

REPORT
OF THE
**INTERMEDIATE PORTS
DEVELOPMENT COMMITTEE**

April, 1960



GOVERNMENT OF INDIA
MINISTRY OF TRANSPORT AND COMMUNICATIONS
NEW DELHI

ERRATA

TO

REPORT OF THE INTERMEDIATE PORTS DEVELOPMENT COMMITTEE

APRIL, 1960.

- Page (i), against Chapter X, read '127' for '124'
- Page (ii), against Appendix V, read "List of gentlemen, Officials and Organisations with whom the Intermediate Ports Development Committee had discussion" for "List of individuals, Persons, etc. etc."
- Page (ii), against Appendix IX, read "sailing" for "tilling" appearing between the words "and" & "Craft", after the word "Ports", add words "from 1950-51 to 1959-60."
- Page (ii), against Appendix X, delete the word "Works" appearing between the words "each" and "port".
- Page (ii), against Appendix XXI, read 'Narmada' for 'Narwada'.
- Page (iii), against Appendix XXIII, read the word "mechanised" for the word "modernised".
- Page (iii), against Appendix XXVII, add the words "and Chairman's comments thereon" after the words "Dr. C.R. Krishnamoorthy".
- Page 4, para 1.8, last line, read "ports" for "routes" and add the words "with roads, rail and I.W.T. links thereto between the words "Committee" and "is given".
- Page 17, para 3.24, line 1, read, "may" for "will".
- Page 24, para 4.26, line 6, read, "six" for "four".
- Page 30, para 5.24, line 4, read "limitation" for "limitations".
- Page 32, para 5.31, line 36, read "work" for "works".
- Page 36, para 5.43, line 12, read "8" for the word "a" appearing between the words "for" and "generally"
- Page 55, para 6.18, line 5, read "Coast" for "Coastal".
- Page 55, para 6.19 line 15, read "Rs. 96.5" for "Rs. 92.5".
- Page 57, para 6.23, line 8, read "3.16" for "3.33".
- Page 59, para 6.28, line 21, add "3" between the words "of" and "Nos".
- Page 68, para 7.18, line 4, delete ",," appearing after the word "will".
- Page 72, against May, under heading "S.W", read "2" for "0".
- Page 75, para 7.30, line 4, read "is" for "in".
- Page 103, para 9.28, under the heading "rt" against words "Mean low water Neaps" read "11.8" for "11.58".
- Page 133, Recommendation No. 16, line 9, read "This" for "The".
- Page 138, Recommendation No. 32, line 3, read "few" for "five".
- Page 138, Recommendation No. 34, under heading Paragraph Nos. read "9.32" for "9.31".

- Page 174, Item (c) 10, Put the last line within brackets.
- Page 180, Item 9, under heading "North pier" read "12" for "19".
- Page 196, under Col. "Imports in Tons", "Sailing Craft" for the year 1958-59 and 1959-60 read "Nil" and "155" for "N.A" and "N.A" respectively.
- Page 203, under Col. "Total in Tons", "Sailing Craft" against year 1959-60 read "3,658" for "2,600" and under Col. "Steamers" read "1,54,757" for "1,29,438".
- Page 215, Port Nagapattinam, year 1950-51 under heading "Number of Steamers", read "44" for "47".
year 1955-56 under the heading "N.R.T" of "Sailing Craft" read "12,288" for "12,228".
- Page 228, Port Neendakara read "(iii)" for "(ii)" against Item "Extension of Railway siding".
read "(xvii)" for "(vii)" against item "Additional field offices at Kollthotam and Quilon".
- Page 232, Port Karwar, Item (d), of (xiv) read "Oyster" for "dyster".
- Page 233, Item (xviii), under the heading "estimated amount" read "38,000" for "38,400".
- Page 244, Item (2(i), under the heading "Expenditure" read "Rs.11.5" for "Rs. 11.4".
- Page 247, against "Front Wall" under the heading "Rate", add "L.ft." after "Rs. 825/-".
- Page 251, Item (4), under "Wharfage" read "6,000" for "8,000".
- Page 269, Item 2(b), under Col. "6" read "130.90" for "130. 0".
- Page 271, Item 24, under Col. 2, read "berth" for "berths",
under Col. 4, read "7,500.00" for "5,000.00".
- Page 273, under the heading "North Breakwater" the word "Caisson" appearing after the words "return at ends" should be deleted.
under the heading "North Breakwater" add the word "Caisson" before the words "Straight Portion".
- Page 275, against item 13, read "11.2" for "11.3".
against "Total Expenditure" and "Net Annual Revenue" add word "lakhs" against "165.29" and "43.18".
- Page 276, add the words "by rail cum road route" to the heading.
- Page 277, and 278 paragraphs 4, 5 and 6 may be numbered.

