SOME GEOGRAPHICAL FACTORS IN THE PALESTINE PROBLEM

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The small country of Palestine, not much larger than Wales, holds a place in, and has exercised an influence on, world history and affairs out of all proportion to its size and has done so for perhaps a longer period than any other country. Its natural endowments are meagre, but as a home of spiritual inspiration it is unique. Its geographical position has made it inevitable that it should continue to be a land of inspiration and of problems, a land in which the ceaseless clash of ideologies complicates its culture and its economy. It is situated at the junction of three continents, at the cross-roads of East and West, where the great trade routes of the ancient world intersected. But neither the passing of the old empires whose armies, seeking to dominate those routes, fought more battles in Palestine's confined plains than those of modern powers have waged in the cockpit of Europe, nor the shifting emphasis of modern transport have diminished the significance of Palestine's position, now athwart important world air routes.

The virtual absence of harbours on Palestine's almost unbroken coast was, until recently, a factor militating against the influx of ideas from the west. Palestine embraces the southern tip of the Fertile Crescent and its cultural ties were with Syria and other lands in the Crescent, and with the desert to the south-east whence came Israel's early and powerful patriarchal ideology. The nomadic influence has never ceased, nor has the struggle between the Desert and the Sown.

To-day, Palestine is as much a land of dispute and conflict, of clash of political, religious, and economic interests, as it has been for thousands of years, and the trend of world events and developments does nothing to lessen this. Thus, the Middle East is one of the four major oil provinces of the world and the one most divided between the great powers; the position of Palestine, perhaps itself containing oil, on the fringe of the oil fields and athwart the pipe lines gives it great significance both strategically and economically, making it a focus of political and commercial interest. Recent events, including the work and report of the Anglo-American Committee of Enquiry, have caused public attention again to be focused on Palestine, and it is pertinent to consider some of the geographical factors in the problem of modern Palestine.

The country is one of variety and diversity. Physically, it consists of an upfolded central mass of limestone mountains, dropping precipitously to the east where the northern end of the great Rift Valley contains the Jordan river and the Dead Sea and continues southward towards the Gulf of Aqaba as the Wadi Araba, and flanked to the west by a coastal plain of Tertiary and Recent deposition (Fig. 1). The central hill mass is divided from the Hills of Galilee in the north by the plains of Esdraelon and Beisan, sunken blocks with sharp
faulted sides, covered with deep alluvial soils. They provide an easy route from the Jordan Valley to the Mediterranean, where the coastal plain around Acre is separated from the main maritime plain by the mass of Mount Carmel, whose projecting cape provides at Haifa the only break in the coast sufficient to allow the creation of a significant harbour. In the south of Palestine the maritime plain merges into a tract of loess-covered plain which in turn merges into the desert of the south. To both these last the name Negeb is indefinitely applied: sometimes it refers only to the loess-covered steppe lands, perhaps Palestine's most fascinating problem area, and sometimes to the whole of the desert and semi-desert of the south.

However geographers may divide and sub-divide Palestine, one fact is inescapable. The physical divisions make for disunity rather than unity. There is no natural nodal point to assist unification. The hills and the plains are in sharp contrast; the deep cleft Jordan Valley is no unifying factor either with the lands beyond or, because of the lack of opportunity for settlement except in certain parts, longitudinally. The separation of Galilee from Samaria and Judah is very striking. Down its long history Palestine has rarely been united politically. City states and local deities flourished, but unity was never achieved except by hated and conquering empires and then not for long. But the isolation and detachment of the hills of Judah encouraged the development, from a unique spiritual heritage, of a national and religious spirit strong enough to survive centuries of exile and loss of independence.

Nature has been unkind to Palestine in that it has left her poorly endowed with natural resources. The country is severely handicapped because it lacks almost any raw materials, other than agricultural, on which trade and industry might be based. The salts of the Dead Sea constitute a noteworthy exception, and the peculiar combination of excessively saline water and intense dry heat enables the Palestine Potash Company to produce from an unfailing source increasing quantities of potash, bromine, and other chemicals for export and for use in home industries. Otherwise limestone, now as in the past

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extensively used for building purposes, is Palestine's only significant mineral resource. She has however, in recent years, enjoyed the immense advantage of an increasing supply of oil brought by pipe line from Iraq. This provides not merely exports of crude oil, petroleum, and other products from the Haifa refineries, but the fuel for electricity generators and other plants and factories within Palestine.

The climate of the country is a factor closely connected with many of its problems. Its general "Mediterranean" characteristics are well known, but it cannot be too strongly stressed that the climate is transitional between the Mediterranean and desert types. While temperatures limit the growth of certain crops, rainfall and water supply are the vital factors. A new map of Mean Annual Rainfall was prepared at my request by the Palestine Meteorological Service and has now been published (Fig. 2). It certainly suggests that there is a little more rain in the higher parts of the desert and a little less in some other mountainous areas than was believed to be the case before the most recent data were available. But the fact must be noted that only 43 per cent. of Palestine receives more than 12 inches of rain and 25 per cent. receives less than 4 inches. Averages are deceptive, and when those for Palestine are analysed they reveal the serious fact that the rainfall is not merely uneven but also unreliable and often of unhelpful intensity. In the desert and semi-desert areas the rainfall is especially fickle. The crops in the loess area are notoriously liable to failure for this reason. The intensity of much of the rainfall is too often over-generous, doing great damage to soil and property not merely in the areas of ample rainfall, where it is common for several inches to fall in 24 hours (Haifa has recorded nearly 11 inches), but also in the dry areas, where in winter and in spring the fall in one day often exceeds the mean for the month. At both Beersheba (9.3 inches) and Jericho (5.9 inches) the 24-hour maxima equal or exceed the monthly mean in each month except that of maximum fall. The sudden and intense downpours in the desert, which send torrents of water raging down the wadis, sweeping away soil, crops, and livestock, have to be seen to be appreciated. In most of the areas with under 12 inches annual rain there are usually less than 20 rain-days in the year.

The Bible is full of references to man's anxiety concerning the rainfall and his troubles in times of drought, and it may be useful to reiterate the conclusion, without recapitulating the arguments, so ably reasoned by J. W. Gregory that "all through historical times the climate has been essentially the same as it is now."

