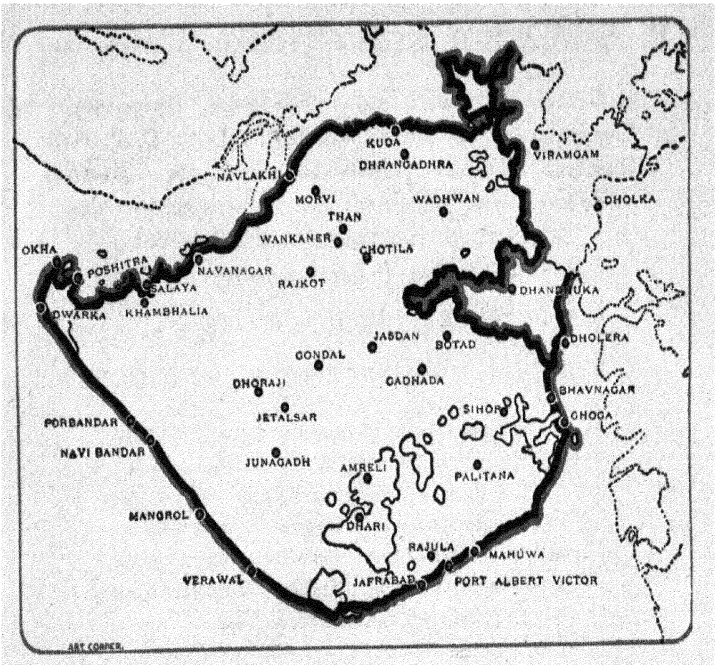
DAMAGE BOOK
TEXT FLY WITHIN
THE BOOK ONLY

UNIVERSAL
LIBRARY

OU_154415

UNIVERSAL
LIBRARY

KATHIAWAR ECONOMICS



Map showing the Regional Background of Kathiawar

KATHIAWAR ECONOMICS

BY

A. B. TRIVEDI, M.A., B.Com., (Banking & Accounting);

Prefect, University Hostel; Research Scholar, University School of Economics and Sociology; Member Professor C. N. Vakil's Economic Seminar; Investigator, N. D.: Bombay Economic and Industrial Survey Committee; and Lecturer in Economics and Geography, Khalsa College, Bombay.

AUTHOR OF

STUDIES IN GUJARAT ECONOMICS SERIES:

(1) The Gold Thread Industry of Surat, (2) Wood Work and Metal Work of Gujarat (Radio Talk), (3) Fire Works of Gujarat (Radio Talk), (4) Plight of Handloom Industry in Gujarat (Memorandum submitted to the Handloom Fact Finding Committee), (5) The Washers Manufacturing Industry of Gujarat, etc., etc.

★

1943.

First Published : January 1943

Printed by Mr. R. R. BAKHALE, at the Bombay Vaibhav Press,
Sandhurst Road, Bombay 4, and
Published by Prof. A. B. TRIVEDI, M.A., B.COM.,
Khalsa College, Bombay 19.

To

LATE SHETH HARGOVANDAS JIVANDAS, J. P.

Late Sheth Hargovandas Jivandas, J.P. who rose to high eminence by sheer hard work and abilities. Born of poor parents and though deprived of the chances of taking University Education, this great industrialist of Kathiawar, showed remarkable business acumen from his early life. He rose with occasions and opportunities and led a very successful life. His life will be a fountain of knowledge, revealing the fruits of patience, perseverance and forbearance, to the future generations. Born in 1874, he died at the age of 68 in 1942. A short sketch of his career appears in

SHORT SCETCH OF THE CAREER OF LATE SHETH HARGOVANDAS

Sheth Hargovandas Jivandas, J. P., was born of poor Kapol Bania parents at Talaja (Kathiawar) in the year 1874. He received no education and he had to earn his bread at a comparatively young age of 17.

