

KEPHALO: A VILLAGE OF FARMERS, SHEPHERDS AND FISHERMEN IN KOS ISLAND

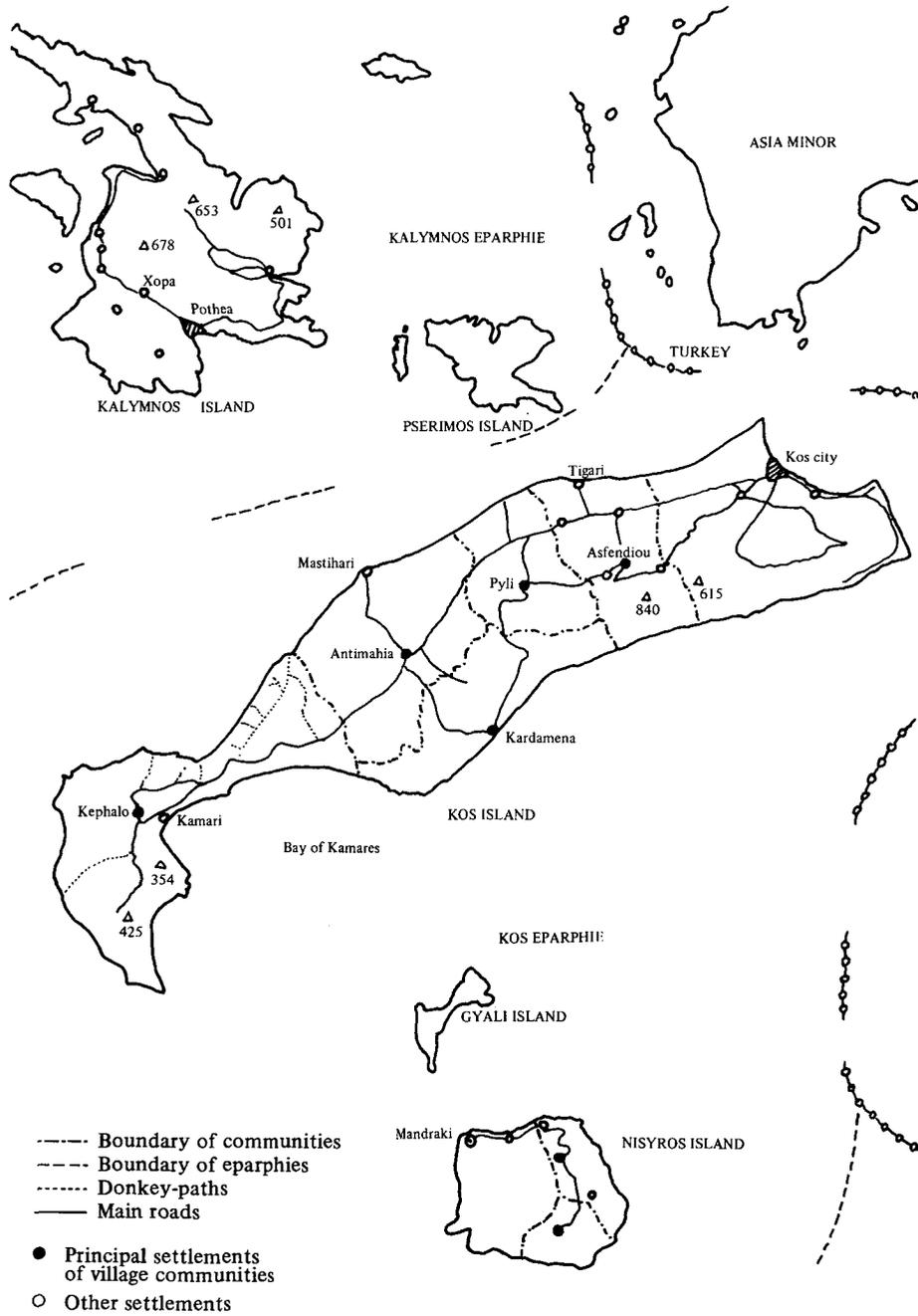
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For five weeks from the mid-December of 1980 to the first decade of January of 1981, I stayed on Kos Island, mainly in a village named Kephalo. Kephalo is a typical village in the Aegean Islands area in terms of its occupational component including all the three following sorts of villagers that constitute an inherent part of islanders' rural life: farmers, shepherds and fishermen. Farming, stock-breeding and fishing are most traditional and most representative ways of life for the inhabitants of the Aegean Islands. In this paper, I intend to give a brief description of these villagers' contemporary ways of life, paying attention mainly to their economic aspect. But I am primarily concerned about the farmers and shepherds of this island. So, I keep my mind mainly on their land (farm and pasture), their products (crops and livestock), their working activities (farming and stock-breeding) and so on. The present paper consists of two parts. The first half comprises the general description of Kephalo's land and production and the recent changes of the village economy, and the second half is devoted to the detailed observation of the same elements on a level of the private lives illustrated by some average villagers.

I Cropland and Pasture

Kos Island, which is located at the entrance of Keramicos Bay in Asia Minor and covers an area of 288 square kms, is the third largest island of the Dodekanese group, among which Rhodes is the largest and Karpathos is the second. It is a long, narrow island with the length of 49 km from the north-east to the south-west. The city of Kos, capital town of the island, is situated at the north-east end of the island. From this town a road, traversing the island lengthwise, leads to the villages scattered over the south-western part of the island. About a 45-minute busride, after passing several villages, brings us to the farthest village located at about 43 km from the town. It is the village named Kephalo. The fair-sized settlement of this village is found at one km

Fig. 1 Kos Island and its vicinity



inland from the south-east coast and built upon an impressive elevation that dominates the Bay of Kamares.

Kephalo is the largest of the five village-communities on Kos not only in population but also in area. Its communal district – an administratively defined territory of the village-community as a local government – consists of 7,100 hectares. But villagers don't live dispersedly in this extensive communal district. Generally it can be said that many historical factors and many needs for daily life have made Greek villagers' strong inclination to live together in a limited residential district. As is the case in almost all the other regions in Greece, the villages of Kos are also compact-type settlements, where all the villagers' houses are concentrated in one or several nuclear residential areas. So, in the extensive district of Kephalo which is about 15 km long and 3 to 5 km wide, only two settlements are found: one is a large and main inland settlement named "Kephalo", which is situated approximately at the geographical center of the communal district and built on the above-mentioned elevation, while the other is a small sea-side hamlet with a little harbor named "Kamari" consisting of some fishermen's cottages, several hotels and taverns for summer-season tourists. A winding steep road connects these two sea-side and hill-top settlements which are one kilometer apart from each others (see Figure 1).

These two settlements are mostly surrounded with mountainous ridges, barren hills, groves, brushes, and villagers' cultivated lands and fields. According to the recent statistical census data, the basic land-use division of the communal area in Kephalo is: 1,150 ha (16.2%) in every type of agricultural land, 4,780 ha (67.3%) in brush wood or natural grazing land, 660 ha (9.3%) in wood and grove, 260 ha (3.7%) in road and residential area (see Table 1). What attracts our attention first is the fact that in Kephalo the natural pasture land occupies an overwhelming part of the total communal area (nearly 70%) in contrast with the agricultural land constituting only 16%. In the agricultural statistics of modern Greece, many sorts of infertile land not suited to cultivation is classified as natural pasture land used for the traditional grazing of sheep and goats. Therefore, the high proportion of the wild pasture land in Kephalo directly means that a considerable part of the communal district is occupied by poor or barren land that is barely available for grazing land of sheep and goats.