The major problems of Palestine, as of many countries, are bound up with considerations of population, especially the question of what numbers the

1 'Maps relating to the Report of the Anglo-American Committee of Enquiry regarding the problems of European Jewry and Palestine,' map No. 2. (Supplement to Cmd. 6808.) London: H.M.S.O., 1946.
2 See 'Rainfall Map of Palestine, Transjordan, southern Syria, Southern Lebanon, average for the period 1859-1938,' by W. D. Ashbel; issued by the Hebrew University Press with the aid of the Jewish Agency for Palestine.
PALESTINE

MEAN ANNUAL RAINFALL

<table>
<thead>
<tr>
<th>Inches</th>
<th>m.m.</th>
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<tr>
<td>43</td>
<td>1100</td>
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<tr>
<td>35</td>
<td>900</td>
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<td>24</td>
<td>600</td>
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<td>12</td>
<td>300</td>
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<tr>
<td>4</td>
<td>100</td>
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<td>0</td>
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Based on map prepared by Palestine Meteorological Service for the Anglo-American Committee of Enquiry

Figure 2
country can maintain. The matter has been the subject of much study, wishful thinking, propaganda, and speculation, and this must inevitably be so while the problem is over-shadowed by political considerations. It is therefore worth while to review the facts of the present and recent past and then to consider some future probabilities.

During the British administration population data of increasing accuracy have become available, and the forthcoming third census is eagerly awaited. While the broad division is between Jews and Arabs, the official classification is by religious communities because of the social structure of the country. The Jews by “nationality” and religion are almost coincident, but the Arabs include other religious groups beside Moslems. Moslems are the largest community, and include some pure Arab Beduin, a fascinating people habitually antipathetic to enumeration, largely living in the desert and its fringes and estimated in 1931 to number 66,300, although there are reasons for thinking they considerably exceed this. There are also a few thousand Druses, mostly in the north of the country, who are Arabs by “nationality.” The Christian

1 Throughout this paper the author has drawn freely on the two volumes of the ‘Survey of Palestine prepared for the information of the Anglo-American Committee of Inquiry,’ 1946. Government of Palestine, 1946.

2 The Department of Statistics of the Government of Palestine has recently made a fresh enumeration of the Beduin of the Beersheba District and found 90,000, excluding 6000 in the town of Beersheba. The total Beduin population of Palestine is therefore between 120,000 and 130,000.
community, 80 per cent. Arab, is a small minority of considerable importance in certain localities. The most outstanding fact concerning the population is its phenomenal increase during the years of British rule (Fig. 3). Accurate data are not available for previous periods, but there is ample evidence that the population had remained fairly stable for a long time. Then, in two decades of British rule, it doubled.

This increase was quite unprecedented and has been at an accelerating rate. The twin causes have been Jewish immigration and the natural increase of the indigenous population. The result has been an increase of the total population from 752,000 in 1922 to 1,740,000 in 1944. The Jews have increased from 12.9 per cent. of the settled population in 1922 to 32.6 in 1944, when they totalled 554,000; 74 per cent. of their increase was due to immigration. In the same period the Moslems almost doubled, but only 4 per cent. of their increase was due to immigration. The recorded Jewish immigration shows marked fluctuations due to political events in the countries of origin. Definite waves of refugees, first from Russia and Poland and later from Germany and Austria, have swollen the irregular stream of Zionists and others who have come to Palestine as a result of mixed incentives, including idealism and economic depression.

The map of Population 1944, made by the Research staff of the Anglo-American Committee, shows the population of each village and town, distinguishing the religious groups. While it was impossible to show the nomadic population, the map emphasizes the uneven distribution and reveals the emptiness of the desert areas. The Southern Desert, the Wilderness, the lower Jordan valley, and the coastal sand dunes are areas which repel population except for a few hardy Jewish settlements of a distinctly experimental character.

But the most striking facts are the size of the largest towns and the distribution of the Jewish and Arab communities (Fig. 4). Palestine is primarily a land of villages with four large towns and about a dozen small ones. In addition to the four large towns of Tel-Aviv (167,000), Jerusalem (157,000), Haifa (129,000), and Jaffa (94,000), twenty others rank as municipalities, but only twelve of these exceed 10,000 and the largest of them, Gaza, has but 34,000 inhabitants, while a number are little more than large villages. In the country as a whole, 50 per cent. of the population lives in villages, a much smaller proportion than ten or twenty years ago, although the actual numbers have increased considerably.

A separate examination of the two principal communities reveals some interesting facts. The Jews, in spite of the increased number of agricultural settlements established in furtherance of the policy of “close settlement on the land,”² are largely an urban population. 329,000 or about 60 per cent. live in the three chief towns and only 25 per cent., slightly less than in 1931, in villages as compared with 70 per cent. of Moslems. The Jewish urbanization has accelerated rapidly, their town population increasing threefold between 1931 and 1944, although the Palestine Jews have always tended to concentrate in large towns. The percentages of the Jewish population in towns of over

¹ Supplement to Cmd. 6808, map No. 3.
² Mandate for Palestine, Article 6.
45,000 inhabitants in 1922, 1931, and 1944 respectively were 72, 69, and 64·5, the corresponding Moslem figures being 7·4, 10·0, and 11·4. The Jews, in short, are fundamentally an urban people and in Tel Aviv have set a record for urbanization and “New Town” growth. In 1910 Tel Aviv was a suburb of Jaffa with a mere 500 inhabitants, in 1922 it had 15,000, in the next nine years it trebled and, continuing at this rate, was by 1944 the largest town with 167,000 inhabitants, the Jewish metropolis, the commercial centre of the country, a coastal city but not a port.

This modern urbanization reveals tendencies analogous to those of Western European countries, tendencies which, while also perceptible in Syria and Lebanon and to a lesser extent in Egypt, are not yet common in other lands of the Middle East. Such developments are accompanied by political, social, and economic changes associated with industrialization and capitalization which represent a notable revolution in countries hitherto essentially agricultural.

The Arab pattern is an almost complete contrast. The hill areas are predominantly Arab and, while the northern coastal plain and the plain of Esdraelon, formerly malarial, are predominantly Jewish, there is a notable line of large villages in, or fringing, the maritime plain, where the increase of Arab rural population has been greatest owing to better economic and social conditions. The Arabs, especially the Moslems, are still predominantly an agricultural people, 70 per cent. dwelling in villages. There has been a slight tendency to urbanization by a movement into such towns as Haifa, Jaffa, Gaza, and Jerusalem where industrial or commercial activities have expanded; but it is remarkable that for the last twenty-two years the Moslems have represented an almost constant proportion of the urban population.