His patience, perseverance and abilities soon brought him luck. At the age of 30 he was taken as a partner by Messrs. Kedal Bros., dealing as brokers of Seeds and Cotton. Later he was appointed as a sole Cotton Broker to Messrs. Forbes, Forbes Campbell & Co. Ltd. This brought him many opportunities by which he could amass riches. He soon became one of the leading businessmen of Bombay.

In 1932 he started the Mahalaxami Mills Ltd. at Bhavnagar with a capable manager—Sheth Bhogilal Maganlal to assist him. The Mills commenced working in June 1933 and the successive years brought huge profits to the Mills, so much so that not only the Company became financially strong, but it also became possible to reduce the capital year by year by returning the same to the shareholders, with the result that the face value of the share of the Company at present is only Re. 1, while the present market value of the share is Rs. 900. This fact by itself speaks volume for the capable management and the far sighted policy pursued by Sheth Hargovandas and his Manager.

With such a remarkable rise in his career Sheth Hargovandas could at once realise the grievances of the poor. Henceforward he began to identify himself with every good cause and he made many munificent donations during his lifetime. He started giving-'Sadavrat' in Bombay and set apart Rs. 25,000 for this purpose; he built a Dharmashala at Trimbakeshwar at a cost of Rs. 25,000; he donated Rs, 25,000 for erecting buildings for a Nature Cure Hospital at Malad; he donated Rs. 25,000 for erecting a Boarding House at Bhavnagar, and, further donated Rs. 10,000 for its maintenance; he set apart Rs. 35,000 for erecting a Dharmashala and 'Anna Kshetra' at Talaja: he also donated Rs. 10,000 for building a School at Talaja; he paid Rs, 10,000 to Bombay Municipality to erect a Band Stand at Victoria Gardens.

Thus with his growing desire to serve every just cause he went on taking leading part in the public affairs and he was a trustee in a number of Charitable Institutions in Bombay.

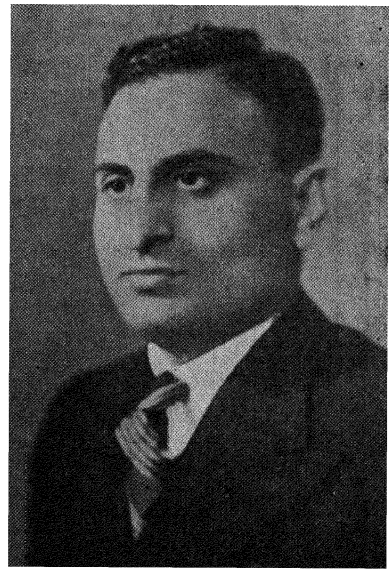
Very recently, before his death, he donated a liberal amount of Rs. 32,000 establishing a Maternity Home at Bhavnagar in the memory of his beloved wife—Bai Harkorebai—who died in the year 1941. This maternity home is named Harkorebai Maternity Home, and this Home is a great boon to the citizens of Bhavnagar.

Sheth Hargovandas was a leading member of East India Cotton Association Bombay, Bullion Exchange Bombay, Native Stock and Share Brokers' Association Bombay, and, Bharat Vidya Bhuvan Bombay.

In addition, he also founded and was a Director of the New Mahalaxmi Silk Mills, Ltd., Bombay; and he was a Director in: the Navsari Cotton Silk Mills, Ltd., Dhrangadhra Chemical Works, Ltd., and, Udvada Vapi Electric Supply, Co., Ltd.

In 1941 Sheth Hargovandas started the Master Silk Mills at Bhavnagar in partnership with his manager Mr. Bhogilal. As Sheth Hargovandas was failing in health, his son Sheth Dharamdas was now required to shoulder all the responsibilities and in this he proved to be equally capable as he discharged his duties with the same remarkable zeal and capacity.