REPORT
OF THE
INTERMEDIATE PORTS
DEVELOPMENT COMMITTEE

April, 1960



GOVERNMENT OF INDIA
MINISTRY OF TRANSPORT AND COMMUNICATIONS
NEW DELHI

CONTENTS

			PAGE No.
CHAPTER	I	Introductory	1—5
CHAPTER	II	Iron ore export	6—9
CHAPTER	III	Orissa State	
		Introduction	10
		The Port of Paradip	11—17
CHAPTER	IV	Andhra Pradesh	
		Introduction	18
		The Port of Kakinada	19—22
		The Port of Masulipatnam	22—25
CHAPTER	V	Madras State	
		Introduction	26
		The Port of Cuddalore	27—30
		The Port of Nagapattinam	30—33
		The Port of Tuticorin	33—50
CHAPTER	VI	Kerala State	
		Introduction	51—52
		The Proposed New Intermediate Port at Neendakara	52—56
		The Ports of Kozhikode and Beyfure	56—60
CHAPTER	VII	Mysore State	
		Introduction	61—62
		The Port of Mangalore	62—85
		The Port of Karwar	85—89
CHAPTER	VIII	Bomby State Maharashtra Region	
		Introduction	90
		The Port of Redi	90—92
		The Port of Ratnagiri	92—94
CHAPTER	IX	Bombay State (Gujerat Region)	
		Introduction	95—96
		The Port of Surat	96—98
		The Port of Broach	98—101
		The Port of Bhavnagar	101—106
		The Port of Veraval	106—109
		The Port of Porbandar	109—113
		The Port of Okha	113—121
		The Port of Bedi	121—124
CHAPTER	X	Allocation of Priorities Amongst Different Ports	125—124
CHAPTER	XI	General	128— 129
CHAPTER	XII	Summary and Recommendations	130— 147

APPENDIX	I	Questionnaire	145—147
APPENDIX	II	List of addresses to whom the Questionnaire was sent by the Committee	148—152
APPENDIX	III	A. List of State Governments and officials from replies to the Questionnaire of the Committee were received	153
		B. List of the Chambers of Commerce and Industry etc. from whom replies were received by the Committee to their Questionnaire	153—154
		C. List of persons/parties from whom Representation and Memoranda, were received by the Committee.	154—156
APPENDIX	IV	The itinerary of the Intermediate Ports Development Committee	157
APPENDIX	V	List of individual persons/parties with whom the Intermediate Ports Development Committee had discussion	158—170
APPENDIX	VI	List of Chief Minister, Ministers with whom the Committee had the honour to meet and discuss	171
APPENDIX	VII	Existing facilities at the ports	172—193
APPENDIX	VIII	Tonnage of imports and exports at the various ports from 1950-51 to 1959-60	194—213
APPENDIX	IX	Number and nett registered tonnage of steamers and tilling craft which visited the various ports	214—220
APPENDIX	X	Recommended development of the various ports and priorities at each works port	221—240
APPENDIX	XI	Cost of transport of iron ore F.O.B. Paradip Port	241
APPENDIX	XII	The Economics of Port Development at Paradip for handling 5,00,000 tons of iron ore per annum.	242—243
APPENDIX	XIII	Economics of the Scheme for development of Cuddalore Port for handling 5,00,000 tons of iron ore, 50,000 tons of general cargo and 1,00,000 tons of coal	244
APPENDIX	XIV	Estimate for the development of Tuticorin into a 30 ft. harbour with four alongside berths, two for coal, one for salt and one for general cargo	245—247
APPENDIX	XV	Economic of development of a 30 ft. harbour at Tuticorin with four alongside berths, two for coal, one for salt and one for general cargo	248—249
APPENDIX	XVI	A. The break up of cost for handling one ton of ilmenite sand at Kollthotam as supplied by the State Government	250
		B. Annual fish landings at Neendakara from 1955 to 1958	250
APPENDIX	XVII	The economics of port development at Neendakara for a traffic of 4 lakh tons per annum consisting of 3 lakh tons of ilmenite sand, 50,000 tons of cashewnuts and 50,000 tons of general cargo	251—252
APPENDIX	XVIII	A note prepared by the Managing Director, State Trading Corporation of India on the possibilities of iron ore exports in the future	253—264
APPENDIX	XIX	Estimated cost per ton of handling ilmenite sand through the proposed port at Neendakara	265
APPENDIX	XX	Statement of shoals in the Tapti River	266
APPENDIX	XXI	Statement showing shoals in the Narwada river as obtained from the longitudinal survey carried out in 1959.	267