The problem of the future trends of population is naturally one which has attracted much attention, especially because of proposals to increase immigration into a land which already shows some signs of relative over-population and which is now increasing its population at a higher rate than any other in the world. Methods of forecasting which are valid elsewhere are difficult to apply to Palestine because of the very variable composition and irregular age distribution of a demographically heterogenous population.

The Jews, as a result of immigration, have a high proportion of people in the central ages (54 per cent. of immigrants in the last decade were between the ages of 15 and 34), and a scarcity of old folk is most noticeable wherever one travels in their towns and villages. Marriage is practically universal and a much greater proportion of the fertile period is spent in marriage than is customary in Europe. The birth rate, which exceeds 30 per thousand, is high by European standards, but is of course influenced by age structure (as well as by economic conditions and even propaganda) and varies greatly according to the land of origin. It is lower among those from West and Central than from Eastern Europe, and highest among Jews from Iraq and Iran—similar in fact to Arab rates. The crude death rate of 7 or 8 per thousand is the lowest recorded in the world, but this is because of the abnormal age structure; a

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1 A small lighter basin was constructed ten years ago, but it suffers from even more disadvantages than the port of Jaffa.

corrected figure would give 15 or 16, which is still very low. The main reason for this is the great reduction in child mortality, due to the introduction of improved health services and standards and the widespread supervision of children by welfare centres. As a result of these factors, the rate of natural increase of 2 per cent. per year is very high compared with European rates, most of which are below 1 per cent., but it is lower than the Moslem rate of 2·6.

For the future it is difficult to envisage any improvement in the Jewish rate of natural increase by a further substantial decline in the mortality rate, but the fertility rate is more difficult to forecast because of the lack of reliable data. It may well be that the present high rate, due to a favourable age structure, will not be maintained.

The Moslem population shows the two general characteristics of oriental people: a high proportion of children, accentuated by the high birth rate and low child mortality rate in the last decade or so, and a low proportion of old folk. As with the Jews, marriage is almost universal and at very early ages; the average age for women is under 20 and for men is 24, and as remarriage of widowed and divorced women is frequent "Palestine Moslems are to be counted as among the most marriage-loving populations in the world." It is therefore not surprising to find a birth rate of over 50, a fertility rate which has increased to over 7 children per mother, and a net reproduction rate which, doubtless improved by the general rise in Moslem standards of living, is now, at 2·4 or more, double the Jewish rate. The mortality rates (especially infant mortality rates) have, unlike those in neighbouring lands, decreased remarkably in recent years, from over 30 to 18·7 in the last fifteen years, an improvement which in Europe took more than half a century. In short, in the favourable conditions of the last two decades, the natural increase of the Moslems has been phenomenal and has resulted in a very marked increase in such areas as the coastal plain, to which there has been internal migration.

For the future, it seems that no further increase in Moslem fertility is likely or even possible, but that some reduction is more likely since the better classes in the towns have already shown signs of lower fertility. Mortality rates may decline somewhat, but spectacular improvements are improbable.

The problem of land tenure in Palestine is an extremely complicated one, with an intricate system inherited from Ottoman times and largely deriving from a feudal social structure. Practically all the agricultural land is miri land, which reverts to the state, but individuals have rights of use and occupation, and may sell, mortgage, or lease, but may not bequeath. It is common among Arabs for rent to be paid in kind, the landlord normally doing nothing in return: an unsatisfactory system which is widespread in the Middle East. In the majority of Arab villages the cultivated land is held in masha, a system of joint ownership whereby individuals have claims to an undivided share in all the land and own no specific piece. Every two to four years the plots are changed. The system is pernicious.

The hereditary system of division often results in one man's share being very small. A holding usually consists of a number of fragments of land, dis-

persed in various parts of the village in order to share lands of varying quality (Fig. 5). The cultivator thus cannot enjoy the full benefits of consolidation, mechanization, irrigation, and improvement; nor is he encouraged to plant fruit trees or even to manure the land. The average number of fragments per holding in a recent sample of five villages was found to be 9, but varied with the size of the holding; holdings of 5–10 acres had about 12 fragments, those of less than 2½ acres averaged 5 fragments. Joint ownership of parcels is not uncommon and aggravates the problem. In the sample survey there was an average of three co-owners per parcel. Hence the truth of at least half the saying, "Rights in land and wrongs to women are the worst of village evils."

Some of the evils of the system can be solved by land settlement. The Turks had a system of land registration which was incomplete, chaotic, and
obsolete; the British introduced a thorough system of Land Settlement linked to a cadastral survey involving registration of title to land on the Torrens system, which enables all parcels of land to be identified on the ground and in the plans and registers. It has proved a slow and costly process, but of great benefit to the country as a whole, for by securing a clear title to land and encouraging consequent development it removes one of the two greatest obstacles to permanent improvement, the other being land tenure. It has also helped to settle the vexed question of which tracts of land are State Domain, about 600 square miles in all. So far settlement has been completed in the fertile plains and is now in progress in some hill areas.

Settlement has undoubtedly facilitated the purchase of land by the Jews, who now own about 370,000 acres (Fig. 7) but have only begun to use less than half. The total area owned is a small proportion of the country, but comparison of Figs. 7 and 10 shows that it is almost all land of the highest quality. More than half the Jewish land has been acquired by the Jewish National Fund at an average cost, including drainage and irrigation, of about £32 per acre. It is inalienable, let only to Jews, no Arabs may be employed on it, and the rentals charged are uneconomically low (none for the first 5 years, 1 per cent. of the assessed economic value for the next 10 years, and 2 per cent. after 15 years).

The steady increase of land purchase by Jews, together with the rapid natural growth of the indigenous population, was tending to severe congestion and depressed standards of living and to a problem of landless Arabs in certain areas. An attempt was therefore made in 1940 to protect Arabs from the effects of further transfers in certain areas by the Land Transfers Regulations which prohibited the sale of land to Jews in one zone, allowed it only conditionally in another, and allowed unrestricted transfer in a third. The Regulations have been the subject of much controversy, and the Anglo-American Committee recommended their withdrawal because they were opposed to any discriminatory restrictions, including those against the employment of Arabs on Jewish lands.

Agriculture and related problems of land have received attention from so many experts and are so complex that it would be out of place to attempt to mention more than a few salient points concerning an aspect of Palestine which has undergone great changes as a result of the impact of western ideas on eastern conditions.

