

PROFILES OF SURVEY MAPS 45/D7 AND 45/D10

PROFILE OF SURVEY MAP 45

D/7 DESCRIPTION of the Area covered by Survey Sheet No. 45 D/7 (Gujarat and Rajasthan)

District : Banas Kantha and Sirohi

Location: Latitude 24 degree 15' – 24 30' North

Longitude 72 15' - 72 30' East

This region lies in western India on the borders of Rajasthan and Gujarat at the southern end of the Aravalli Hills, immediately north-east of Sheet 45 D/10.

RELIEF : The area is mainly a plain except for:

1. The east central region where the hills rise to almost 500 m.,
2. The lower hills of the north-east corner. The slope of the land is from north-east to south-west in the northern half and east to west in the southern portion of the map. (indicated by flow of rivers)

DRAINAGE1. The Banas river (not to be confused with the Banas river which is a tributary of the Chambal river to the north) flows into the swampland area of the Little Rann, north-east of the Gulf of Kutch. On this survey sheet it flows westward. It has two main right bank tributaries – Sarod and Arado Nadis and the numerous smaller streams like the one entering the river near Chekla (8192). The only left bank tributary is the Balaram Nadi from the south-east. The Banas river varies in width from 1/4km to over 1 km and has a narrow perennial water course. The dry portion

fills in during the rainy seas.

2. The Sipu Nadi is a tributary of the Banas river (the confluence) lying to the west of the area shown. It flows from north-east to south-west with its two main tributaries – Varka and Mahadeviyao Nadis joining the left bank. Both rise in the hilly region to the east.

In the region there are numerous other streams that join main rivers. They rise in the higher ground adjacent to the rivers and invariably their courses show large tracts of broken ground indicating soft soil easily eroded by water.

SOILS: Map symbols indicate desert conditions, a large part of the plain area being sandy. Soils are soft as shown by excessive erosion causing broken ground near water courses.

CLIMATE: There are three climatic seasons:

Summer hot and dry March to June

Monsoon hot and wet July to September

Winter cool and dry October to February

Maximum temperatures in summer are extremely high rising to over 47°C, while minimum temperatures in December/Jan often drops to almost 0 degree C. Because of its location in western India, it receives comparatively less rainfall than other parts of the country. The rainfall which is between 50 to 100 cm annually, falls during the monsoon season. High temperatures cause excessive evaporation. This gives rise to scrub and semi-desert vegetation.

NATURAL VEGETATION : Hill areas –

dry deciduous forests of small trees

Plains – scrub and thorny trees where there is no agriculture.

IRRIGATION: This region is dependent on the periodic rainfall (Monsoon), tanks, wells for agriculture. There is only one canal in the north-east starting from the reservoir (2222)

OCCUPATIONS: Agriculture, rearing of cattle, sheep, camels and horses.

CROPS: Winter (Rabi) – Wheat, Barley, Cotton

Monsoons (Kharif) – Bajra, Jowar, Maize

COMMUNICATIONS: Except for the main line of the Western Railway and the road that runs across the south-east corner of the map through Chitrasani (8923),

there are no other important communications. All other settlements are linked by cart tracks.

SETTLEMENTS: Except for Chitrasani which is a rail/road centre, all the settlements are small and widely scattered chiefly in the lowland area and are either nucleated or dispersed in pattern.

PROFILE OF SURVEY MAP 45 D/10

DESCRIPTION of the Area covered by Survey Sheet No. 45 D/10 (Gujarat and Rajasthan)

District : Banas Kantha and Sirohi

Location: Latitude 24 degree 30' – 24 45' North

Longitude 72 30' - 72 45' East

This region lies in western India on the borders of Rajasthan and Gujarat at the southern end of the Aravalli Hills, immediately north-east of Sheet 45 D/7.

RELIEF : The sheet is divided into two distinct physical divisions:

1. The Aravalli Hills rising to a height of over 1400 meters and occupying the south-east corner. The ranges are more or less parallel and run in a NE to SW direction.
2. A large plain covers the remaining portion of the sheet. There are frequent outcrops of rocky ground, some of it rising to over 400 m (i.e. 100 m above the surrounding country side.)

DRAINAGE: In the hill area, the drainage is radial. Abu being the highest point of the area is the centre from which the rivers radiate. In the plains, the upper courses of the rivers are dendritic or fan shaped. The main stream Sipu Nadi rises in the hills

north of Abu and flows in a south-west direction. It is periodic and seldom exceeds $\frac{1}{2}$ km in width.

TRIBUTARIES: Right bank : Sukli Nadi, Unda Wala, Dior Nadi,
Left bank: Sukli Nadi, unnamed river flowing past Dhavli, Devengan Nadi and Godua Nadi

NOTE:

1. There are three Sukli Nadis in the survey sheet.
2. Because this regions lies close to the desert areas where the soils tend to break up easily, the water courses are numerous and well defined for they are able to cut channels in the soft sandy soils. They are however periodic and rely on the rainy season for the water supply.

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COMMUNICATIONS: Abu, in the hill area, is linked eastwards by two main roads, which run south-east to Abu Road and north-east to Oriya. In the south of this region the east-west main road links up at Karaunti (0700) with another main road which runs parallel to the foot-hills and connects a number of settlements. Many of the smaller settlements are linked by cart tracks.

SETTLEMENTS: Abu is a large hill

resort, an administrative and an educational centre. In the plains, there are numerous settlements of much smaller size of which Sirori (2023) is the most important.