were destroyed. The reasons for making charcoal may vary⁶, but it is important to know that at present this occupation yields an income which is equal to that obtained from irrigated farming.

The largest income per capita of the farmers is obtained by those who as part-time farmers have a main job and main source of income other than agriculture. This consists of merchants, skilled and unskilled labourers. As they spend most of their working time on another profession, they cannot afford to keep goats and sheep which must be watched regularly. Those three who are able to keep some animals have them looked after by their children. Two part-time farmers occasionally make charcoal, and two even grow some vegetable under irrigation.

There are 5 households in which father and son live in economic union. In most cases only the father works in the agricultural sector

6. It is worth mentioning that cutting wood and burning charcoal is forbidden by the Forestry Department which wishes to afforestrate the area. The farmers who regard the forests as belonging to their tribes nevertheless continue to cut and are not prevented from this due to the weakness of the authorities concerned. The only disadvantage faced by the charcoal burners is that they cannot sell their coal on the open market where the government pays a subsidized price. There is however a flourishing black market for charcoal.

whereas the son has another non-agricultural occupation. The cash income of this group is not much higher than that of the first three groups but the income in kind of this group is higher as they do not sell any grain. Charcoal-making is not practiced either, as the farmer is generally too old.

The highest income achieved is that of the 2 heads of households which have no agricultural occupation, the medical dresser and the miller.

Three households had no cash income in 1963 at all. One of them is a farm labourer who came to the settlement after the summer and could not obtain an income, whereas the 2 others who have no income are helped by their neighbours who give them goods in kind.

There are 16 households, i.e. one quarter of all households in the settlement, which do not get any cash income from agriculture, illustrating the rather high rate of subsistence agriculture.

TABLE IX
Annual Cash Income

Socio-economic group	No. of households	Average annual cash income per capita	Average annual cash income per household					Total
			Dry-farming	Veget. cultiv.	Animal husbandry	Charcoal	Non Agricult. activity	
Farmers	24	21.0	10.5	72.3	49.3	—	2.5	134.6
Farmers with add. income	23	19.3	8.9	11.4	33.2	72.6	8.3	134.4
Part-time farmers	12	30.8	12.2	6.8	9.0	13.3	153.8	195.1
Union father/son	5	19.9	—	36.0	1.8	—	101.2	139.0
Non-agricultural	2	135.0	—	—	—	—	270.0	270.0
Dependants	2	—	—	—	—	—	—	—

The larger part of the income in cash is spent by the farmers of Bu Traba on clothing and food. Housing is almost free and the tents which cost about £ 20, are mostly self-made. There is very little expenditure on household goods, furniture, and farm implements. As shown in Table X, only 4 household goods are owned by the majority of the inhabitants. Almost all the households own rugs for sitting or blankets which are laid on the floor of the tents and are sometimes used as bedding.

TABLE X

Household Goods and Farm Implements

Item	No. of households owning one or more items
Rugs and blankets for sitting	67
Chest	62
Water can	58
Wooden plough	56
Bedding	56
Gun	28
Clock	9
Balance	8
Bicycle	7
Chair	7
Iron plough	5
Radio	4
Table	4
Cooking stove	1
Sewing machine	1
Motor-cycle	1

The only furniture used by the farmers consists of wooden chests which serve for storing tea, sugar, clothes, and so on. Chests are owned by 62 households. One very common household article is the water can. It is a petrol can which is very well suited for storing water, though rather expensive. Fifty-eight households own one such can whereas only one household still uses the old leather bag. Beds and mattresses are also very common. All the other household articles like tables, chairs, cooking stoves, and sewing machines are owned by less than 10 households. Another article of interest is the gun. There are altogether 28 guns, the owners of which are very proud of possessing them. Most of them, however, are left-overs from the Africa campaign and 21 cannot be used as their owners do not get ammunition. The owners of the remaining 7 guns do not get much ammunition either and do not use their guns so much for hunting – though there is a lot of game in the area – but more for protection against wild animals.

Conclusion and Outlook.

Various changes in the social and economic condition of Bu Traba have taken place in recent years. The standard of living of its farmers is, however, like in many other rural areas of Libya still comparatively low. In order to improve the lot of its farming population the Libyan Government has started to invest a considerable share of its oil revenues in projects for the development of its agriculture. During the last two years it has initiated a vast program for rural development, in which funds for the improvement of the economic conditions of the farmers of Bu Traba are provided. Among the envisaged measures for development are such like the construction of the Tocrá-Tolmeitha road, digging of new wells, reconstruction of the market place, establishment of a village centre, cadastral survey, bush clearing and farm mechanisation. Large scale preparations for all these activities have started.