There are now three distinct main types of agriculture: the indigenous farming, modern intensive farming, and citriculture. The first is largely a self-sufficient peasant agriculture, based on a two-year rotation of winter crops of wheat and barley and summer crops of millet or sesame, sown after repeated ploughing of winter fallow. The system is dictated by the rainfall regime and the crops depend on the rain, the corn crops especially requiring the "former" rains for germination and the "latter" rains to swell the grain at the milky stage of growth. In the semi-desert of the south no summer crop

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CULTIVATION

After J. Weitz and Z. Lifshitz
compiled from Survey of Palestine
1/10000 Fiscal Survey 1933-34

Over 20% cultivated
Less than 20%
Uncultivated

Miles

Figure 6
is possible, and barley or wheat, alternating with fallow, is grown by a nomadic or semi-nomadic people who harvest the crop in the spring and then take their animals to graze on lands elsewhere. This indigenous extensive system is well adapted to the support of a relatively stable population and is little affected by the trend of major economic fluctuations. Livestock provide milk and meat; eggs, honey, and vegetables are produced, and olive oil furnishes a valuable food and cash crop which can withstand long storage. The general methods of agriculture change slowly. The traditional wooden plough, drawn by ox, donkey, or camel, is ideal for ploughing narrow terraces and stony hillsides, and its shallow cultivation minimizes the loss of moisture by evaporation.

Table I.—Area and value of chief crops, 1944–45 (in thousands)

<table>
<thead>
<tr>
<th></th>
<th>Arab</th>
<th>Jewish</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Acres</td>
<td>£</td>
<td>Acres</td>
</tr>
<tr>
<td>Grain</td>
<td>1038</td>
<td>4403</td>
<td>54</td>
</tr>
<tr>
<td>Vegetables</td>
<td>60</td>
<td>5113</td>
<td>10</td>
</tr>
<tr>
<td>Fodder</td>
<td>6</td>
<td>157</td>
<td>30</td>
</tr>
<tr>
<td>Fruits (excluding citrus)</td>
<td>89</td>
<td>3139</td>
<td>9</td>
</tr>
<tr>
<td>Olives</td>
<td>148</td>
<td>3320</td>
<td>2</td>
</tr>
<tr>
<td>Melons</td>
<td>30</td>
<td>970</td>
<td>1.5</td>
</tr>
<tr>
<td>Citrus (1939)</td>
<td>37</td>
<td>1600</td>
<td>38</td>
</tr>
</tbody>
</table>

But the system has little flexibility, and the evils of land tenure and fragmentation are acute. In the Hills there is virtually no prospect of improvement by irrigation, and centuries of overstocking, uncontrolled grazing and overgrazing, especially by destructive goats, have dangerously intensified soil erosion. There is a crying need for afforestation of the steeper hillsides which would, as small government experiments have shown, quickly reduce run-off, increase percolation, and prevent springs from drying up, and at the same time would re-create soil and provide both firewood and areas for regulated grazing. But the pressure of population on land is so great that the cultivator is naturally opposed to the withdrawal of even the poorest land from cultivation or grazing; and so the problem of erosion grows. A recent study in the Nablus–Tulkarm valley showed that 62 per cent. of the steep slopes (4\(^\circ\)\(\circ\)-14\(^\circ\)\(\circ\)) and 80 per cent. of the precipitous slopes (over 14\(^\circ\)\(\circ\)) were under crops requiring ploughing, and only 14 and 8 per cent. respectively were sufficiently terraced to prevent soil wash. Stones are abundant but the capital and incentive to build them into terraces is lacking and, while many fine terraces are to be seen, their absence or neglect is very widespread.

There is an urgent need for the control of grazing and for the improvement of herbage, especially by the introduction of drought-resisting plants which would enable stock to be kept without injury to the land. Hill agriculture especially requires diversification by increased culture of fruits, such as olives, figs, grapes, apricots, and almonds. The olive is already the principal

2 F. A. Stockdale, op. cit., p. 48.
LAND IN JEWISH POSSESSION 1944
Jewish National Fund, Company & Private ownership
Concessions

ORANGES and other Citrus Crops 1943
One dot represents 100 dunums (23 acres)

OLIVE OIL PRODUCTION 1942-43
100-160 tons •
50-100 •
25-50 •
5-25 •

Figure 7
Figure 8
Figure 9
fruit tree of Palestine and is almost entirely cultivated by Arabs (Fig. 9). The
vine is a crop which is increasing in extent and profitability, and the fig, also
largely an Arab crop, flourishing in arid and rocky situations, is being increas-
ingly planted. Almonds, walnuts, apricots, and peaches are as yet lesser crops
with various merits and problems.

The second main type of farming is an intensive system based on irrigation
and the need to supply the growing urban population. Introduced by the
Jews, it has been successfully followed by Arabs in suitable areas. It includes
dairying based on irrigated fodder crops (and still comparing very unfavour-
ably with overseas production), poultry, fruit, and vegetables, with some
 cereals. It is a highly capitalized and mechanized agriculture, largely based
on the special Jewish settlement on the land. It has raised the productivity of
the land but has made it less self-sufficient, and a very high proportion of the
foodstuffs of Palestine continues to be imported. The system is an interesting
piece of planning, aimed at a marriage of agriculture and industry, with the
standards of living of the agriculturists not dictated by the economics of farm-
ing but fixed by the community and the system evolved to sustain it.1 The
leading economists of the Jewish Agency have stated that “It is no exaggera-
tion to say that the actual process of colonization was financed mainly through
the Jewish public funds without the expectation of a reasonable return.” 2

The third type, citriculture, except for some eighteenth-century plantations,
is essentially a modern achievement of a highly mechanized and capitalized
agriculture employing hired labour. It is largely concentrated on the light
soils of the central coastal plain, and it increased from less than 8000 acres in
1923 to 76,000 in 1939; this is probably the optimum area. The majority of
the groves are of the Shamouti or Jaffa orange, but there is a small acreage of
Valencia oranges as well as some grapefruit on heavier soils and some lemons.
The enterprises are mostly small private farming units of under 10 acres using
cooperative marketing. The industry is almost evenly divided between Jews
and Arabs who combine on the Citrus Marketing Board to attempt to meet
the many problems arising from selling a crop, of which the bulk is a thick-
skinned fruit which packs very uneconomically, relying almost entirely on
overseas markets (more than 70 per cent. comes to Britain) and with a shorter
shipping season than that of any other citrus exporter. It is considered by
many, including Horowitz and Hinden,3 that the industry has suffered from
over-expansion because of the “pressure of investment-seeking capital.”