It is well known, however, that Kos on the whole is an exceptionally fertile agricultural island in the Dodekanese.¹ As Table 2 shows, the proportion of arable (agricultural) land in Kos Eparhie – that amounts to 36.7% – is the highest of all the four eparhies in Dodekanese and almost five or six times as large as that of Kalymnos, which is the famous sponge-fishermen's island. The very fertile plain extending broadly in the north-eastern part of the

¹ The Five-Year Agricultural Development Program in the Dodekanese, Vol. 2, Rhodes, 1964, pp. 152-186 (in Greek); The Third Five-Year Agricultural Development Program in the Dodekanese, 1975-1977. Rhodes, 1974, pp. 6-14, see Table 1-4 (in Greek).

island, contributes most to this high proportion of arable land in Kos. It is obvious that the agricultural conditions of Kephalo, as it is situated in the south-eastern mountainous district, are more or less worse than those of the north-eastern villages. We must pay much attention, nevertheless, to the fact that the proportion of the arable land in Kephalo is high enough as compared with the average level of the whole Dodekanese (see Table 1) and two or three times higher than that of Kalymnos or Karpathos (cf. Table 2). Fundamentally, Kephalo is still an agricultural village in character.

The relative importance of the agricultural and wild pasture land in Kephalo's economy is partly reflected in the number of villagers whose lives depend mainly upon the former and the latter categorie of land respectively: 25 farmers and 24 shepherds (see Table 3). But the economic significance of the agricultural land in Kephalo not only consists in the role of a farmer's "capital" for market-oriented production but also in that of self-sufficient base of every rural inhabitant. In fact, as the village headman told me, most households of Kephalo including nonagricultural ones have their own small wheat-fields to get flour and bake bread for themselves. I was told by the village headman that in Kephalo there were about 2,500 inhabitants and 730 households in 1980. As is seen in Table 3 that is derived from a rough estimate by the village headman and clerks of community-office, a fairly large part of inhabitants engage in nonagricultural occupations. But most of these non-agricultural villagers also raise themselves some crops and domestic animals for family-consumption in the small fields inherited from their fathers. In this regard, they are more or less "peasants" in character, even if not "farmers".² Consequently, the arable land of Kephalo is the essential element of the village life and has a certain degree of economic importance for almost all the villagers regardless of their occupations.

On the contrary, the vast natural pasture land has no economic significance for the greater part of the villagers. It is of some value for only a part of villagers, that is, for 24 shepherds who herd flocks of sheep and goats on it. Moreover, they don't possess their own pasture. In contrast with the agricultural land which is privately owned and used as the inherited property by each villager, most part of the wild pasture land of Kephalo belongs to the village community. In Greece about 40% of the total area of the country is classified as pasture land. And the fact that demands our attention is that more than 50% of this pasture land in Greece is publicly-owned. This is also the case in Kephalo. A large portion of the natural grazing land, on which Kephalo's shepherds are feeding their flocks, is communally-owned and administered by the village authorities as a local government. The data obtained from the pre-

² A large part of 150 wageworkers listed in Table 3 are the agricultural labourers who are employed by the farmers and other nonagricultural villagers on seasonal farm-work. But they are also the half-peasants who possess their own small land holdings.

Table 1 Land-use division in Kephalo

	In stremmas	
	Kephalo	Nome of Dodekanese
Agricultural land	11,500 (16.20%)	424,879 (15.71%)
Natural pasture	47,800 (67.32%)	1,276,321 (47.13%)
Wood and grove	6,600 (9.30%)	684,200 (25.29%)
The water	500 (0.70%)	48,100 (1.78%)
Settlement and road	2,600 (3.66%)	176,400 (6.52%)
Wasteland	2,000 (2.82%)	95,100 (3.52%)
Total	71,000 (100.00%)	2,705,000 (99.95%)

Source: Data obtained from the prefectural office of the Dodekanese.

Table 2 Proportion of agricultural land and pasture land in the islands of Dodekanese (1961)

Eparchies	Agricultural land	Pasture land
Kos	36.71%	48.12%
Kalymnos	6.93%	91.34%
Karpathos	5.68%	46.79%
Rhodes	28.66%	48.12%

Source: Economic and Social Atlas of Greece. Athens, 1964, Table 301, 319

Table 3 Occupations in Kephalo (1980)

Carpenter	6	Baker	1	Postman	3
Blacksmith	2	Butcher	4	Policeman	3
Shoemaker	2	Taberna keeper	5	Community clerk	3
Tailor	3	Coffee house keeper	15	Bank clerk	6
Mason	10	Tobacco shop keeper	6	Water works man	1
Painter	5	Hotel keeper	4	Agrophilakas	2
Barber	2	Stone-quarry keeper	2	Farmer	25
Electrician	4	Constructor	10	Shepherd	24
Driver	7	Teacher	10	Fisherman	18
Cabdriver	3	High school teacher	2	Bee keeper	40
Windmill keeper	1	Doctor	2	Labourer	150
Sexton	1	Dentist	1	Seaman	600
Grocer	20	Priest	2	Pensioner	250

Source: Rough estimate by the village headman and community clerks of Kephalo (the numbers listed above include the heads and other members of households)

Table 4 Communally-owned and privately-owned land in the village-communities of Kos

	In stremmas		
	Kephalo	Kardamena	Asfendiou
Communally-owned land	44,000	9,500	1,000
Privately-owned land	28,000	20,000	20,000
Total	72,000	32,500	21,000

Source: Data obtained from the prefectural office of the Dodekanese.

fectural office of the Dodekanese (Table 4) reveals that Kephalo's communally-owned land by far exceeds the total privately-owned area. The shepherds of Kephalo feed their flocks mainly on this communal pasture land paying a charge to the village-community in proportion to the number of animals pastured on it. This custom seems to prevail throughout Greece.

It is needless to say that the basic two land categories of Kephalo, agricultural and pasturable, are the spaces of daily pursuit for the farmers and shepherds respectively. But the location of their work, farm or pasture, is often at a long distance from their settlement. So, the average rural inhabitants of the village traditionally have two houses each: one for everyday use in the settlement and another for a base of seasonal work in the countryside. These countryside-houses, mostly one-roomed small cottages, are scattered here and there separately one another in the extensive communal district. Of course, these cottages are built near the land and fields they use in their occupational pursuit. The farmers' cottages are found among their farm land, and the shepherds' are conveniently located near the communally-owned grazing land on which they feed their flocks.

II Crops and Livestock

In the agricultural statistics of Greece, farm land is classified into five categories on the basis of kind of crops planted on it: (1) crops on ploughed-land, (2) garden crops, (3) fruit trees, (4) vines, (5) fallow land. The total agricultural land of Kephalo amounted to 10,042 stremmata (1,004 ha) in 1980. And the greater part of it (81%) was occupied by the first categorie, i.e. the land that was used only for plough-cultivating (see Table 5). The proportion of this ploughed land in Kephalo is also obviously high in comparison with that of Dodekanese or even that of the whole Greece (see Table 6). This fact forms a striking contrast to the remarkably small proportion of the land used for fruit trees (olive) and vines (9% in total), while the relative importance of the land of this kind in Dodekanese or in the whole Greece reaches to 25-32% of all

the agricultural land.

A high proportion of crops on the ploughed-land in Kephalo, first of all, comes from the notably widespread remaining of the traditional crops such as barley and wheat. In 1980 cereals to be used as food and feed grains occupied 55.4% of the crops on the ploughed-land (and 46.5% of all the crops) in the cultivated-area. Cereals are now cultivated partly for market by the farmers and partly for home consumption by many households of the average villagers. But in the cultivation of wheat the home consumption character seems to predominate over the market-oriented character. In fact, the villagers who cultivate some stremmata of wheat for their own families are numerically far over the number of the strictly defined "farmers". Though it has a large population of 2,500 souls, Kephalo has only one baker. The reason is that many households bake bread for themselves from the homegrown wheat-flour at their own out-door ovens instead of buying at the baker. I was very surprised at the sight of a windmill still working on a low hill near the settlement. For, we can scarcely find one now in the Aegean Islands except the ones for tourism. A windmill-keeper, who bears strangely a family name of "Mullonas" (Miller), earns his livelihood by grinding villagers' homegrown wheat into flour.³ Barley for grains which is more cash-oriented crop than wheat, is also cultivated by quite a number of villagers. In 1980 not less than 50 households cultivated it receiving an agricultural grant-in-aid from the government at 200 drachmes per stremma. The cultivated area of barley per one household varies from 7 to 54 stremmata, and the average comes to 30.9 stremmata. In 1980 barley (for grains) ranked first of all crops in the cultivated area.

