

CHAPTER IV

MINING ACTIVITIES IN GUJARAT

Introduction

In the case of Gujarat we shall briefly touch upon the emerging trend of large port based industries. The focus will be especially on the large cement plants being established along the entire coastline of Kutch and Saurashtra. The proximity to ports and the easy availability of raw materials in the form of high quality cement grade limestone are basic incentives for the industries. Further being primarily export oriented units, captive mines and monopoly ports increase the viability of their venture.

A. Gujarat's Industrial Policy Document, 1995

Section 4.3: Amending existing land laws to facilitate rapid change in land use. "Procedure for the grant of permissions under various land reform laws would be simplified and time bound clearances assured. At present non-agriculturists cannot purchase agricultural land without the prior approval of government. This provision causes undue delay in acquiring land for industrial use. Amendments will be carried out in the Bombay Tenancy and Agricultural lands act so that entrepreneurs can purchase land for setting up industrial estate without undue delay. Conversion of agricultural land for non-agricultural use for industrial purposes would also be simplified".

Section 4.7: Port development Gujarat has 1600 km of coastline and 40 minor and intermediate ports, which could be ideal locations for hinterland industrialization. Gujarat state government is planning a new port policy aiming at major port based industrialization programme.

Section 4.11: Intensification of mineral exploration activities and emphasis on the development of mineral based industries.

Section 4.14 Exports: Gujarat accounts for almost 16% of the country's total exports. To increase this potential in keeping with the rapid rate of development Gujarat work towards providing infrastructure facilities in the form of developed ports with bulk handling facilities container depots.

B. Briefly about the Mineral Reserves of Gujarat: Estimated Mineral Reserves in million tonnes, Gujarat

Mineral	Reserve in Mt.
Limestone	10.000
Dolomite	700
Lignite	227
Bauxite	77
China clay	62
Bentonite	43
Fluorite	11.6
Base metal	8
Coal	3
Manganese ore	2.5
Graphite	2

For the present discussion we shall concentrate on the limestone reserves typical of coastal Gujarat.

The Limestone reserves of Coastal Gujarat and their typical properties

The state Gujarat has large and widespread deposits of Limestone. Out of a total of a 10,000 mt almost 7700 mt are located at Kutch. About 500 mt in Kodinar taluka of Amreli district and approximately 130 mt around Ranavav, Porbandar, Maliya and Kutiyana taluka of Junagadh district. The deposits in Amreli and Junagadh districts are chiefly constituted of the Miliolite Limestone. This variety of limestone is a basic raw material for cement plants. In coastal Saurashtra, blocks of this limestone have been traditionally used for house building. The Miliolite Limestone is a natural aquifer. In an otherwise saline area, the coastal limestone beds have acted as storehouses for potable ground water. In spite of the proximity to the coast therefore, certain regions of coastal Saurashtra have historically been very fertile with the most varied kind of ecosystem. The natural pores in Miliolitic Limestone can trap water. While surface aquifers get recharged every monsoon, the deep confined aquifers circulate ancient water.

The critical environmental impact of limestone mining in coastal Saurashtra

Gujarat coastline of 1400 km is the longest in peninsular India. Salinity ingress is increasingly becoming an unavoidable reality. The extent of ingress is estimated to be a distance of 7 km inland from the coast into the aquifer system. Salinity in shallow depths has been recorded over an area of 34.626 sq. km. Salinity below 200 m depth is found over an area of 34,000 sq. km. Under such a circumstance the surface aquifers could manage to hold some quantity of fresh water due the flushing of salt water during monsoon.

With increasing extraction of this limestone the flushing mechanism of surface aquifer is lost which would further aggravate salinity ingress. The resulting crisis for fresh water since large quantities are needed both for the industries and the prevalent cash cropping system is resulting in the over exploitation of remaining ground water sources. Today's tract 4 to 7 km in length covering an area of 900 sq. km. suffers from acute salinity ingress. The practice of mechanized mining of limestone over large areas by the industries shall inevitably speed up the process. Gujarat Ambuja Cement Company large limestone mined located in Vadnagar village of Kodinar taluka district Amreli is a case in point.

C. Some details about the Nature of Industries along the coast of Saurashtra

Name of the Industry	District	Taluka
Sanghi Cement	Kutch	Lakhpat
Adani industries	Kutch	
Reliance Petro chemicals	Jamnagar	
A.C.C. Cement	Junagadh	
Hindustan Levar Complex	Junagadh	
Ajmera Cement	Junagadh	
Birla Rayon	Junagadh	
G.H.C.L. Soda ash	Amreli	
C.G.C.L. Cement	Amreli	
Ambuja Cement	Amreli	Kodinar
L & T Cement	Amreli	Rajula
Narmada Cement	Amreli	Janabad
Digvijay Cement	Jamnagar	Sikha
Sidhi Cement	Junagadh	Veraval

1. Gujarat Ambuja's activities in Amreli district

Gujarat Ambuja's Cement Plant came up in Kodinar Taluka of Amreli district in 1986. The plant and the mine area had acquired almost the entire land of certain villages like Vadnagar. In many other villages a lot of Agricultural land has been diverted to it.

Ten years after the project came up no records are available on the extent of displacement the amount of land diverted etc. No information on the leasehold area of Ambuja's mine. Only conjectures are possible as far as their expansion plans are concerned.

The lands next to operating mines are some of the most fertile lands in Gujarat. The Ambuja's had also developed a highly mechanized port at Mool Dwarka. A lot of land had been acquired for building their plant, container shed, etc. No trace again of the extent of displacement though every one knows about the existence of local fishing communities.

2. Harvesting stones, Black Trap quarries in agricultural land

Quarrying for the black trap rock is another phenomenon encountered frequently in Coastal Saurashtra. In almost every village in some of the talukas of Junagadh district like Talala, Mangrol, Veraval, etc. agricultural land, grazing land, every thing is being dug up for the stones.

The entire process is mechanized large boulders are dug out and loaded. Each chunk is large enough to fill one small truck entirely. Even inside the Gir Lion reserve there were till recently flourishing quarries of trap stone. The boulders are used for making jetty among other things.