Sheth Dharamdas, born in December 1911, and, educated at Elphinstone High School, Bombay, joined his father's business at an early age of 20. By his training under such a capable hand like his father's, Sheth Dharamdas has been able to show very remarkable capacity in managing all the concerns at this his young age. Besides he has established the New Mahalaxmi Silk Mills, Ltd., at Bombay, and he is working as its Managing Agent. He is also the Managing Agent and a Permanent Director of the Mahalaxmi Mills, Ltd., Bhavnagar; Director in Navsari Cotton and Silk Mills, Ltd; and in the Master Silk Mills Ltd., Bhavnagar. Sheth Dharamdas takes keen interest in riding and is a good horseman. He also takes regular exercises, and possesses a well-built body.



Sheth Dharamdas Hargovandas

Like his father he is also taking keen interest in the public affairs and he is a trustee of the institutions like Badri Narayan Dharmashala, Sheth Narandas Devidas Charitable Trust, Sheth Ranchhodji Valji Charitable Trust, Devkorbai Charitable Trust.....

I am highly indebted to Sheth Dharamdas for assisting me in publishing this work, which is bound to be very useful especially to the industrialists and the administrators of Kathiawar.

A. B. TRIVEDI,
Author.

FOREWORD

Mr. A. B. Trivedi's book " Kathiawar Economics " fills a notable gap in the industrial and economic organisation of the country, by supplying a careful survey of the industrial and economic resources of Kathiawar. Not only this, the book provides a basis for industrial and economic planning by the administrators as well as the industrialists.

Mr. Trivedi carried out his researches for writing this book for some 5 or 6 years, and has travelled in every part of Kathiawar, and has made extensive inquiries and gathered the material from the written State Records, as well as by issuing questionnaires to the various classes of people. The book is, therefore, a result of great labour and cost; and Mr. Trivedi has successfully handled the subject with the skill of a research scholar.

His masterful analysis of the possibilities of a fully developed economic and industrial life in Kathiawar is the most notable part of the book and it is hoped that the States' Administrators will take full advantage of Mr. Trivedi's valuable suggestions.

Agriculture is the most vital occupation in Kathiawar, even though the countryside is not blessed with very good rainfall. Mr. Trivedi is to be congratulated for bringing out this point forcefully and also for stressing the need of developing it in an adequate and efficient manner.

The writer belongs to, and has been brought up in Kathiawar, that is why he has been able to treat the subject with such an intimate knowledge of facts. This adds greatly to the value of his survey.

MOHANLAL T. PARIKH, B. COM.

1st January 1943.

Manager, Bullion Exchange Branch
Bank of India Ltd., Bombay.

PREFACE

The dislocation in the spheres both monetary as well as industrial as a result of the post-war boom and the world depression gave rise to a new way of economic thinking which recognised an absolute necessity of a well planned economic order. Every sane economist admitted that in matters of production as well as distribution a planned scheme was a prime requisite for the revival of the international trade and commerce. Unemployment of able-bodied persons as a result of the depression was facing every nation and was a phenomena with which the various States were hitherto unfamiliar. The decline in trade and industry had adversely affected the agriculture and even here the prices of raw materials had reached a rock-bottom stage. The economists everywhere tried to find out the root cause of this depression, and though different causes were attributed to it by different economists, almost all were unanimous in recognising the need for a planned economy.

Even in India Dr. Sir M. Visveswaraya gave out a ten years scheme for the development of Indian Industries.

In Kathiawar, the post-war period gave a new fillip to its industrial activity. The removal of the Viramgam Cordon in 1917 and the recognition of the maritime States' right to develop their ports were instrumental in bringing about a haphazard growth of industries within the province. The maritime States turned their attention towards the development of their ports, and huge expenditures were incurred by them for the said purpose. By dint of their natural position, the cheapness of labour, and, the availability of further facilities, the Kathiawar ports were able to divert a great share of the foreign trade of India towards them from the British Indian Ports. The development of the