The relative importance of all the respective crops, as far as it is determined by the area devoted to them, is shown in Table 7. The fact which attracts our notice first is a great variety and fragmentation of production. We can numerate at least 45 different sorts of crops. Most important seven crops occupy about 85% of total cultivated area, but none of them reach to 20% respectively. Remaining area of 15% (roughly 15 ha) is divided into 38 various kinds of crops. This diversity obviously results from the self-sustaining character of their agriculture and the villagers' increasing inclination to adopt new crops for market. The fragmentation of land holdings, a characteristic social phenomenon of the rural Greece, also greatly enhances this diversity. Even the nonagricultural villagers not to speak of the average farmers often have several fields, most of which are found apart from each other at various places in the communal district. Besides, each field is scarcely over 20 stremmata in size. As is commonly known, this fragmentation of their farmland

³ Formerly, there were five windmills in the village. Four of them were closed and ruined in 1941-44. The Mullonas' windmill was built about two hundred years ago and has been inherited in his family for generations. But he is the last "miller" of the village, since none of his five sons intend to succeed this unprofitable job. He grinds villagers' grain into flour taking 10% of it as a charge.

is mainly due to the dowry and inheritance custom of Greece. And it is a matter of course that the fragmentation of land holdings is accompanied with diversity of crops planted on it.

Next, it also merits attention that in Kephalo a considerably large portion of agricultural land is devoted to crops for fodder: either for hay or for green grass. Vetches for hay and barley for grass, both amounting high to 1,500 stremmata respectively, are the second most crops after barley for grains. The total area for fodder came to 3,270 stremmata, 33.1% of the all cultivated land in 1980. Furthermore, it shows a tendency to increase in recent five years (see Table 8). There is no reliable data from which we can know exactly how much the fodder in Kephalo is produced for market outside the village and, in consequence, how much for the stock-breeding inside the village. But without

Table 5 Cultivated areas by categories of crops in Kephalo (1967-1980)

	In stremmas				
	1976	1977	1978	1979	1980
Crops on ploughed land	6,520	7,480	7,560	7,650	8,145
Garden crops	220	220	280	310	395
Fruit trees	620	680	750	775	1,370
Vines	80	70	25	20	12
Fallow land	1,000	80	—	90	120
Total	8,440	8,530	8,615	8,845	10,042

Source: Bulletin of Annual Agricultural Statistical Research in Kephalo. Year 1976-1980 (in Greek)

Table 6 Cultivated areas by categories of crops in Kephalo, Dodekanese and whole Greece (1978)

	Areas in stremmas		
	Kephalo	Dodekanese	Greece
Crops on ploughed land	7,560 (87.8%)	133,980 (31.2%)	24,633,396 (60.9%)
Garden crops	280 (3.2%)	12,385 (2.9%)	1,143,924 (2.7%)
Fruit trees	750 (8.7%)	101,524 (23.6%)	7,977,370 (19.7%)
Vines	25 (0.3%)	33,551 (7.8%)	1,995,511 (4.9%)
Fallow land	— (—)	148,056 (34.5%)	4,810,968 (11.8%)
Total	8,615 (100%)	429,496 (100%)	40,561,169 (100%)

Source: Agricultural Statistics of Greece. Year 1978.

Table 7 Cultivated areas and relative importance of respective crops in Kephalo (1980)

		In stremmas	
Crops on ploughed land		Onions	110 (1.1%)
Wheat	700 (7.1%)	Green beans	15 (0.2%)
Barley	1,800 (18.1%)	Garlic	32 (0.3%)
Oats	300 (3.0%)	Radish	2 (0.02%)
Millet	20 (0.2%)	Lettuce	2 (0.02%)
Beans	450 (4.5%)	Green broad beans	25 (0.3%)
Lathyrus	80 (0.8%)	Onion bulbs	8 (0.08%)
Chick peas	50 (0.5%)	Beet	2 (0.02%)
Broad beans	25 (0.3%)	Okra	3 (0.03%)
Tobacco	50 (0.5%)	Pumpkin	10 (0.1%)
Sesame	10 (0.1%)	Eggplants	5 (0.05%)
Vetch	5 (0.05%)	Pepper	1 (0.01%)
Lupine	20 (0.2%)	Epanaki	10 (0.1%)
Barley for hay	150 (1.5%)	Fruit trees	
Oats for hay	40 (0.4%)	Lemon	4 (0.04%)
Vetch for hay	1,500 (15.1%)	Orange	6 (0.06%)
Lathyrus for hay	10 (0.1%)	Mandarine	6 (0.06%)
Green maize	25 (0.3%)	Fig	3 (0.03%)
Barley for grass	1,500 (15.1%)	Almond	15 (0.15%)
Oats for grass	20 (0.2%)	Peach	1 (0.01%)
Watermelons	1,100 (11.1%)	Olive	1,335 (13.4%)
Melons	50 (0.5%)	Vines	
Potatoes	240 (2.4%)	Vine for wine	10 (0.1%)
Garden crops		Vine for table	1 (0.02%)
Tomatoes	170 (1.7%)	TOTAL	9,922 (100%)

Source: Bulletin of Annual Agricultural Statistical Research in Kephalo. Year 1980.

Table 8 Cultivated areas of major crops in Kephalo (1976-1980)

Crops	In stremmas				
	1976	1977	1978	1979	1980
Barley	900	1,100	800	1,100	1,800
Wheat	800	1,200	900	900	700
Oats	120	500	200	200	300
Beans	400	350	400	450	450
Other pulse	195	210	130	170	155
Tobaccos	365	210	200	60	50
Barley and oats for hay	50	80	250	150	190
Vetch for hay	1,000	1,200	1,500	1,600	1,500
Barley for green grass	1,500	1,600	1,600	1,200	1,500
Other crops for green fodder	80	70	120	80	65
Watermelons	700	600	950	800	1,100
Melons	30	20	100	100	50
Potatoes	130	140	320	130	240
Onions	76	64	83	104	110
Tomatoes	120	100	170	230	170
Garlic	34	30	44	32	32
Olive	580	640	710	740	1,335
Vines	80	70	25	20	12

Source: Bulletin of Annual Agricultural Statistical Research in Kephalo. Year 1976-1980.

Table 9 Kinds and population of livestock in Kephalo (1976-1980)

Livestock	Head				
	1976	1977	1978	1979	1980
Cattle	124	129	127	124	123
Donkeys	199	222	266	245	246
Mules	6	4	2	3	2
Pigs	210	265	270	300	265
Rabbits	400	500	200	400	150
Poultry	2,280	2,750	2,850	2,600	3,420
Turkeys	60	100	50	80	20
Pigeons	150	200	180	120	250
Sheep domestic	4	4	—	2	—
Sheep in flocks	450	480	450	420	360
Goats domestic	380	420	440	460	400
Goats in flocks	3,500	3,450	3,520	3,250	3,000
Beehives	3,700	4,000	3,800	4,020	4,120

Source: Bulletin of Annual Agricultural Statistical Research in Kephalo. Year 1976-1980.

