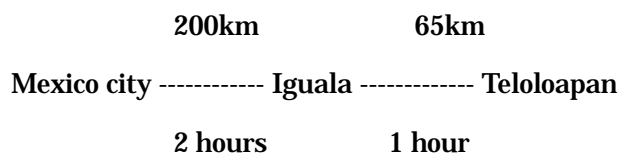


## **Chapter 2 Geography of Survey Area**

### **2-1 Location and Access**

The Zacualpan area is situated to the southwest of Mexico city, in Guerrero and Mexico states. Principal villages in the survey area are Zacualpan, Ixcateopan Ixcapuzalco and Teloloapan having population 16,000 is the largest village around the area, to the south of the survey area. Base camps for the survey have been set at Teloloapan and Zacualpan. The survey area is situated in the administrative districts of the above village names.

Access to Teloloapan from Mexico City is possible in three hours by vehicles through the highway via Iguala. To reach Zacualpan from Mexico city, it is possible to use the highway through Toluca, taking the same hours. An outline of the access is shown as follows.



A branch paved road from Highway No.51 connects Teloloapan and Ixcapuzalco. Other paved roads from the northeast of the survey area to Zacualpan and from the east to Ixcateopan are available. There exist other gravel roads connecting each village, but it will become hard to use those roads in rainy season.

### **2-2 Topography, Climate and Vegetation**

The survey area is geographically in the Sierra Madre del Sur (Raiz 1959) and included in the Balsas-Mexcala sub-province near by the Neo-volcanic axis.

The northern area is in a high altitude area and shows many steep V-shape valleys, but its altitude is getting lower toward south. The topography in the southern area shows relatively gentle low land area. The Sultepec River in the west end of the area is 700 meters in lowest altitude and Cerro Tentacion to the south of Zacualpan is 2,710 meters, highest in the area.

The drainage systems in the area are divided into three, separated by the

Cerro Tentacion. The Sultepec River system occupies about 60 percent of the whole survey area and rivers running down to the southwest from the watershed have been formed in the system area. The Los Sabinas River system occupies the southeast part of the survey area and rivers running down to the south and southeast have been formed. The San Jose River system occupies about 10 percent of the whole area at the northeast end and rivers running down to the east have been formed. These systems constitute branches of the Balsas River.

The climate in the area is of tropical to subtropical and its rainy season is from the end of June to October, dry season is from November to May. The average annual rainfall is 1,100 to 1,400 millimeters and the average temperature is 18 °C in Zacualpan.

The vegetation in the area is dominated by tall weeds in the lowland area, lower than 1,800 meters in altitude. Some cornfields are partly seen there. In the highland area, pine and oak trees grow scarcely.

### **2-3 Infrastructures**

Electricity, communication and medical facilities are satisfactory available in Teloloapan, one of our base campsite and two major bank offices are situated in the village. Three gas service stations are located along Highway No.51. In the other villages in the area, electricity and communication facilities are available, but no bank and gas station are available. Satellite communication facilities are available in some small villages and mobile telephones are useable along almost all roads and mountain or hill ridges.

The road networks are generally well developed, but almost all roads are not paved and difficult to transit in the rainy season. It will be usual that all roads, except major ones, blocked everywhere in July and August.