ports brought in its train the existence of new industrial concerns within the province. But the greatest drawback of this new development was that, there was neither co-operation, nor a desire for a concerted action, among the various maritime States of Kathiawar. Each one tried to pull in its own direction and each strived for the development of industries within its own territories. This unhealthy rivalry led to the existence of a most vicious system of Inter-State tariffs which were detrimental to the best interests of the province as a whole. Under these circumstances, when individualistic tendencies of the States have become rampant in the sphere of economic activities, it was thought necessary to have the problem of industrial development of Kathiawar surveyed on a scientific basis. No such survey had been undertaken or attempted before, and the need was greater, looking to the new tendencies in economics visible in other parts of the world. Every country tries to develop its natural resources and strives for the development of its own industries and it is just a matter of economic expediency vital to its own existence, that Kathiawar should also try to follow the foot-steps of other nations in the direction of industrial advancement.

But an economic survey of such a problem on a scientific basis always pre-supposes the existence and the availability of statistical and other informations concerning the same. Unfortunately in Kathiawar, its political conditions, and, the existence of some two hundred States with independent jurisdictions, make it impossible for a research worker to gather information of an all embracing character. Only few of the major States publish Administration Reports; and, even these are in some cases devoid of any valuable information concerning the economic problems confronting the States. No State Administration Report, for example,

gives the yield per acre of any crop within the State's territories, neither does it state the number of industrial concerns within the State employing more than 20 persons, and, the total number of persons employed in such concerns. Only three or four States possess the geological surveys of their territories. In matters of population statistics, although there is a Census Volume, yet it covers all the areas comprised under the Western India States' Agency. For the purposes of Kathiawar proper, therefore, statistics relating to States like Cutch, Radhanpur and Palanpur had got to be omitted and those concerning the districts of Amreli and Okhamandal had got to be included.

In order that the problem under investigation may not suffer from a superficial treatment or may not remain far away from the actual state of affairs, an extensive tour of the province was undertaken for gathering first-hand information and necessary data. Opportunity was also taken, while on the tour, to discuss the problem of industrial development with the high officers of the States, as well as, the prominent businessmen, to understand and grasp their respective points of views concerning the same. An exhaustive questionnaire dealing with the problem from all angles was issued, and, copies of the same were despatched to more than 250 people comprising the political leaders, the social workers, the States' Officials, and, the business people. Though co-operation was not received to an expected standard or degree, yet whatever replies were received, they were both informative as well as suggestive. They clearly indicated the direction in which the wind was blowing.

A word, therefore, regarding the scope of the present work will not be considered as out of place. The problem tackled in the following pages is that of the Industrial

Development of Kathiawar, with special reference to its Natural Resources and Geographical Position. In Chapter I survey of Kathiawar's geographical position, its rivers and mountains, its climatic conditions, etc., has been effected.

Then the survey of the natural resources like minerals and forests is attempted. As for the minerals, it should however be remembered that, no up-to-date or proper geological survey of the province is available, and, the necessity of such a survey cannot be over emphasised. For the forests, the need for afforestation policy, and, of the plantations of trees, is already brought home to us while surveying these resources. Chapter III deals with the economic importance of coastline to this province. While Chapter IV tackles the population problem with a view to have a correct perspective of the existing situation regarding the occupational returns and other correlative things. Chapter V relates to the agriculture in Kathiawar and it gives us an idea of the position that agriculture occupies in the economic life of this province, its backward state, and, the apathetic attitude of those in power towards this main occupation of the province.

Thereafter in Chapter VI a survey of the existing industries is attempted. All the industries large as well as small, have been surveyed. In Chapter VII the history of the development of the existing industries has been traced with particular reference to the part played by the transport facilities. Chapter VIII emphasises the need for a transport co-ordination in this province. For the transports play important role, in (i) opening up new markets, (ii) bringing about easy flow of goods and labour, (iii) developing greater social contact and, in short, (iv) in the rise and growth of towns and factory life.

Chapter IX refers to the political conditions as prevailing

in Kathiawar and also to the rise and growth of Inter-State tariffs.

