Chapter 2 Geography.

2-1 Location and Access

The survey area is situated about 330 kilometers south of the capital city, Rabat, north of the Haut-Atlas Mountains, and southwest of Marrakech.

The access road from Rabat to the survey area is almost paved, and the paved trunk freeway via Casablanca connects Rabat and Setatt, about 130 kilometers apart. Between Casablanca and Setatt, about 140 kilometers, there exist a paved trunk road, taking about three hours by car. The railway service is also available between Casablanca and Marrakech.

International airports exist in Marrakech in addition to Rabat and Casablanca, connecting to European principal cities, Paris, London, etc.

2-2 Topography and Drainage

The altitude of the survey area ranges between 400 to 600 meters, showing gentle hilly topography. The survey area is situated in the Haouz Plain, in between the Jebilet Mountains to the north and the Guemassa Mountains to the south. The Jebilet Mountains and Guemassa Mountains are underlain by weakly metamorphosed Paleozoic sedimentary and volcanic rocks, and the Haouz Plain is underlain by Paleozoic basement rocks, being overlain by Tertiary to Quaternary sedimentary rocks. Outcrop of the area is very scarce.

The principal drainage in the area is the Oued Niss River, running to the north-northeast in the west, and joining to the Oued Tensift River outside of the area.

2-3 Climate and Vegetation

The climate of the area is of arid-inland, temperature widely varies day and night, and season to season, over 40 degrees in Celsius in summer and near zero degree in winter. The vegetation in the area is generally poor, however, some plants adequate for arid area like olives, grapes, wheat, etc. are cultivated. Sheep pasturage is also common. The rainy season ranges April and May, and October and November, and the annual precipitation is about 300 millimeters. Occasional heavy rainfalls in the rainy season give some rigorous damage. Table I-2-1 shows temperature and precipitation in Marrakech.

Table I-2-1 Temperature and precipitation in Marrakech

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Temp.max.($^{\circ}$ C) | 17 | 20 | 23 | 26 | 29 | 33 | 38 | 38 | 33 | 28 | 23 | 18 |
| Temp.min.($^{\circ}\!$ | 3 | 6 | 10 | 11 | 14 | 17 | 20 | 20 | 18 | 14 | 10 | 6 |
| Prec.(mm) | 29 | 31 | 31 | 33 | 20 | 8 | 2 | 3 | 10 | 17 | 27 | 34 |

Highest and lowest temperature: Average temperature for every month

Precipitation: Average precipitation for every month By the Tourist Bureau, the Government of Morocco