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# SOME FACTS AND FIGURES

# ON DHOFAR

## - CONTENTS -

							Page
	Introduction						
1.	Public Administr	ation					1
2.	Physical Geograp	hy and	Water	Resou	rces		1
3.	Climate						2
4.	Population						3
5.	Education						4
6.	Health					•••	4
7.	Communications a	and Uti	lities				5
8.	Agriculture in t	he Jeb	el			•••	5
9.	Agriculture Nort	h of t	he Jeb	el	•••	•••	6
10.	Agriculture on t	he Sal	alah P	lain		•••	7
11	Fisheries						8

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#### INTRODUCTION

Most of the information in this paper has been provided by Government sources, particularly the Dhofar Development Department. To a lesser extent, information has been provided by P.D.(0) staff and other private contributors.

It would be much appreciated if the readers of this paper could send corrections/improvements/additions to the Head of Government Relations, P.D.(0), Muscat, before 1st November 1972.

#### 1. PUBLIC ADMINISTRATION.

The Wali of Dhofar has ministerial rank and reports direct to the Sultan. The Wali is supported by six Naib (assistant) Walis, one of whom is in Salalah. The Wali's staff in Salalah comprises also a Labour Officer and a Municipal Officer. Due to the distance from Muscat and the difficulty of communication, the Wali often deals direct with such matters as Customs and Immigration.

The Development Department reports through the Wali to  $\rm H.M.$  The Sultan.

## 2. PHYSICAL GEOGRAPHY AND WATER RESOURCES.

With the exception of the Salalah and Zalawt coastal plains, the Dhofar coast is mountainous throughout its length. The coastal mountain range, some 30-50 km. in width, is called Jebel al Qamar in the west, Jebel Qara in the central part, Jebel Samhan further east, and Jebel Zaulaul towards the Jazir in South Oman. Altitudes range around 800-1,100 m. in the western and central parts, reaching 1,678 m. in the Jebel Samhan, and 610 m. in the Jebel Zaulaul, descending regularly towards the north-east to about 350 m.

The slopes to the south, called the actual "Jebel", are rather steep and deeply dissected by narrow wadis, with abrupt cliffs at or near the coast. The northern slopes, called the "Nejd", are much gentler, and the wadis dissecting them wider and less deeply incised. Along a line between Marmul and Midway (Thamarit) a few cone-shaped hills emerge from the flat gravel plains, while further north there are only a few rare undulations and very low scarps bordering sandy wadis, which can be several kilometres wide.

In Northern Dhofar, the high sand dunes of the Rub'al Khali form a belt 40 to 110 km. wide along the border with Saudi Arabia. Dune orientation is predominantly northeast-southwest to north-south, although in the central part of this area dune orientation is "confused" and variable. The dunes appear to be rather stable. Vegetation is noticeable in the wadi-depression bordering the Rub'al Khali and in the "valleys" between the dunes.

North of the Jebel, a plentiful supply of water has been obtained from wells drilled at Janab, Shelim, Marmul, Mowaffaq, Khasfa, Dauka and Fasad. The depth of these wells ranges from 500 ft. in the south to 1,200 ft. in the north. Salt and HoS content increase towards the north, and though the water remains potable for practical purposes, it does not always meet the international specifications warranted by that classification. Some of this water can be produced by artesian flow. In addition, small diameter corcholes have yielded indications of potable water at shallow depths in the Wadi Qitbit and Wadi Arah areas of eastern central Dhofar and to the northwest of Ramlat Mugshin in Northern Dhofar.

#### 3. CLIMATE.

Monsoon rain falls primarily onto the mountains south of the watershed. This area measures some 5,000 sq. km. (500,000 hectares). The coastal plain receives relatively little rain, but experiences near-continuous cloud-cover from June to mid-September. The air becomes cool and humid. Beyond the watershed there may be some cloud-cover for extended periods, but generally no rain.

The monsoon rain in the Jebel falls mainly as a fine drizzle and not in heavy rains. There is therefore little run-off and only a few wadis are flowing.

There are no scientific records of rainfall, but the estimates established with the help of figures from the R.A.F. range from 20 inches (50 cms.) to 30 inches (75 cms.).

Wind is a problem on the coastal plain from December to February. Increased wheeled traffic tends to loosen the top soil, which then gets attacked by wind erosion. Trees and shrubs are considered necessary as wind breaks/barriers.

Outside the monsoon period and beyond the area affected by the monsoon, the climate is comparable to the remainder of Southeast Arabia, with the interior characterised by dryness and extreme temperatures.