Table 10 Number of newly-born livestock in Kephalo (1980)

Kinds of livestock	Head
	Numbers
Colts of donkeys	25
Calves	50
Piglets	400
Lambs	300
Kids	2,900

Table 11 Slaughtered animals and meat production in Kephalo (1976-1980)

Kinds of animals	Head, Production in tons				
	1976	1977	1978	1979	1980
Lambs	350 (4.2)	330 (3.9)	390 (4.7)	390 (4.9)	270 (2.4)
Sheep	200 (3.2)	125 (2.3)	100 (1.8)	120 (1.9)	90 (1.4)
Kids	1,500 (15.0)	1,850 (14.8)	2,200 (17.6)	2,150 (19.4)	2,250 (20.3)
Goats	860 (12.9)	1,080 (16.2)	830 (12.5)	1,550 (23.3)	960 (14.4)
Calves	3 (0.5)	24 (4.0)	15 (2.3)	18 (2.7)	10 (1.5)
Cattle	27 (7.1)	45 (11.8)	26 (7.9)	31 (6.7)	44 (10.3)
Piglets	110 (5.5)	140 (7.0)	240 (12.0)	180 (9.0)	200 (10.0)
Pigs	190 (19.0)	230 (23.0)	310 (31.0)	210 (21.0)	205 (20.5)
Rabbits	2,500 (3.7)	2,300 (6.0)	3,800 (5.7)	3,700 (4.6)	1,800 (2.7)
Poultry	3,320 (5.0)	3,500 (5.3)	4,250 (6.4)	3,330 (5.0)	3,480 (5.2)

Source: Bulletin of Annual Agricultural Statistical Research in Kephalo. Year 1976-1980.
Numbers in () are meat production in tons.

Table 12 Milk production in Kephalo (1976-1980)

		Head, Production in kgs				
		1976	1977	1978	1979	1980
Sheep in flocks	Animals milked	420	410	400	400	260
	Yield per head	55kg	55kg	60kg	60kg	60kg
	Total milk	23,100kg	22,000kg	24,000kg	24,000kg	15,600kg
Goats in flocks	Animals milked	2,220	2,360	2,500	2,400	2,000
	Yield per head	70kg	70kg	30kg	70kg	70kg
	Total milk	155,400kg	165,200kg	175,000kg	168,000kg	140,000kg
Domestic goats	Animals milkd	270	320	360	400	350
	Yield per head	180kg	160kg	150kg	150kg	150kg
	Total milk	46,800kg	51,200kg	54,000kg	60,000kg	52,500kg

Source: Bulletin of Annual Agricultural Statistical Research in Kephalo. Year 1976-1980.

Table 13 Dairy products and other livestock products in Kephalo (1976-1980)

Products	Production in kgs. Hides in pieces				
	1976	1977	1978	1979	1980
Soft cheese	35,000	40,000	42,000	40,000	35,000
Myzithra	1,600	2,000	2,000	2,000	1,500
Butter	500	500	800	600	600
Cream	1,500	2,000	2,000	1,500	1,200
Wool	500	650	600	700	600
Goat hair	880	1,050	1,000	1,100	1,000
Hide (sheep, goats, pigs)	2,240	2,395	2,800	3,830	2,850

Source: Bulletin of Annual Agricultural Statistical Research in Kephalo. Year 1976-1980.

doubt a fairly large part of it is consumed by the villagers for their own animals.

The kinds and the number of the livestock in Kephalo are listed in Table 9. As well as crops, these animals can be divided into two sorts. One is the livestock that is herded for commercial production by the occupational stock-breeders of this village, that is, flocks of sheep and goats grazed by the shepherds. The other is the animals tended by most of the nonpastoral villagers for the purpose of sustaining directly the needs of their own households. About one-third of the households still maintain a donkey for transporting both goods

and persons. A donkey is admirably able to go up steep slopes or narrow rocky paths loaded with a bulky freight such as cereals, olives, bales of hay, bundles of green fodder. Cows or oxen are kept by the farmers for ploughing, despite of recent increasing reliance on tractors. Most of the villagers prefer cows to oxen, since cows yields a calf per year and give some cash income for them. Almost all households keep also some productive livestock like pigs, rabbits, chickens, turkeys, pigeons and milking goats. Of course, goats are bred so that they can produce every year a few kids which are to be slaughtered in the spring. Domestic animals of these family-sustaining character are kept in the small enclosures or in the caves that are excavated on the rock walls around the settlement. By contrast, flocks of sheep and goats are grazed and tended by the shepherds throughout the year at the pasture land which is often placed at a great distance of 60 to 90-minute-donkeyride from the settlement. In Kephalo sheep are greatly outnumbered by goats (see Table 9). In Kephalo we find no shepherds who tend mixed flocks of sheep and goats though they are a familiar sight in the rural Greece. Most shepherds tend flocks of only goats, and a few shepherds only sheep. The number of animals owned by each shepherd varies from 60 to 300 and the average is 140.

During the breeding season of sheep and goats that begins in October and continues until January, the shepherds go to their countryside-houses everyday to take care of breeding and tend newly-born kids and lambs. In February they slaughter kids and lambs and sell them to meat dealers. After that, the hard task of milking and cheese-making begins and lasts throughout the summer. The largest income-source of the shepherds consists in these two sorts of products: meat and cheese. Very large part of newly-born kids and lambs including female are slaughtered. For example, in 1980 out of 3,200 newly-born kids and lambs roughly 2,500 head (78%) were slaughtered for meat (cf. Tables 10 and 11). About 25% of them were sold alive or slaughtered outside the village. The average yield of milk per head a year is about 70 kg in case of goats kept in flock. This quantity is less than a half of a domestic goat's yield which amounts to 150 kg a year (see Table 12). The difference is most likely caused by the difference of milking frequency. In 1980, 260 head of all 360 sheep and 2,000 head of all 3,000 goats in flocks were milked. And the total milk-output came to 155,600 kg. From this milk the shepherds of Kephalo made all sorts of dairy products tabulated in Table 13. It shows that Kephalo's dairy production is notably specialized in soft-cheese making.

III *Changing Economy*

After the end of the four centuries' Turkish rule, the Dodekanese islands were seized by Italy during the Italo-Turkish war of 1911-1912.⁴ The Italian rule lasted for 31 years till 1943, when the Italians capitulated to the Allies in the Second World War. After the short occupations by the German and then by the British, the Dodekanese Islands were officially united to Greece in 1947. The population of Dodekanese had been decreasing from the 1930s. After that year, i.e. 1947, it showed the increasing trend. But as is the case in almost all the other regions of the Aegean Islands, it has begun to decrease again since the 1960s or the earlier period and still continues decreasing. The population of Kos began to diminish already in the 1950s. What we must pay due attention to, however, is the fact that Kephalo's population has been continuously increasing since 1947 in contrast with the general trend of the rural population in the Dodekanese or in the Aegean Islands as a whole (see Table 14). What has caused this exceptional situation in Kephalo?

The decrease in population in the Dodekanese, of course, results mainly from the domestic migration of rural inhabitants toward large cities. This "exodus" population comprises not so much the migrants with their whole families as the young people who leave home solely for the urban employments. Therefore, Kephalo's gradual increase in population means that the young men's "exodus" movement of this village is relatively weaker than that of the other rural districts of the Dodekanese. One of the most important factors that restrains this migration movement is the development of tourism in the Dodekanese. Since the 1960s foreign tourists have remarkably increased. And today the tourist industry is one of the most significant sections of economy in Kos, to say nothing of Rhodes. There is every reason to suppose that tourism will become more and more important part of the Kos economy in the future.⁵ It is true of the village Kephalo as well. In particular, a big hotel that was built on the seashore of Kamares Bay (near Kamari) in 1980 can not but have a great influence upon the villagers' economy. First, the large hotel that has sleeping accommodations for 1,100 guests affords a fairly large number of villagers an opportunity to get a summer job without leaving their own village. In fact, 130 villagers were employed by the hotel in the summer of 1980. Secondly, this big tourist facility built on the communal administrative district inevitably has an important effect on the finance of the village community as a local government. The sudden increase of communal budget in 1979 and in 1980 which was nearly twice as much as the previous year was

⁴ On the history of the Dodekanese, see: Skevos Zervos, *The Dodekanese. The History of the Dodekanese through the Ages*. London.

