

## P L A T E S

| NO.            | CAPTION                                                                                                                                        | PAGE<br>NO. |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 1              | SYNOPTIC VIEW OF THE STUDY AREA                                                                                                                | 1           |
| 2              | VIEW OF THE TERRACES FORMED BY THE VISHWAMITRI RIVER                                                                                           | 51          |
| 3              | CONSPICUOUS SINUOUS WINDING OF THE VISHWAMITRI RIVER IN BARODA CITY. THE THICK, DARK EFFLUENT-CONTAINING WATER IS ALSO NOTICED.                | 51          |
| 4              | PROMINENT OX-BOW FORMATION IN THE VISHWAMITRI RIVER                                                                                            | 53          |
| 5              | BAD-LAND BETWEEN THE MINI AND MAHI RIVER MARKING THE ONSET OF RAVINE FORMATION.                                                                | 53          |
| 6              | RAVINE FORMATION ALONG THE MINI RIVER. THORNY VEGETATION IS NOTICEABLE. STEEL GRAY VISCOUS EFFLUENTS IN THE STREAM CHANNEL IS CONSPICUOUS.     | 53 a        |
| 7              | STRAIGHTENING OF THE VISHWAMITRI RIVER IN THE KARELIBAUG AREA OF BARODA CITY TO COPE WITH FLASH FLOODS DURING THE MONSOON.                     | 53 a        |
| 8              | HIGH-RISE BUILDINGS ALONG THE BANKS OF THE VISHWAMITRI RIVER WHICH HAVE COME UP IN AN INDUCED ABANDONED CHANNEL.                               | 54          |
| 9<br>[a] & [b] | INHIBITION OF NATURAL DRAINAGE BY CONSTRUCTION OF GUIDE WALLS IN THE VISHWAMITRI RIVER.                                                        | 55          |
| 10 & 11        | RESIDENTIAL BUILDING COMING UP IN AND AROUND AGRICULTURAL LAND. THE PORTION IN THE LAND IN THE FOREGROUND IS STILL BEING UTILIZED FOR FARMING. | 142         |
| 12             | INDUSTRIAL ACTIVITY COMING UP IN AGRICULTURAL FIELDS                                                                                           | 143         |
| 13             | AGRICULTURAL LAND IN THE STUDY AREA                                                                                                            | 143         |
| 14             | TYPICAL TRANSITIONAL AREAS WHICH HAVE BEEN LEFT IDLE AND HAVE DEVELOPED BARREN LAND.                                                           | 144         |
| 15             | TYPICAL TRANSITIONAL AREAS WHICH HAVE BEEN LEFT IDLE AND HAVE DEVELOPED THORNY VEGETATION.                                                     | 144         |
| 16             | TYPICAL TRANSITIONAL AREAS WHICH HAVE BEEN LEFT IDLE AND HAVE DEVELOPED GULLYING.                                                              | 144 a       |

|           |                                                                                                                                                                                    |     |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 17 & 18   | RAVINE FORMATION IN TRANSITIONAL AREAS DUE TO STOPPAGE OF NORMAL AGRICULTURAL PRACTICES.                                                                                           | 145 |
| 19        | CLIFF SECTION OF THE MAHI RIVER AT VASAD, WHERE PRE-HISTORIC ARTEFACTS DATED ABOUT MID-PLEISTOCENE, POINTING TO THE POSSIBLE EXISTENCE OF EARLY MAN.                               | 148 |
| 20        | PRESENT DAY AKOTA ON THE BANKS OF THE VISHWAMITRI, KNOWN AS ANKOTAKKA IN THE PAST.                                                                                                 | 152 |
| 21        | PART OF THE WALL OF THE ANCIENT FORT BUILT BY PRINCE KHALIL KHAN.                                                                                                                  | 152 |
| 22        | SURSAGAR LAKE IN THE HEART OF BARODA CITY. IT WAS BUILT IN THE 18th CENTURY FOR WATER SUPPLY.                                                                                      | 155 |
| 23        | AJWA RESERVOIR COMPLETED IN 1890, FOR THE SUPPLY OF WATER TO BARODA CITY.                                                                                                          | 155 |
| 24        | THE GUJARAT STATE FERTILIZER CORPORATION WHICH CAME INTO EXISTENCE IN 1962.                                                                                                        | 163 |
| 25        | NANDESARI CHEMICAL INDUSTRIAL ZONE.                                                                                                                                                | 163 |
| 26        | VIEW OF ONE OF THE FRENCH-WELL DUG IN THE MAHI RIVER BED AT FAJALPUR FOR THE SUPPLY OF WATER TO BARODA CITY AND INDUSTRIES. THE MEAGRE WATER QUANTITY IN THE RIVER IS CONSPICUOUS. | 185 |
| 27        | VIEW OF THE VISHWAMITRI RIVER FLOWING THROUGH BARODA. BLACK AND VISCOUS WATER IS CONSPICUOUS. THE PLANETARIUM IN SAYAJI BAUG IS SEEN IN THE BACKGROUND.                            | 209 |
| 28        | SEASONAL NATURE OF THE MINI RIVER, WITH THE PARTIAL PRESENCE OF EFFLUENT WATER WHICH IS DARK GRAY, VISCOUS AND GIVES OF A PUNGENT ODOUR.                                           | 209 |
| 29        | CATTLE RESORTING TO THE DRINKING OF THE EFFLUENT WATER OF THE MINI RIVER.                                                                                                          | 211 |
| 30 & 31   | HOLES DEVELOPED ON TAR ROADS DURING THE MONSOON.                                                                                                                                   | 258 |
| 32        | ILLEGAL LIFT IRRIGATION FROM THE EFFLUENT CHANNEL.                                                                                                                                 | 276 |
| [a] & [b] |                                                                                                                                                                                    |     |