

CONTENTS

<u>CHAPTER NO.</u>		<u>PAGE NO.</u>
I	INTRODUCTION	
	GENERAL	1
	OBJECTIVE AND SCOPE	2
	AREA PROFILE	3
	Location of study area	3
	Communication	6
	Climate	6
	Flora	8
	Fauna	9
	Population	10
	Economic aspects	10
	GEOLOGICAL ASPECTS	11
	Geology and structure	11
	Geomorphology	12
	Terrain resources	13
	Geo-environments	14
	METHODOLOGY AND APPROACH	15
II	STRUCTURAL EVOLUTION AND QUATERNARY GEOLOGY	
	REGIONAL GEOLOGICAL SET-UP	18
	REGIONAL TECTONIC FRAMEWORK	23
	STRUCTURE AND EVOLUTION OF CAMBAY BASIN	25
	NEOTECTONISM	29
	QUATERNARY GEOLOGY	32
	Stratigraphy	34
	Sedimentation and Environments	44
	Sea level changes	54
III	GEOMORPHIC SET-UP AND MORPHOGENESIS	
	INTRODUCTION	58
	TOPOGRAPHY	60
	RIVERS	64
	Channels and Terraces	68

(II)

	DRAINAGE SYSTEM	68
	LANDFORMS	72
	Coastal Lowland	74
	Recent mudflats	76
	River mouth bars	76
	Beach sand ridges	78
	Raised mudflats	78
	Relict alluvial plains and bays	80
	Central Alluvial Plain	81
	Flood plains	81
	Natural levees	83
	Point bars	83
	Buried channels	84
	Gullies	86
	Cliffs and Scarps	86
	Eastern Piedmont Zone	89
	MORPHOGENESIS	92
IV	TERRAIN RESOURCES - I	
	LAND, SOILS, AND MINERALS	
	INTRODUCTION	97
	LAND CAPABILITY	98
	PRESENT LANDUSE PRACTICE	108
	Agricultural uses	111
	Non-agricultural uses	112
	SOILS	113
	Modern soil classification	114
	MINERAL RESOURCES AND GENESIS	121
	Salt	121
	Sand and gravel	122
	Brick earth	122
	Kankar	124
	Mineral genesis	125

(III)

V	TERRAIN RESOURCES - II	
	SURFACE WATER AND GROUNDWATER	
	INTRODUCTION	127
	SURFACE WATER POTENTIAL	128
	Occurrence and use	131
	GROUNDWATER RESOURCES	138
	Aquifer parameters	147
	Chemical quality	149
	Ground water potential	157
VI	GEO-ENVIRONMENTS AND MANAGEMENT	
	CONCEPT AND APPROACH	159
	ENDOGENIC ACTIVITIES	160
	Seismicity	160
	EXOGENIC ACTIVITIES	162
	Floods and inundation	162
	Erosion and deposition	163
	Salinity of laand and water	167
	Cyclones and storms	169
	HUMAN ACTIVITIES	172
	Agricultural practices	174
	Industry and urbanisation	174
	GEO-ENVIRONMENTAL ZONNING	176
	MANAGEMENT STRATEGY	182
VII	SUMMARY AND CONCLUSION	185
	ACKNOWLEDGEMENTS	189
	BIBLIOGRAPHY	191