⁵ H. R. Bernard, *Kalymnos: The Island of Sponge Fishermen*. *Annals New York Academy of Sciences*, 1971, p. 304.

Table 14 Population in Kephalo, Kos and Dodekanese

	1947	1951	1961	1971	1980
Community of Kephalo	1,480	1,565	1,856	2,197	c. 2,500
Eparhie of Kos	21,044	21,403	19,987	18,940	—
Nome of Dodekanese	115,343	121,480	123,021	121,017	—

Table 15 Budget of the village community of Kephalo in last decade

Drachmes			
Year	Revenues & expenditures	Year	Revenues & expenditures
1971	1,650,000	1976	3,524,780
1972	1,915,615	1977	4,254,346
1973	2,308,000	1978	4,535,953
1974	2,530,000	1979	8,203,955
1975	3,132,600	1980	15,201,419

Source: Data obtained from the communal office of Kephalo.

Table 16 Land redistribution in Kephalo, Kos and Dodekanese (1958-1960)

	Total redistributed areas	Number of land-redistributed inhabitants	Average redistributed areas per capita
Dodekanese	63,000 str.	5,000 persons	12.6 str.
Kos	43,155 str.	2,425 persons	17.8 str.
Kephalo	5,730 str.	157 persons	36.5 str.

Source: Data obtained from the prefectural office of the Dodekanese.

Table 17 Land holding in Kos (1961)

Size of holdings	Number of holders
under 10 str.	2,160
11 — 20 str.	1,000
21 — 50 str.	500
51 — 100 str.	200
101 — 200 str.	100
above 201 str.	40

Source: The Five-Year Agricultural Development Program in the Dodekanese. Vol. 2, Rhodes, 1964, p. 158 (in Greek).

Table 18 Irrigated areas in Kephalo (1976-1980)

Year	In stremmas				
	1976	1977	1978	1979	1980
Total agricultural land	8,440	8,530	8,615	8,845	10,042
Total irrigated land	720	800	950	1,100	1,420
Percentage of irrigated land	8.5%	9.3%	11.0%	12.4%	14.2%

Source: Bulletin of Annual Agricultural Statistical Research in Kephalo. Year 1976-1980.

wholly caused by this new hotel (see Table 15). Thirdly, a large number of foreign tourists who greatly increase the summer-population of the village necessarily create new demands for various sorts of products and services in the village. One can safely suppose that these economic stimulations have much effect on restraining the "exodus" movement of the young villagers.

But the development of the tourism can not give the full explanation of the continuous population growth in Kephalo since the 1950s. Although the tourism has been developed on all over the island, the total population of Kos has constantly decreased since the 1950s. The total migrants from Kos during 1951-1961 amounted to 4,153 persons, that is, about 20% of the total population of Kos in 1951.⁶ In addition, even the population of Kos City where the most developed tourist industries of the island are concentrated has been decreasing since the 1960s.

Therefore, we must turn our attention to another more essential factor that has secured the gradual population growth of Kephalo. It consists in the fact that the young villagers have preferred to become seamen without leaving the native village rather than migrate to urban areas. During the last few decades, it has been possible and real alternatives for the young men of Kephalo to become sailors or to migrate to big cities or sometimes to emigrate overseas. Most of them preferred the former to the latter. As a result of this, about 600 seamen are found in Kephalo today (see Table 3). Only with a short stay in the village one can easily find out that there are without fail one or two and sometimes three sailors in almost all the families, so long as they have some grown-up boys or adult men. And a considerable large part of these young seamen marry with the girls of Kephalo and have houses in the native village. Their houses are sometimes the dowries of their wives and sometimes were built for themselves. Certainly, they pass much of the year on the sea and only rarely come home to spend some weeks in the village with their wives and children. They are, nevertheless, the "inhabitants" of Kephalo. Thus, the

⁶ Economic and Social Atlas of Greece, Athens, 1964, table 215, 216. Rural population apparent migration.

wages of the seamen make the largest cash-income source for the village. According to the data obtained from the village headman, the total wages of the seamen are nearly three times as much as the total amount of the remittance from the domestic and oversea migrants. Such being the case, a large number of mariners in Kephalo are the most important components of the village today not only from a demographic point of view but also in terms of their economic significance as the villagers' cash-earning occupation.

Then, the next problem is to seek the reason why the young men of Kephalo have chosen to remain in the native village instead of migrating to the cities in pursuit of urban lives and jobs. It is generally observed that the migrants from the Dodekanese occupy by far the smaller proportion of the urban labour-force in Athens in comparison with the migrants coming from other regions of the Aegean Islands such as Kiklades Islands, Ionian Islands, Lesbos, Evvia and Crete. According to the research carried out by the Social Science Center, out of 48,084 Athens' labourers who were born in the provinces and registered for their social security purposes in 1957-1960, the number of persons originating from the Kiklades, Ionian Islands, Lesbos, Evvia and Crete amounted to 2,512 (5.2%), 3,765 (7.8%), 2,023 (4.2%), 1,711 (3.6%), 3,579 (7.4%) respectively, while the labourers from the Dodekanese only 394 persons (0.8%) in total.⁷ This clear distinction between the Dodekanese and the other regions of the Aegean Islands probably originates from the fact that in the Dodekanese the strong connection with the Metropolitan area in economic and social spheres was only established in 1947. Dodekanesians, and the villagers of Kephalo in particular, have not yet obtained enough channels through which they can constantly get jobs and suitable social places in Athens. This circumstance appears to have forced the villagers of Kephalo to accept the alternative of becoming seafarers.

Now, some mentions should be made of agrarian condition of Kephalo, since it is one of the most fundamental economic factors that determine the size of the rural population which may be maintained by the production on the land of the village. The size of the villagers' land holding ranges from the lowest level of 5 stremmata to the highest level of 240, and the average comes to about 30 stremmata. Every holding is usually split into many different plots, widely scattered among the communal district. A plot of field varies from 1 to 50 stremmata in size. The land holdings of most farmers considerably enlarged by the agrarian reform in 1958-1960. In the mainland of Greece, the land reform legislation of 1917 had already come into effect before the Second World War by expropriating the big farmland from the landowners and redistributing it to each cultivator. The landless inhabitants became landowners on condition that they should make the complete payment of the price for the

⁷ *ibid.*, table 219. Origin of the urban labor force.