In a country with such contrasts, where there is acute land congestion and
at the same time certain limited prospects of land improvement, it is not sur-
prising that much attention has been given to the question of the “lot viable”
or subsistence area. The Royal Commission discussed the problem of sub-
sistence areas very fully and there is little to add to its masterly review,4 which
pointed out that the hill lands especially were already congested and that
there was then no satisfactory basis for advance estimates of either the total
cultivable area or the amount required by each cultivator. The Rural Property

1 B. A. Keen, *op. cit.*, p. 25.
Tax records show the area cultivated and particulars of its quality for all the lands north of Beersheba. Detailed plans show the various types of land, the extent of its cultivation and, for the sixteen tax categories which are related to approximate yields, the division into blocks of similar productivity value. A crude index is therefore available showing, for example, that forty times as much of the poorest cultivated land is required for a "lot viable" as of land under citrus or bananas.

As a fresh contribution to the wider understanding of the problem, the research staff of the Anglo-American Committee compiled a Tentative Land Classification Map of Palestine, using all available data, such as the village statistics concerning crops and categories, various published and unpublished maps and plans, oral and documentary testimony of various government departments and officials and other local experts, as well as extensive first-hand studies on the ground and from the air. It was found necessary to distinguish ten classes of land: three of Good, three of Medium, and four of Poor Quality (Fig. 10). Table II gives the type and dominant use of land in these classes. The map published in the supplement to the Committee's report shows also the land now partly irrigated and that not irrigated but well situated for water supplies (Fig. 12).

The Palestinian unit of land is the dunum, or 1000 square metres (about 1.4 acre). Subject to certain limitations, the tax categories can be used to express the productivity of any dunum of land in terms of a "standard dunum," taken as category 12, by dividing the tax rate of the one by the other; thus comparisons between dissimilar land may be made. After the compilation of the Committee's map, the Department of Statistics of the Government of Palestine investigated the various tracts comprising each class, and, ignoring land under citrus and bananas, expressed the results in terms of the standard dunum and then expressed the relative productivity of the classes, taking Class 4—the typical hill lands—as a standard of 1. The results are shown in Table III.

Everyone who has studied the problem agrees that in irrigation lie the chief hopes of considerable agricultural improvement, for only a reliable supply of water available all the year round can enable more than a limited range of seasonal crops to be produced. The Royal Commission ably summarized the matter by saying: "It is on the extension of irrigation, combined with the regularized control of the water resources of the country by Government, that reliance must mainly be placed for any marked increase in the productivity of the land." 2

As yet, unfortunately, there is no legislation in Palestine to make the principles of water ownership conform to good irrigation procedure. Existing water rights are a very complex inheritance from Ottoman law, which, while regarding the State as owning all surface water, allowed the right to use water to land which had immemorially received it. Recently there has been some tendency by interested parties to dispute the public ownership of springs and rivers and to treat water rights as if they were susceptible of absolute ownership. Partly in consequence of this, the Government has attempted to

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1 Supplement to Cmd. 6808, map No. 5.
Table II.—Land classification

A. GOOD QUALITY LAND

1. HIGH CLASS LAND, level or gently undulating with fertile soils and an adequate water supply (Plate 2).
2. GOOD LAND, with loamy soils, similar to (1), but with lower rainfall (Plate 4).
3. GOOD LAND, with deep alluvial soils, suitable for a wide range of ground crops and, where irrigation is available, for intensive farming (Plate 7).

B. MEDIUM QUALITY LAND

4. UPLANDS OF LIMESTONE, with steep and terraced slopes, much shallow soil and rock outcrop, with tracts of deeper soils in valleys (Plate 6).
5. UPLANDS, similar to (4) but with more bare rock, steeper slopes and less cultivable land.
6. SEMI-DESERT LOWLAND, with good loess soils, but cultivation limited by low and very variable rainfall.

C. POOR QUALITY LAND

7. LOWLANDS, with limited seasonal crops and grazing; some broken land and some highly saline soil and extensive stretches of cultivable land if irrigated (Plate 5).
8. DRY ERODED HILLS
   (a) Northern Belt, with sufficient moisture for patches of cultivation where sufficient soil.
   (b) Wilderness, with very arid conditions (Plate 1).
9. SOUTHERN DESERT OR NEGB, deeply eroded uplands and southern rift valley (Plate 3).

10. COASTAL SAND DUNES.

Table III

<table>
<thead>
<tr>
<th>Class of land</th>
<th>Relative productivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>3.2</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>0.5</td>
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<tr>
<td>6</td>
<td>0.5</td>
</tr>
<tr>
<td>7</td>
<td>0.3</td>
</tr>
<tr>
<td>8</td>
<td>0.005</td>
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</tbody>
</table>
PALESTINE
LAND CLASSIFICATION

A. Good Quality Land
   1.
   2.
   3.

B. Medium Quality Land
   4.
   5.
   6.

C. Poor Quality Land
   7.
   8a.
   8b.

9. Desert
10. Coastal sand dunes

Figure 10
introduce legislation to secure the best development of the water resources by controlling drainage and irrigation, deciding water rights, controlling surface water, and studying and controlling the underground water table.

The surface water is now deemed to be vested in the Government, but so far the draft law for its control has not been enacted, and owing to unfortunate Jewish opposition the proposals for the study and control of underground resources have not proceeded very far. The vital information concerning the fluctuation of levels in wells, seriously needed in order to decide the best method of control of water exploitation, is therefore not available.

That investigation of the behaviour of the underground water is essential as a preliminary step to control is shown by what is already known of the fall in the level of the water table in the last decade. Near Haifa it has fallen 13 feet and is now below sea-level, with a dangerous threat of penetration by salt water. In parts of Tel Aviv where water is supplied from shallow wells, sea water is already in some over-pumped wells, while a few miles inland in the Lydda—Rehovot area levels in wells have dropped 12 feet. Elsewhere there is doubtless room for a considerable increase in pumping, but exploitation must be controlled.

Data are being collected by the Government on various aspects of water supply, such as run-off and the possibilities of dams. It is surveying wells and boreholes, carrying out exploratory drilling, and is studying the "duty" of water (the amount of water required for various crops) and the problems of salinity. Such investigations are essential before major schemes are attempted, especially in a country where natural conditions often handicap rather than help the water engineer.