#### POPULATION.

The present tribal groups in Dhofar represent the results of thousands of years of battling for control of the valuable aromatic gum, incense. The oldest group comprises the Shahara who, with the Da'iyf of Salalah, would seem to be representatives of the original inhabitants. Both have now regressed, having possibly been conquered by the Qara, who are still in control of a large part of the mountain area. These are a cattle owning and possibly Hamitic race, who in their turn have been confined to their mountains by subsequent incursions of Mahra and Bayt Kathir from the Hadhramaut.

The Hadhrami influence is still strong in Dhofar and there are links with the Shenafir confederation of Kathiri tribes in the west. The coastal Dhofaris have engaged in seafaring activities at least since early Islamic days. On land, the desert formed an effective barrier to all but the most slender contacts between Dhofar and Oman.

Religiously, the links with Hadhramaut were strong. The influence of Sayyids and holy men of the Mashayikh can readily be seen in the mosques and tombs, which are such a prominent feature on the Salalah plain and surrounding villages. These buildings, as well as the houses, also clearly demonstrate the architectural and artistic links. In the last century the influence of the present dynasty became pronounced.

Salalah and the three villages in the immediate vicinity have an estimated 7,500 inhabitants. Taqah and Marbat each have some 1,000 to 1,500 inhabitants. All other places along the coast have considerably less than 500 people. The entire coastal population is thought to number between 10,000 and 15,000 people.

The portion of the mountains which profits from the monsoon is thought to have about 20,000 inhabitants.

The vast area north of the above two zones comprises nearly 95% of the total surface and has probably less than 1,000 people, all of whom are nomadic.

Due to the hostilities in the Jebel, until Summer 1972 some 550 people had migrated from the Jebel to the Salalah plains.

As a result of a severe shortage of both skilled and unskilled labour, an estimated 700 Indians and Pakistanis, labour, craftsmen and clerks, have been brought to Dhofar for employment by the Government and contractors for civilian employment. The number of northern Arabs and Europeans in civilian employment is estimated at over 70.

#### 5. EDUCATION.

There have always been Koranic schools for boys and girls in Salalah and the other larger villages.

The present primary school has 950 pupils, who are taught in two shifts. All teachers are Dhofari.

A school for 1,200 pupils is planned to open in September 1972. A contract for the building of a girls' school has been signed. A secondary school will follow.

At Taqah and Marbat the schools function presently in mosques, but new facilities are being built.

There are also schools at Madinat al Haq and Mudhai. One is under construction at Midway, and work will soon begin at another at Shelim.

#### 6. HEALTH.

On the Jebel, T.B. is very common; otherwise on the coast the main problem is hookworm and bilharzia, leading to malnutrition and anaemia; also amoebic dysentry; malaria-like fevers are on the increase, but respond well to treatment.

Amongst babies, dehydration is the most prominent malaise. This occurs following enteric fevers and prolonged breast feeding, and also due to the mothers' ignorance - wrong diets.

High concentration of salts in drinking water leads to a higher than normal incidence of gall and kidney stones.

The hospital in Salalah has 70 beds, with a large maternity ward and a dental clinic. Food is provided by G.C.C. There is an extension planned to double this size. On an average, 400 out-patients are treated every day. There are four clinics outside Salalah, one of which is north of the Jebel at Mudhai.

#### 7. COMMUNICATIONS AND UTILITIES.

There are some 30 miles of hard-top roads under construction, most of which have been completed. The remainder are unsealed. There are only a few secondary feeder roads. Not counting the vehicles of the Army and of the foreign contractors, there are about 280 trucks and cars on the Salalah plains for civilian use; 80 of these are available for carrying passengers.

There is a telephone exchange with 50 lines. By the end of 1972 a 200 line exchange will be operating. Three telephone lines serve Muscat, as well as a telegraph line. Telex facilities are planned for 1973. The Dhofar Radio station is being expanded.

A port is being constructed at Ras Raysut which, as of March 1973, will provide 14 feet of water at the jetty as well as deeper sheltered water for larger ships using lighters.

A town supply of drinking water was inaugurated in July 1972.

Government garages and workshops have been opened during the last 2 years.

Electric power is supplied by five 550 kilowatt units. A contract for a larger power station has been signed.

There is an airport with a 6,000 feet asphalted runway.