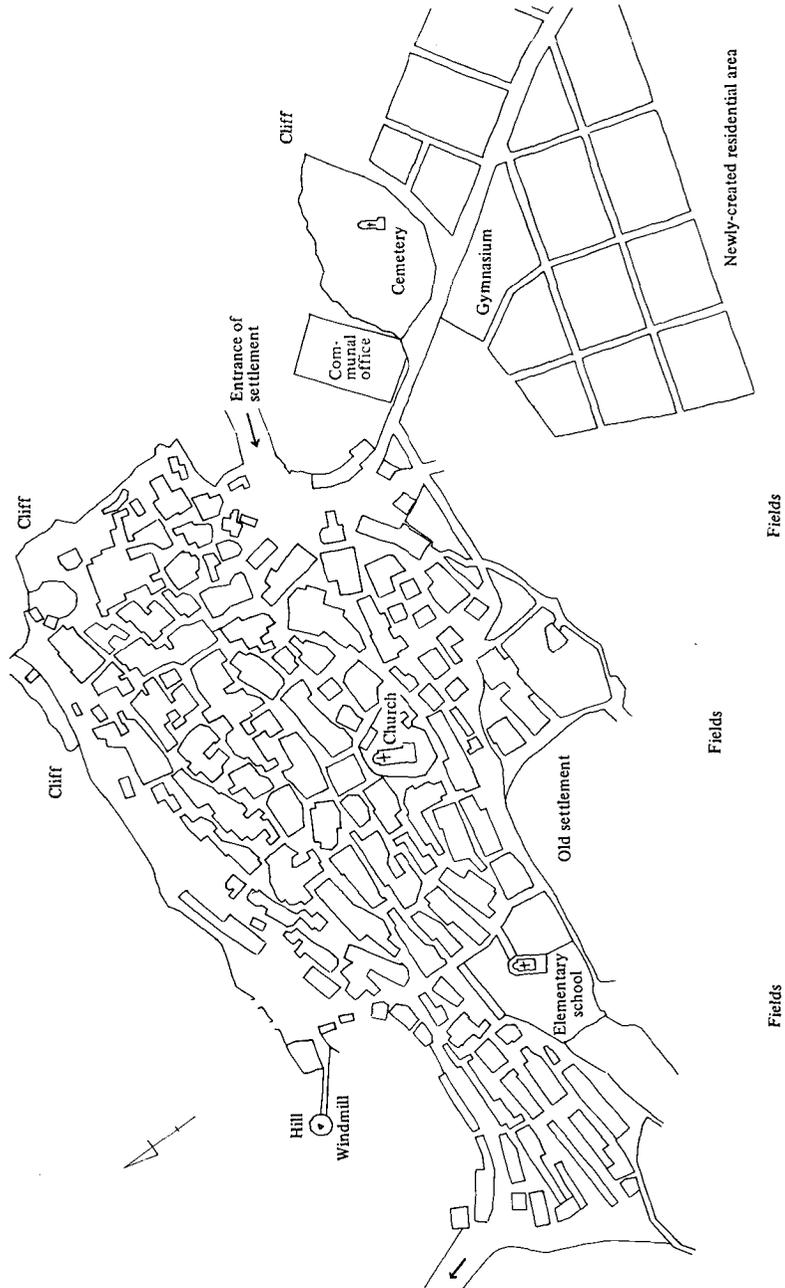
plots acquired. The gradual application of this legislation had eliminated big estates and tenancy in the greater part of Greece by 1930.⁸ In the Dodekanese this land reform was enforced after its complete annexation with Greece. In 1958-1960 about 63,000 stremmata of agricultural land were redistributed to about 5,000 landless or land-lacking peasants in the whole Dodekanese. As Table 16 shows, the land reform of the Dodekanese was carried out mainly in Kos. The total redistributed land in Kos (43,155 stremmata) occupies 68.5% of the total land-fund for distribution in the whole Dodekanese. Out of 5,000 persons who acquired some parcels of land by this agrarian reform, 2,425 persons (48.5%) were the peasants of Kos Island. Since Kos had 4,620 households in 1961, more than half the number of the households (52.5%) obtained some amount of land respectively.

In Kephalo, 5,240 stremmata of agricultural land were first distributed to 157 peasants in 1958. Additional 490 stremmata of land were distributed to 72 peasants in 1960 as well. Consequently, 157 peasants acquired 5,730 stremmata in total and 36.5 stremmata respectively on an average. According to the census of 1961, Kephalo had 480 households. So, about one third of the total households in Kephalo acquired some parcels of agricultural land thanks to this reform. Most noteworthy is the fact that the average size of the distributed land in Kephalo is by far larger than that in Kos or Dodekanese as a whole. The average size in Kephalo is about twice as large as that in the whole Kos and three times in the Dodekanese (see Table 16). This means that the peasants of Kephalo have got relatively large land holdings by the agrarian reform of 1958-1960 comparing with the inhabitants in the other regions of the Dodekanese. The important role that the land reform has played in the agriculture of Kephalo is easily understood if we recognize the fact that the total distributed land (5,730 stremmata) amounts to about 60 to 70% of all the available agricultural land of the village. Relatively large land holding and relatively stable production on it naturally have a certain effect to attract the young people to their fathers' land or at least to prevent their complete alienation from their native village. For the inability of the peasants to sufficiently meet their wants out of their own products had forced their sons to look for jobs outside the village. From that point of view, it may safely be said that, besides the other above-mentioned factors, this relatively favorable agrarian condition in Kephalo has also contributed to the gradual population growth of the village.

Finally, we should refer briefly to the water problem in Kephalo. For in the Aegean Islands the availability of water is one of the most essential factors which the economic and social development of each district in this region depends primarily on. First, irrigation is a determinant element of productivity

8 I. T. Sanders, *Rainbow in the Rock. The People of Rural Greece*. Cambridge, 1962, pp. 65-66.

Fig. 2 The settlement of Kephalo



in the Mediterranean agriculture. But water shortage causes a notably low proportion of the irrigated land in the Aegean Islands compared with the irrigated-land-proportion in the other continental regions of Greece. For example, the irrigation rate to the total agricultural land in the Aegean Islands came to only 9.1% in 1978, while in Thessaly and Macedonia it amounted to 35.3% and 29.9% each.⁹ This situation in the Aegean Islands as a whole was also the case in Kephalo. But today Kephalo has some communally-owned driven-steel-pipe wells with electric pumps which afford the full supply of good water. One of them has a potential capacity of watering 6,000 stremmata of agricultural land. It is noteworthy that the irrigated land in Kephalo has been steadily increasing in the past decade (see Table 18). If this trend continues for another decade, the irrigated land in Kephalo will reach to 30% of the total agricultural land. Secondly, not only the development of agriculture but also that of the tourist industry more or less depends upon the capacity of the water supply in the region concerned. In fact, such a big tourist hotel with sleeping accommodations for 1,100 guests would not have been realized without a plenty of water in Kephalo, especially during the long dry season of Greece. Thirdly, water is an important thing for the development of the settlement as villagers' residential area. The two driven-steel-pipe wells that are found at one kilometer away from the settlement have provided the full supply of water for the whole population of the settlement. Each household is served with plentiful water for daily-use through the piped-systems. In contrast with many deserted villages that are a familiar sight in the Aegean Islands today, Kephalo's residential area has been keeping somewhat extending for a few decades (see Figure 2). Considering the fact that in the rural history of Greece lack of water has often caused such phenomena as depopulation or complete ruin of villages, permanent or seasonal movement of settlements, we have every reason to believe that sufficient and convenient supply of water is also one of the important factors which have sustained the steady demographic and territorial development of the settlement in Kephalo.

IV Farmer, Shepherd, Fisherman

Keeping in mind the foregoing general description of Kephalo's settlement, land, crops, livestock, and recent socio-economic changes, now lastly we may observe these elements of the village-life more concretely in the personal-life background of some average villagers. For that purpose, I'll choose the most typical three rural occupations in the Aegean Islands: farming, stock-breeding, fishing. First of all, let us examine the private lives of two old farmers with whom I got acquainted through the introduction of the village headman.

⁹ Agricultural Statistics of Greece. Year 1978, p. 29, 68.

I had an interview with both of them, Georgos and Nikolas, in a village coffee house where they are both frequent customers. After that I met the shepherd Stamatis and the fisherman Georgos. I am mainly concerned here with the economic sphere of their living.

A Farmer Georgos

(1) He was born in Kephalo in 1918. Both his grandfather and father were farmers of the same village as well. He got married to a daughter of another Kephalo's farmer in 1941 and got six children. Of the three sons the eldest one lives alone in New York having a job in a restaurant, the second got married in Kephalo and supports his family by farming, the third is a single sailor. The three daughters all live in the village. Two elder daughters of them got married in the village, one with a butcher and the other with a mason. The youngest lives with her parents as yet.

(2) He owns two houses: one (three-roomed) in the settlement and another (one-roomed) on his farm in the countryside. Both he built for himself through a bank loan. His land holding amounts to 95 stremmata, the 50 str. of which was inherited from his father and the 45 str. was distributed from the government by the land reform in 1958. He paid 34,000 drachmes for the land. Besides, in 1979 he sold a parcel of land (15 str.) that had been inherited from his father to the big hotel aforementioned.