As shown in Fig. 1, the average annual rainfall of the country (ignoring falls of less than 10 inches) is about 7000–8000 million cubic metres, but rather more water enters the country—about 10,000 million cubic metres—because of the contribution from the Jordan springs in Syria. The central mountain range divides the country unevenly, and of the total rainfall about two-thirds falls towards the Mediterranean and the remainder towards the Jordan and Dead Sea. About two-thirds of the precipitation is evaporated from the soil or transpired by unirrigated vegetation, but the proportion of actual run-off is phenomenally low, being estimated at 300 million cubic metres to the west and 180 million to the east. This does not mean that the wadis do not carry down great rushes of water, but their flow is of very short duration. Much more penetrates into the rocky hills—about 1400 million cubic metres, of which about 800 drain westward—while another 400 million cubic metres penetrate the maritime plain. Of the water falling in the hills, 345 million cubic metres on the west and 300 on the east are estimated to feed springs and rivers, of which about 15 on the west and 85 on the east are used for irrigation while another 15 are pumped near the foothills on the east for the same purpose. The remainder of the water flowing towards the Mediterranean finds its way through blocks of sunken mountain strata, below the important impermeable layer of Saqia and other beds which retains the water in the coastal plain substrata and isolates it from the mountain underground water at a lower level. While a proportion of the latter—perhaps a fifth—is too saline for irrigation, it should be possible to exploit most of it by semi-artesian wells.
Hydrological Cycle of Palestine

Estimates in millions of cubic metres per annum

Based on data supplied by the Water Commissioner, Govt. of Palestine
near the foothills, where the water in such wells rises to within 65–130 feet of the ground. In the maritime plain, about 400 million cubic metres replenish the underground water table in porous sand and sandstone rocks. About 250 million cubic metres of this is now pumped for irrigation on the plains, of which a third repercolates and, with a similar proportion of the mountain water used for irrigation, flows towards the Mediterranean. While the mountain water could be available for irrigation up to its full annual capacity, sufficient must be left of the 250 million cubic metres flowing slowly through the younger rocks below the plain to enter the Mediterranean to prevent the trend becoming reversed and the salt water invading the wells, a disaster which cannot be remedied once it has occurred.

Consideration of these facts makes it clear why the Royal Commission asserted that "Irrigation from wells is, and is likely always to remain, the chief source of irrigation in Palestine." 1 The use of reservoirs for irrigation raises great difficulties. Owing to the very porous nature of the limestone rocks which compose most of the hill areas, the construction of dams is likely to be a very difficult and expensive means of utilizing the very irregular flow of flood water. An experimental dam and reservoir in the Beersheba area showed that 93 per cent. of the rain of the catchment area was absorbed into the soil, 7 per cent. reached the reservoir, but only one-half per cent. of the total was retained. Waterproofing of reservoirs would be a costly and expensive process, and the very irregular flow of the wadis would necessitate extravagantly large dams to hold a reasonable proportion of the water.

The problem of the use of saline water is a very serious one, as Reifenberg 2 and others have pointed out, but experiments seem to show the possibility of getting high yields of crops with saline water if certain chemical fertilizers are employed. The problem of saline soils such as those of the lower Jordan is a different one.

The general conclusion to which one is forced is that, in spite of the claims of propagandists, Palestine is very badly placed for irrigation. She contrasts very unfavourably with the major irrigation countries which, having large and assured supplies from rivers, have merely to organize the distribution of water. Palestine has but one small river (if we overlook the few miles of the Auja), and the Jordan is not merely very badly placed for irrigation but its flow is only 1 per cent. of that of the Nile and 3 per cent. of that of the Tigris or Tennessee. Whereas Egypt has 5000 cubic metres of Nile water per inhabitant and Iraq twice as much from its rivers, Palestine has about 1000 cubic metres from all its streams, springs, and water torrents, many of which are quite unusable.

There are about 112,500 acres now irrigated and about three times that area which could reasonably be irrigated out of a total of perhaps 820,000 acres of cultivated land in the plains. The chief irrigated area is the coastal plain, where wells 30–70 feet deep in the sandstone are used to irrigate about 82,000 acres. The inland plains of Esdraelon and Jezreel and a few smaller plains have smaller supplies, including both springs and boreholes. The Huleh basin is extensively irrigated with primitive channels and a big scheme has been prepared for its improvement. In the Jordan valley, south of

2 Reifenberg, op. cit.
1. The Wilderness: softly dissected limestone country bordering the Rift Valley, too dry for settlement or cultivation

Phot. Jewish Agency
2. **Citrus plantations on the coastal plain near Jaffa**

3. **Southern desert or Negeb**
Tiberias, water is supplied by pumping from the river and from boreholes, and some from springs farther south in the Wadi Far'ia; at Auja and Jericho perennial springs permit such crops as bananas to be grown in tropical conditions. The hills offer very few opportunities for irrigation, except from a few small springs which supply much less than 1 per cent. of the tilled land. The area of deep loess soil in the Beersheba district has practically no irrigation water, though prospects would be excellent if water were available; the tragedy is that it is not. Boreholes have revealed no water that is not saline.

The prospect of making the desert bloom has long captivated both dreamers and engineers, and there have been various projects for irrigating large tracts of Palestine, especially the Jordan Valley, by impounding and canalizing the water in the upper reaches of the valley. Several of them have had associated projects for utilizing the difference in level between the Rift Valley and the Mediterranean for generating hydro-electric power, by conveying Mediterranean water by canal or tunnel and so earning revenue to pay for the project. The authors of some of the schemes claim that they may thus fulfil the prophecies of Ezekiel. Various schemes may be practicable as engineering projects, but this does not mean that they are necessarily economic propositions when the probable cost of the work and of eliminating existing concessions is considered.

Recently Lowdermilk, in his book 'Land of promise,' proposed a grandiose scheme for a Jordan Valley Authority. This combines an irrigation and power project to divert the waters of the Jordan and its tributaries to irrigate 158,000 acres in the valley and the plains of Esdraelon, Beisan, and other areas, and to carry Mediterranean water by canal into the Jordan Valley for the dual purpose of compensating the Dead Sea for its loss of sweet water and generating hydro-electricity by means of the 1200-foot drop into the Rift Valley. The scheme provides for various other ambitious projects which are not given in detail, including flood control and the reclamation of the Negeb by means of cheap power and by irrigation from artesian supplies and stored rain water. Lowdermilk suggests that his scheme is intended primarily to facilitate the settlement of millions of Jews in Palestine, and if Arabs do not like it 'they could easily settle in the great alluvial plain of the Tigris and Euphrates Valley.'