#### 8. AGRICULTURE IN THE JEBEL.

The following applies only to the  $^\pm$  5,000 sq. kms. (500,000 hectares) of Jebel which are affected by the monsoon. 60-70% of this area (i.e., 300,000 to 350,000 hectares) is covered by soil/vegetation. The depth of soil is often measured in inches only, and rarely exceeds 3 feet.

Livestock is of prime importance to the inhabitants of the Jebel. The ratio of cattle per acre is small. While in the dry season there is over-grazing, during the monsoon much organic material is trodden into the soil. This over and under-grazing could easily be balanced by hay making. There is much scope for better use of pasture. The area could support a much larger number of cattle. Also, there is scope for improving the quality of the existing cattle.

It is estimated that at present there are some 20,000 head of cattle in the Jebel. Under more peace-

ful circumstances this number probably stood nearer 25,000. Cattle are mainly kept for dairy products. Of these, ghee (boiled, in 4 gallon tins) travels well and would probably again find a ready market in Muscat after cessation of hostilities in the Jebel.

As to meat, it is estimated that - with upgrading and better methods - the Jebel would have a potential of about 1,000 steers per annum.

There are numerous small plots which are planted during the monsoon. They measure one-eighth to half an acre each, and are often positioned in topographic depressions where soil is thickest and rain water accumulates. The plots are nearly always circular and surrounded by a stone fence - presumably to keep the grazing cattle out (though some of these stone fences may actually serve as corral. The crops consist in the main of sorghum, cowpeas and tobacco.

A significant portion of the Jebel is covered by shrubs and trees. There is considerable scope for forestry, producing both timber and firewood.

#### 9. AGRICULTURE NORTH OF THE JEBEL.

Since ground water in the wadis descending to the north is rather deep, there are only a few places where date palms are being cultivated near the mountains. The entire area is used for nomadic grazing, which is very poor except for the plateau north and northeast of Shuwaymiah.

There are, however, two experimental projects in the plains beyond the mountains, making use of artesian water from relatively deep water wells. Some date palms were originally planted at Fasad, which have not done very well due to the difficulty of obtaining satisfactory care/supervision. Near Dauga, 150 date saplings have been planted by the Dhofar Development Department, and put in the care of the Assistant Wali at Midway. Simple trials are also being carried out with lucerne and sweet potato at Dauga.

There is probably sufficient artesian water at Fasad, Montassar and Dauga to grow fodder for animals to afford the Bedu a settled existence.

#### 10. AGRICULTURE ON THE SALALAH PLAIN.

The Dutch consulting firm of NEDECO have estimated that some 50,000 acres (20,000 hectares) are in principle fit for cultivation, which is nearly 40% of the total surface of the Selalah plain. This assumes that there is enough ground water available/replenished to irrigate such a large area. This assumption, while not unreasonable, nonetheless warrants investigation. It is worth noting that this (ultimate potential) area is larger than the acreage presently under cultivation on the entire Batinah coast.

At present there are, however, only some 2,250 acres, i.e., less than 5% of the potential maximum area, under cultivation without counting some 500 acres of coconut palms. Of the 2,250 acres, about 90% is used for growing fodder. Another 8% is used for vegetables for human consumption, such as ladies fingers, eggplant, water melon, green pepper, banana, papaya. Only 2% of the cultivated acreage is planted with cash crops, such as a few acres of wheat.

The animal fodder at present consists mainly of lucerne, which in the monsoon area dies every year. The presently grown fodder supports about 1,000 cattle. There is an actual "fodder crisis", as the lucerne is not doing well. The Development Department have successfully grown an alternative fodder, a special tall grass - the Bullrush Cross Napier - which is perennial. Production per acres is 40 tons per annum. If planted mixed with other fodder, the yield rises up to 50 tons/acre/annum. Lucerne yields at present are only 10-15 tons/acre/annum. For reasons which are not quite clear there is, however, enormous resistance against the introduction of the new grass. It should also be noted that this new grass needs less irrigation than lucerne.

The breed of cattle needs improvement, and a promising beginning has been made with the importation of 3 bulls. A veterinary clinic is being constructed at present, and a breeding herd of 30 indigenous cows is being formed for mating with both the imported and local bulls, so that comparative studies can be made of selective breeding and cross-breeding.

There is much scope for cash crops once more acreage can be cultivated, and the following crops are being investigated.

Wheat should do well, and would find a small but ready local market. There is a possibility that with the application of fertilisers it may become economic to ship such wheat also to Muscat.

Potatoes are thought to be gaining acceptance among the local population as a diversified food. Since potatoes travel well, there would be a market for them in Muscat.