(3) His land holding is split into seven plots scattered widely here and there. The most remote one is at a distance of 5 km from his house in the settlement, but most plots are within the distance of 1 to 2 km from the village. The respective size of the seven plots and their place-names are as follows: Ag. Evangel—24 str., Elikia—6.8 str., Ellenika—1.6 str., Kellaria—10 str., Katabi—30 str., Krofelednas—15 str., Aspracharachia—8 str. His farm-house mentioned above is found on one of these plots.

(4) His domestic animals are two cows, two calves, three goats, twenty garden fowls. He has no donkey. The cows are used for ploughing. But he bought a tractor by installment plan in 1974 (450,000 drachmes). It is used both for cultivation and for transport. The calves are to be sold for cash income. The goats are kept for daily milk. They are bred every year to produce a few kids for slaughter in the spring. Of course, chickens and eggs are self-sufficient as well. He also has eighty olive trees planted on the two of his fields. They give him both olive oil and edible olive for his family-consumption. Besides, various agricultural products such as wheat, barley, tomatoes, potatoes, beans, onions and so on are completely self-sufficient.

(5) The total planted area of all the crops in his farms was 123.5 str. last year (1979). Respective planted areas of all the crops were as follows: barley—50 str., wheat—20 str., watermelons—30 str., vetches for hay—15 str., tomatoes—5 str., potatoes—2 str., beans—1 str., onions—0.5 str. His main commercial pro-

ducts are barley, watermelons, vetches for hay, tomatoes, and potatoes.

(6) A part of his farm-plots are found in the area irrigable by the communally-owned irrigation facility, a drilled well that has a water-supply-capacity of 50 cubic meter per hour. And the other plots are situated on the non-irrigable areas. He plants on the irrigated farms only tomatoes and watermelons. During the summer, he waters these crops once a week paying 40 drachmes per hour to the village community. The other crops are cultivated by dry farming. He applies chemical fertilizer to the crops on the irrigated land twice a year, in summer and winter, and to the crops on the non-irrigated land once in winter. On the irrigated land he uses 200 kg fertilizer per stremma, while only 100 kg on non-irrigated cultivation.

(7) The monthly distribution of his work activities is as follows: Jan.—Feb. ploughing by cows, Mar.—Apr. ploughing by tractor, May, harvesting barley and wheat, planting tomatoes, tobaccos, and watermelons, Jun.—Aug. watering and harvesting tomatoes and watermelons, Sept.—Oct. the only slack season for him, Nov.—Dec. harvesting olives, ploughing for barley and wheat, sowing barley and wheat. Summer is the busiest season for all the farmers of Kephalo. During this period that begins in May and lasts until August, he keeps living in his farm-house for a few months as well as the other farmers of the village.

(8) Daily farming pursuits in ordinary seasons are done by three family-workers: his wife, his youngest daughter and himself. In case of necessity, his second son who lives in Kephalo as a farmer lends a hand to his father. But during the busiest season, particularly in the harvest-time of tomatoes, tobaccos, barley and wheat, he hires a few villagers. The daily wages for a man are about 1,000 drachmes, and for a woman 600 drachmes.

(9) He derives his cash income mainly from his commercial products. He got the largest income from a watermelon crop last year. He also obtained some income from barley, tomatoes, wheat, potatoes and so on. Watermelons are in great demand by the summer tourists. In 1979 his gross income from his commercial products amounted to about 400,000 drachmes. On the other hand, the chief items of the expenditure required for his year-round pursuit of agriculture are: [1] the wages for day labourers in the harvesting season, [2] the expenditure for the chemical fertilizer (1 kg = 20 drachmes), [3] the fuel expenses for the tractor, and [4] the payment of the interest on the loans from the Agricultural Bank of Greece (9-16% per year).

B Farmer Nikolas

(1) He was born in Kephalo in 1919. His grandfather, father, father-in-law were all farmers of Kephalo. He married in 1937 and got three sons and a daughter. The eldest son, who is a cook on a merchant ship, has a wife and children in Kephalo. The second son, a bachelor, emigrated to America several

years ago and got a job in a restaurant. The third son also is a sailor and has his own family in Kephalo.

(2) He owns two houses. In the settlement he built a two-roomed house in 1957 on a piece of land that he had obtained as his wife's dowry. The other is a farm-house which he built also for himself in 1963 on a farm distributed by the agrarian reform. When his daughter married, he dowered her the house which he had acquired in the settlement as his wife's dowry in 1937.

(3) His farmland was 95 stremmata in size. It comprised 20 str. of inherited property from his father, 30 str. of his wife's dowry, and 45 str. of distributed land from the government in 1958 for which he paid 22,000 drachmes. But out of 95 str. he dowered his daughter 30 str. and gave 16 str. to his eldest son when he married in Kephalo. In consequence, now only 49 str. farmland belongs to his ownership. Nevertheless, he is tilling practically all the 95 str. fields including the ones he has given to his children, since neither the daughter nor the son uses the farms which are both found at 5 km distance from the settlement. This 95 str. farmland is split into 5 plots: Milies—40 str., he has a farm-house here. Ellinika—5 str., Ellinika—5 str., Balkania—30 str. (for his daughter), Balkania—16 str. (for his son).

(4) His livestock are: three cows for ploughing, a calf for cash income in future, two donkeys for transport, two goats for milk and their kids, a pig for pork, ten garden fowls for eggs and chickens. He has no tractor. He ploughs only by using the cows. In addition to these, he has 30 olive trees and 10 fig trees for his home use.

(5) His total area under cultivation in 1979 was 49.5 stremmata and its details are as follows: barley—1 str. for family subsistence, wheat—2.5 str. for family subsistence, onions—1 str. for family subsistence, beans—2.5 str. for family subsistence, potatoes—1 str. for market, tobacco—4 str. for market, tomatoes—5 str. for market, watermelon—10 str. for market, vetches for hay—5 str. for market, fava—5 str. for market. None of his farms are irrigable. He cultivates all crops by dry farming. Once he tried well-boring on one of his farms but in vain.

(6) He works on the farms with his wife in the ordinary farming season. During the busiest farming season from May to August, he must often employ some villagers. A daily wage for a man is about 800 drachmes and for a woman 500 drachmes. The total working days of these farm labourers of the male sex usually amount to twenty a year. The largest expenditure throughout a year is on chemical fertilizer. In case of non-irrigated farming, 100 kg fertilizer per stremma must be applied in a wet winter season. His chemical fertilizer costs 7.2 drachems per kilogram. Last year, the total expenditure on fertilizer amounted high to 36,000 drachmes. The second most expenditure is on wages for seasonal farm labourers, which costed him about 16,000 drachmes last year.

(7) The following were respective commercial crops' yields per stremma, total yields, sale prices per kilogram, and gross sales in 1979: watermelons—1,000 kg-10,000 kg-5 drach.-50,000 drach., fava—120 kg-600 kg-50 drach.-30,000 drach., tobaccos—60 kg-240 kg-100 drach.-24,000 drach., potatoes—500 kg-500 kg-20 drach.-10,000 drach., tomatoes—1,000 kg-5,000 kg-3.4 drach.-17,000 drach. Accordingly, his gross income from commercial products was about 131,000 drachmes. He sold most of his products to the merchants of Kephalo. In addition to these, he sold also two calves and got a cash-income of 50,000 drachmes last year.

C Shepherd Stamatis

(1) He was born in Kephalo in 1929. His grandfather and father were both shepherds. He has three brothers. One is a labourer in Kos city, another is a grocer in Kephalo, a third lives in Kephalo as a shepherd too. He got married to a daughter of a Kephalo's shepherd in 1955 and got two sons and a daughter. The daughter got married to a sailor and lives in Kephalo. The sons, unmarried yet, both became seamen and seldom come home to their parents though they are both "inhabitants" of Kephalo.