The following year, 1945, a bold scheme which was largely an elaboration of the Lowdermilk plan was put forward by Messrs. Hays and Savage, American consulting engineers (Fig. 12). This consists of ten independent stages, beginning with damming the Hasbani river in the Lebanon to generate electricity to assist in developing the underground water of Palestine's coastal plain, and going on to carry water from the upper Jordan tributaries by a tortuous high-level canal to irrigate lands in the Huleh area, Esdraelon, and lower Galilee. Half the flow of the Yarmuk river would be diverted into the Sea of Galilee to prevent it from drying up and the other half used to irrigate

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HAYS SCHEME
GENERAL PLAN
Main irrigation canals
Other
Dams and reservoirs
Power canal and plants

HAYS SCHEME
Areas to be irrigated
Stages 1-8

EXISTING IRRIGATION
Areas now irrigated
Areas well provided with
water for irrigation

Figure 12
the land south of the Sea. The existing electric power plants of the Palestine Electricity Concession, which now use the Jordan water a little below the Yarmuk confluence, would have to be replaced, and for this and larger purposes a huge power canal would convey Mediterranean water from Haifa to the Jordan Valley, where electricity would be generated at two power stations and the water used to compensate the Dead Sea for the diverted Jordan water. The winter flow of the upper Jordan would be stored in a large reservoir in the great basin of the Sahl el Battuf in the hills of Galilee and conveyed by another tortuous canal to irrigate the plain of Jezreel and the central part of the coastal plain. The later stages would extend the irrigation southwards in the coastal plain, drain and irrigate the Huleh swamps, irrigate the lower Jordan from the dam on the central part of the river near Beisan, and store in dams the storm water of the wadis on the western watershed to swell the supply in the long canal from the Lebanon to the Negeb to water the Gaza area. The last two stages envisage carrying water from the Litani, in the Lebanon, as far as the Egyptian border by high-level canal.

The scheme, conservatively estimated to cost £50,000,000, is far from being the "blue print" which it has been claimed. Its imaginative authors propose to irrigate 625,000 acres and to generate 660 million kw. of electricity as compared with the present 270 million. They presume that the many obstacles and difficulties will not prove serious. The cost of irrigation would average at least £80 per acre, about forty times the cost of the Punjab and Assuan schemes and six times the Godavari scheme.

The problems involved are not to be lightly disregarded. The scheme assumes the satisfactory cooperation of neighbouring countries, whose water supplies are to be used, and who have been provocatively described "as a seat of watersheds rather than as a seat of political entities." It assumes that arrangements can be made with existing concessions and other interests. Existing water rights cannot be roughly set aside as this would alienate Arabs who in any case might distrust a scheme directed primarily towards benefitting Jews. The scheme would require freedom from political as well as tectonic disturbances if its hundreds of miles of easily fractured canals were to function. In any case, in crossing the natural drainage of the country, elaborate engineering would be needed to carry the canals over wadis and protect them against damage by flood water.

At least as serious are many other questions, such as whether there is sufficient water available, for the scheme envisages the diversion and storage of 2,200,000 million cubic metres of water, more than the total normal discharge of all the streams and rivers of Palestine. Sufficient storm water could hardly be stored to make up the difference. Storm water must be stored in winter for use in summer, and even if expensive waterproofing of the porous rocks were feasible, evaporation in storage and transit would be considerable. The irregularity of the rainfall would be a further complication in a country whose rainfall in a dry year may be 60 per cent. of that in an average year; and storage from year to year is even more expensive than from season to season.

In general it seems that the project, which has a strong political flavour, is over ambitious in proposing to use more water than is available. In order

1 *Palestine Post*, March 1946.
to attempt a maximum extension of irrigation it introduces a series of expensive and difficult features. If somewhat less was attempted it could be done much more cheaply and simply, and the Government has a number of suitable projects in preparation or under consideration. It must be realized however that, while irrigation is the chief of a variety of ways in which the agricultural productivity of the country might be increased, the prospects are limited, and when the full facts of the present population position are taken into account it seems unlikely that the aggregate of any further improvements could more than meet the needs of the existing population and their children. In considering the much discussed "economic absorptive capacity" of the country it is difficult to avoid the conclusion that agriculturally the country is already saturated.  

In spite of her unfavourable natural endowment, Palestine in the last quarter of a century has become increasingly industrial, so that even before the war industry was the dominant contributor to the National Income. This accomplishment has not been the result of the association of favourable factors which usually promote industrialization, for, apart from her position, Palestine has no natural geographical advantages and few home-produced raw materials, and the Mandate has made tariff protection impossible.

Of several factors favourable to industry, the first was the growth of the population, resulting in a demand for extensive constructional work and the production of consumers goods. The rapid growth of an increasingly prosperous population made it possible for the products of industry to be absorbed. Until the war, 75 per cent. of industry was concentrated on consumer goods and over 90 per cent. of production was for the home market. Indeed, building constituted one-third of industry and at times of peak immigration employed as many as 43 per cent. of all Jewish workers (although it did not, and has not, reduced the severe overcrowding and high rents of houses).

The second important factor was the great influx of skilled labour, enterprise, initiative, resource, and capital which has characterized Jewish immigration. Between the wars a trained and experienced industrial and commercial community was transplanted from Europe, often bringing with it modern industrial machinery, especially from Germany whose government discouraged the transfer of cash.

The introduction of industrial equipment in the years of world price breakdown in the early 1930's enabled new industries to be established at charges which permitted competition with older countries. The influx of new capital has been an enormous influence. Between 1922 and 1929 the Jews invested £80,000,000 in land, buildings, industry, and transport. The flow of funds from world Jewry to assist Jewish development in Palestine, averaging about £10,000,000 per year, has for some years offset the adverse balance of visible trade. Capital assets per head in Palestine have increased by over 230 per cent. in spite of the growth of population.

1 Political economists might care to assess the consequences of uneconomic absorption of an increased population.
3 Horowitz and Hinden, op. cit., p. 92.
4. Southern coastal plain near Madjal with encroaching sand-dunes

5. The lower Jordan valley. Patches of intensive cultivation occur only where springs provide irrigation water
6. Terraced slopes and bare limestone outcrops in the hills of Judah

7. Typical Jewish settlement in the Valley of Jezreel growing citrus and other irrigated crops
Thirdly, increasing power became available, first from hydro-electricity and later, and much more important, from oil. Crude oil was available in increasing quantity after 1935 and in the last few years refined oil has been produced. Fourthly, there has been a specialization on certain types of industry, such as those using materials of high value and small bulk and weight, which is important in both importing raw materials and exporting finished products. Polished diamonds, now the chief export, are the best example, and furs, false teeth, pharmaceutics, and fashion goods are others. Full use has also been made of local raw materials, such as textiles, olive oil for soap, and wines.