(iii)

APPENDIX	XXII	The transportation charges per ton on soda ash and caustic soda from Mithapur to different port towns by the all rail and sea routes	268
APPENDIX	XXIII	Estimate for the development of an all weather harbour for 34 ft. steamers at Mangalore with three alongside berths two for general cargo and one for ore fully modernised	269-273
APPENDIX	XXIV	The economics of developing an all weather port at Mangalore for 34 ft. draft steamers with 3 alongside berths	274-275
APPENDIX	XXV	The transport cost of iron ore F. O. B. Karwar Port from Hospet	276
APPENDIX	XXVI	Note of Dissent by Shri H.P. Oza on I.P.D Committee Report of April 1960 & agreed to by Shri G.G. Thakkar	277-28
APPENDIX	XXVII	The Note of Dissent by Dr. C. R. Krishnamoorthy	281

List of Drawings

Drg. No.

IPDC/1	Map of India showing the ports studied by the Committee with road, railway and I.W.T. links thereto.
IPDC/2	Paradip Port Development—Plan showing various past proposals for development of Paradip into an all weather port and a new scheme of development with location plan as inset.
IPDC/3	Kakinada Port Development—plan showing Kakinada Bay with past and present soundings existing port facilities, proposed port development and location shown in inset.
IPDC/4	Masulipatnam Port—Plan showing existing port facilities and proposed port development.
IPDC/5	Cuddalore Port Development—Plan showing existing layout and proposed improvement to the bar as insets.
IPDC/6	Nagapattinam Port Development—Plan showing existing port facilities and proposed port development with location plan as inset.
IPDC/7	Tuticorin Port Development—Plan showing past proposals and new proposal for a major port development with hinterland of Tuticorin Harbour as inset.
IPDC/8	Tuticorin Port Development— Plan showing borings and location of borings.
IPDC/9	Tuticorin Port Development—Plan showing detailed layout of port development and cross sections of breakwaters.
IPDC/10	Proposed Port Development at Neendakara—Plan showing port development at Neendakara and the Location plan as inset.
IPDC/11	Beypore Port Development—Plan showing proposed development at Beypore with location plan as inset.
IPDC/12	Kozhikode Port Development—Plan showing existing facilities and proposed Port Development with location plan as inset.
IPDC/13	Mangalore Port Development—Plan showing the hinterland of an all weather port at Mangalore with proposed Mangalore-Hassan railway link.
IPDC/14	Mangalore Port Development— Plan showing existing port facilities and proposed development thereto with inset showing past and present soundings off Mangalore.
IPDC/15	Mangalore Port Development—Plan showing development of Mangalore into an all weather port, boring details and location plan as inset.

- IPDC/16 Mangalore Port—Plan showing the detailed layout of approach channel, breakwaters, turning basin and berths for an all weather port and detailed cross sections of breakwaters.
- IPDC/17 Plan showing Karwar harbour—with past and present soundings and rock levels with locaron plan as inset.
- IPDC/18 Karwar Port—Plan showing existing port facilities and proposed port development and rock levels in the port area.
- IPDC/19 Redi port—Plan showing existing port facilities and proposed port development at Redi Port with location plan as inset.
- IPDC/20 Ratgagiri Port Development—Plan showing Ratnagiri and Mirya Bays, existing port facilities and proposed port development.
- IPDC/21 Surat Port Development—Plan showing proposed development at Magdala and location plan as inset.
- IPDC/22 Broach Port Development—Plan showing existing port facilities and proposed development with location plan as inset.
- IPDC/23 Plan showing existing port facilities and proposed port development at Port of Bhavnagar “Concrete Jetty” area.
- IPDC/24 Veraval Port—Plan showing existing port facilities and development at Veraval with locaton plan shown as inset.
- IPDC/25 Porbandar Port—Plan showing existing port facilities and proposed port development at Porbandar Port with location plan as inset.
- IPDC/26 Sikka Port Development—Plan showing existing port facilities and proposed port development at Port Okha with location plan as inset.
- IPDC/27 Sikka Port Development—Plan showing existing port facilities and proposed port development with location plan as inset.
- IPDC/28 Bedi Port—Plan showing existing port facilities, approach creek proposed port development with location plan as inset.
-