(2) He owns two houses. The one in the settlement (one-roomed) was built in 1958 at his own expense. The other in the countryside (one-roomed) was obtained as his wife's dowry. This house is located in a mountainous district at 4 km distance from the settlement. His mother-in-law (90 years old) still passes every night alone there. He has also 20 stremmata farmland, the half of which has been inherited from his father and the other half has been given him as his wife's dowry. His farmland is separated into three plots of farms. The respective size of these farms is 8 str., 5 str., and 7 str.

(3) The crops on his farms consist of two kinds: fodder-crops for his animals and food-crops for his home consumption. The total planted area in 1979 was 19 stremmata and its details were as follows: barley—8 str. fodder for his animals, vetches for hay—5 str. fodder for his animals, wheat—4 str. for family subsistence, watermelons—1 str. for family subsistence, onions—0.5 str. for family subsistence, beans—0.5 str. for family subsistence. Besides, he owns two pigs for family consumption, fifteen garden fowls for eggs and chickens, one donkey for riding along a mountain path to the pasture land every day, and two fig trees.

(4) He has a flock of 150 goats, but no sheep. He is not a hired shepherd to take care of combined flock of villagers' animals, but an independent shepherd who possesses his own flocks. He is a medium-sized livestock-owner in Kephalo, since the largest owns 300 head of sheep or goats and the smallest owns only 60 head. He grazes his animals mainly on the communally-owned pasture land all the year round. He uses about 500 stremmata of mountainous pasture land extending widely around his countryside-house which I mentioned

before. As a pasturing charge, he pays only 8 drachmes per head a year to the village community. He owns no private grazing land as well as the other shepherds of the village.

(5) A year-program of his work is more or less common to all the shepherds of the Aegean Islands: Dec.—Jan. breeding season. He takes care of breeding and tends newly-born kids. During this season he goes to his countryside-house every day. Feb. he slaughters newly-born kids and sells them to a meat dealer. Feb.—Jul. milking and cheese-making. This is the busiest months for shepherds. During three months from March till May both he and his wife stay at their countryside-house for cheese-making. Aug.—Nov. making fodder, watering, sowing and so on. In addition to the pastoral daily pursuit, he must work on the farms this season.

(6) He tends his flocks mostly for himself all the year round. But in the cheese-making season he cannot do anything without his wife's assistance. Furthermore, the harvesting season of barley falls on the busiest month for making cheese, i.e. May. Therefore, he cannot but employ a few villagers to harvest his barley for fodder. Since he has neither tractor nor cows, he must hire a tractor with its operator to plough his farms every year. Ploughing charges by tractors are to be paid at the rate of 300 drachmes per stremma.

(7) He derives his cash income mainly from the production of meat and cheese. During the cheese-making season, out of 150 goats 140 head are milked. He milks only twenty kg per head per year (cf. Table 12). From four kg of milk is produced one kg of soft-cheese. In consequence, the total amount of his cheese production comes to 700 kg a year. He also slaughtered eighty newly-born kids and twenty-five goats, and got approximately 1,400 kg of meat last year. He sold the meat of the kids for 200 drachmes per one kg and that of the goats 120 drachmes. Besides, he sold 100 pieces of goat-hide at 100 drachmes a piece to a merchant of Kos city. Also 50 kg of goat-hair was sold to a Cretan merchant at twelve drachmes per one kg. He sold his meat and cheese exclusively to dealers of Kephalo.

(8) The largest expenditure required for his occupational pursuit of stock-breeding is on fodder-making. In winter, it is very difficult to graze sheep and goats on communally-owned pasture land. So, every shepherd has to either raise fodder-crops for himself or buy them from farmers. He cultivates fodder-crops on his farms himself. The main items of his expense are: [1] the cost of chemical fertilizer. [2] the hire-charge of tractors for ploughing, [3] the wages of labourers for harvesting barley, and [4] the cost of seeds.

D Fisherman Georgos

(1) He was born in Kephalo in 1941. His grandfather and father were sponge-fishermen of Symi Island. But his father migrated from Symi to Kos and settled in Kephalo. After the death of father in a shipreck, he worked for

about ten years as a sailor and then became a fisherman in Kephalo in 1968. He got married to a farmer's daughter in 1965 and got three children, a daughter and two sons. They are all school children in Kephalo.

(2) He owns two houses: one in the settlement and the other in the seaside hamlet "Kamari" aforementioned. The former (four-roomed) was presented by his father-in-law at marriage in 1965 as his wife's dowry. The latter was built in 1977 at his own expense. He possesses only two stremmata of farm planted with fifty olive trees. These trees give him 65 kg olive every year. This also was his wife's dowry. Besides, he has two goats for milk, a pig for pork, twenty garden fowls for eggs and chickens.

(3) He possesses a fisherboat of 6-tons equipped with a 90-horsepower engine. Its size is 10 meters long and 3.8 meters wide. He bought it second-hand in 1968 from a fisherman of Samos Island for 400,000 drachmes. He obtained it through a loan from the Agricultural Bank of Greece. His boat is a type commonly called "trata" which is equipped with a hoisting drum to wind up the trammel net (trata). His boat, named "Evangelisa", is usually fastened at the quay of Karami, where we can always find some dozen boats of the villagers.

(4) He is exclusively engaged in coastal fishery by trata. He usually catches fish in the Bay of Kamares. Inside the bay there are some ten places which are suited for fishing with a trammel net not only because of the sandy seabed without rocks or stones but also because of the adequate depth of the water from 10 to 40 meters. At these places he sets the trammel net with a length of 250 meters to enclose his wide fishing ground fanwise. And after an hour he winds up the enclosed net with a winch and a hoisting-drum from the boat anchored on the sea. Fishing places in the neighboring waters of the village are not monopolized by Kephalo's fishermen but are legally opened to all fishermen of other villages or other islands. Conversely, Kephalo's fishermen may go to fishing places belonging to other islands. But Georgos hardly goes to other places taking the fuel cost into consideration.

(5) Fishing with a trata is prohibited for five months a year – from May until September. Before 1978 he had been engaged in sponge-fishery as a diver at Libyan sponge grounds during the five months which were a closed season for fishery. After the prohibition of Libyan offshore sponge-fishery he had nothing to do but to mend nets or repair boat. The busiest fishing season includes both October and November. Last year the total of his fishing days came to 150 days.

(6) The kinds of fishes that can be caught with a trata are limited to four: "marides" (sprats), "gopes" (bogue), "barbouni" (red mullet), and "kalamari" (squid). But the first ones (marides) occupy the overwhelming part of the haul. Last year the total amount of fish caught by Kephalo's fishermen was of about 125 tons, the 120 tons of which were marides and remain in five tons consist of

the other three sorts. Most part of his fish are sold to the villagers in Kephalo. But sometimes when he made a good catch, he used to peddle his goods in other villages such as Andimachia and Pyli by a small truck of Japanese make which he bought in 1978. Marides, gopes, barbouni, kalamari are sold for 40, 70, 400, 400 drachmes per kg respectively.

(7) A crew of his fishing boat is three including himself. The other two members of the crew are recruited from young village-fishermen who do not have their own boats as yet, but one of them is often replaced by Georgos' wife. The employed fishermen are not on the fixed payroll but on a percentage bases payroll. He takes first 40% of the total catch (of fishes) as shipowner's share, and then the rest (60%) are to be divided equally among the three members of the crew as a worker's share. Each member of the crew including himself gets 20%. Consequently, he takes 60% of the total catch of fishers and even 80% when his wife is a member of the crew.

(8) His largest expenditure for occupational pursuits for a year is on fuel. The total amount of fuel oil consumption a year roughly amounts to 5,000 liters. It costs him 55,000 drachmes a year. The second largest expenditure is on lube-oil, amounting to 15,000 drachmes per year. A trammel net costs 220,000 drachmes.