Finally, the war brought opportunities for a great expansion in many types of industry to satisfy the urgent demands of great armies perilously removed from their main bases of supply. Industry nearly trebled between 1939 and 1942 (Table IV). Textiles, metals, and chemicals especially showed great increases.

Table IV.—Numbers employed in chief groups of industries in 1939 and 1942

<table>
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<tr>
<th></th>
<th>Arabs</th>
<th>Jews</th>
<th>Total</th>
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<tbody>
<tr>
<td></td>
<td>1939</td>
<td>1942</td>
<td>1939</td>
</tr>
<tr>
<td>Food and drink</td>
<td>1017</td>
<td>1841</td>
<td>3251</td>
</tr>
<tr>
<td>Tobacco</td>
<td>614</td>
<td>842</td>
<td>383</td>
</tr>
<tr>
<td>Edible oils</td>
<td>98</td>
<td>170</td>
<td>463</td>
</tr>
<tr>
<td>Chemicals (including soap)</td>
<td>245</td>
<td>191</td>
<td>720</td>
</tr>
<tr>
<td>Wood and paper</td>
<td>330</td>
<td>879</td>
<td>1560</td>
</tr>
<tr>
<td>Leather</td>
<td>66</td>
<td>213</td>
<td>94</td>
</tr>
<tr>
<td>Textiles and clothing</td>
<td>835</td>
<td>3096</td>
<td>3038</td>
</tr>
<tr>
<td>Stone, cement, etc.</td>
<td>152</td>
<td>269</td>
<td>1072</td>
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<tr>
<td>Metals</td>
<td>386</td>
<td>1137</td>
<td>2474</td>
</tr>
<tr>
<td>Diamonds</td>
<td>—</td>
<td>—</td>
<td>197</td>
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</table>

An important question, naturally being asked, is to what extent Palestine’s industries will survive when world trade has recovered and full competition has been re-established. There is no doubt that some industries are particularly vulnerable to overseas competition and may well decline. Much of the textile industry, especially the weaving branch, is one, based as it is on imported raw materials or yarns. Others are the manufacture of boots and shoes, of which the Arab side expanded eightfold, engineering and machine construction, which is entirely Jewish, and such industries as wire and electrical fittings and apparatus.

There are some less extensive industries which are partially protected by local habits of taste on the part of consumers, such as cigarettes and some shoes; while others chiefly using local raw materials, such as citrus jams and tanning, are only slightly vulnerable to foreign competition. The milling of local grain (which is largely in Arab hands, the Jews preferring the flour from softer imported wheat) is another of these. At least half of Palestine’s

1 Adapted from Censuses of Industry, 1940 and 1943. Government of Palestine, Department of Statistics, Special Bulletin No. 20.
industries are hardly affected by outside competition. These include prepared foodstuffs, mechanical workshops, tin products for citrus canning, printing, the various activities of the Potash concession, cement, and other industries associated with building.

Jews predominate in industry and are predominantly an industrial community (Fig. 13). They comprise 75–80 per cent. of all persons in industry, and twice as many Jews are engaged in manufacture as in agriculture. The Jewish industries show a higher output per head than comparable Arab enterprises, and have superior capital and equipment—about 70 per cent. more capital per head. Jewish wages however are on average more than twice as high as Arab wages, and such comparable statistics as are available indicate that, in spite of their skill and capital, the productivity of labour power per unit of wages and salaries in Jewish industry is in general lower than in the corresponding Arab industry.

There is an extraordinary dichotomy in industrial production, as also in agriculture (except citrusculture), the communities being clearly divided. The tendency for the undertakings of the two communities not to compete for the home market is a phenomenon which, paralleled in social spheres, is a factor of some political significance.

It is to foreign markets that Palestine's industry is now looking, but the future of much of her foreign trade is imponderable, except for such staples as
citrus, which formerly accounted for no less than 77 per cent. of her exports. The war created opportunities of increasing trade with other Middle East lands, although until the war the proportion of her trade with neighbouring lands was a diminishing one. The Middle East is Palestine’s obvious market for manufactures, especially as consumer demands in these lands are likely to expand. With such expansion, there may be room for Palestine’s products as well as those of the older industrial countries, but Palestine will need to temper zeal and energy with economic caution, for, to quote the report of the Anglo-American Committee, “It is conceivable that the passionate expansion of an economic structure, upon a dubious basis of natural resources, might lead to over-development on such a scale as to render it top-heavy to the point of collapse. The argument thus returns to the need for systematic improvement of the country’s basic resources, for which . . . orderly progress in an atmosphere of peaceful collaboration is a sine qua non.”

DISCUSSION

Before the paper the President (The Rt. Hon. Lord Rennell of Rodd) said:
The paper this afternoon is to be read by Dr. Willatts, who is too well known to Fellows of the Society to require any introduction. He accompanied the recent Anglo-American Committee to Palestine and is to speak to us on geographical conditions in Palestine, and particularly on human geography and agriculture.

Dr. Willatts then read the paper printed above, and a discussion followed

The President: Perhaps Mr. Bennett, formerly Director of Land Settlement in Palestine, will open the discussion.

Mr. M. C. Bennett: I must at the outset say, as I am sure you will have realized from the paper, that much as we all try in Palestine to divorce ourselves from politics, the political question cannot be entirely ignored. So far as land problems are concerned, the politics of the country have been responsible for preventing the introduction of very desirable legislation and for introducing what can be called restrictive legislation in so far as the development of the country is concerned. Under legislation which I think should have been introduced to assist the development of the country might be mentioned the revision of the land law and an ordinance to control the use of water. These have been either shelved or openly objected to and not introduced. Under restrictive legislation one might mention the Cultivators Protection Ordinance which sounds very right and proper but has had the effect of restricting development; also the Land Transfers Regulations, 1940, which is one of the major items which the Jews in particular are trying to get repealed.

At the same time, those who have been in Palestine for a number of years—I spent twenty-five or more years there—feel that, in spite of the difficulties of policy, or lack of policy, and the disturbances which have taken place from time to time over the whole period of the occupation, something has been achieved. One might perhaps mention a complete change in the taxation system and the introduction of the Land Settlement Ordinance. I have no doubt in my own mind that the latter is one of the most important pieces of legislation that has been introduced in Palestine, but, like many other things, its progress has been impeded not only by politics but by the atmosphere created by politics. There is suspicion, particularly in Arab villages, that there is something behind all this urge for the settlement of titles to land; that it helps the Jews to acquire a larger area, and does not only assist towards the development of the country.