Chapter X deals with the tariff policy of Great Britain and its effects on the industrial advancement of Kathiawar. This is analysed with particular reference to the free trade policy, and, also the imposition of Viramgam Cordon.

Chapter XI reveals to us the possibilities of developing village industries in Kathiawar. Here, it is revealed that the lack of co-operation on the part of the Kathiawar States hampers the growth of these industries. Hence various schemes are suggested to develop these industries.

In Chapter XII the scope of new industries in this province is visualised from the points of view of (1) raw material, (2) labour and (3) capital. However, the development of these industries require (1) free markets, (2) democratisation of the States' administrations and (3) the spirit of co-operation. Hence, even when there is good scope for some large scale industries in this province, they still mark time.

The work thus deals with the question of industrial development in relation to the economic resources of the province. It will not be too much to assert that the present work is a pioneer one in the direction of a closer study of the economic problems confronting Kathiawar. In it are assimilated all the relevent facts and figures concerning the various problems, and it is hoped that, it will supply the long felt need of an authoritative study of Kathiawar's economic problems.

In the end, I would like to point out that, for the easy grasp of the laymen, and for further illustrating the points raised by me in this volume, Maps, Diagrams, Graphs, etc. were ready at my disposal. But they could not be inserted in this edition, because of the prevailing high price of paper, and, especially of art-paper. The question of cost has definitely come in the way of such considerations.

However, I hope to remedy all the above defects in my revised edition, which I hope to bring out in the near future. In that revised edition, I also guarantee additional statistics to lend more weightage to my discussions on the economic and industrial problems relating to this province. If possible, I also want to throw more light on the working of (i) the Inter-State tariffs and (ii) the Viramgam Cordon with special reference to the Trade and Industries of Kathiawar. But, in this connection, official co-operation is essential. Some small industries, which so to say, are the peculiarities or the specialities of some centres in Kathiawar, like 'Kum Kumia', Crucibles Making, etc., will find due place in that revised edition. Industrial Banks, there are none in Kathiawar, while the Co-operative Movement is still in its infancy. However, I intend to devote special chapters to the rise and growth of (i) Banking and (ii) Co-operative Movement in this province, with a view to stress the importance and urgent need for their development.

In the meanwhile I acknowledge my indebtedness to Sjt. Navalchand T. Shah B.A., the prominent Stock Broker of Bombay, and, Sjt. Mohanlal T. Parikh, B. com., Manager, Bullion Exchange Branch, Bank of India, Ltd., Bombay. But for their keen interest in my work, it would not have been possible for me to lay before the readers my work so soon. I am also happy to note that in publishing this work financial help is given to me by the industrialist of Kathiawar.

I am also indebted to the Bombay University and the Gujarat Research Society for allowing me to incorporate in this work the material which I contributed in the form of articles on the economic and industrial problems of Kathiawar in their respective Journals.

Khalsa College, Bombay,
January, 1943.

A. B. TRIVEDI.

CONTENTS

		PAGES
FOREWORD		vii
PREFACE		ix
CHAPTERS:		
I	Regional Background	1
II	Mineral and Forest Resources	13
III	Coastline	25
IV	Human Element	48
V	Agriculture	78
VI	Industries	117
VII	Transports	179
VIII	Need for a Transport Co-ordination	197
IX	Repurcussions of Political Conditions on the Industrial Advancement:—Rise and Growth of Land Customs	218
X	Repurcussions of Political Conditions on the Industrial Advancement:—(*continued*):—Rise and Growth of Sea Customs	240
XI	Village Industries: Schemes for Their Development.	265
XII	Industrial Scope	299
XIII	Conclusions	323
APPENDIX—TABLES		337
QUESTIONNAIRE		365
BIBLIOGRAPHY		367
INDEX		376

CHAPTER I

REGIONAL BACKGROUND

PHYSICAL FEATURES

Situation:—Kathiawar, as peninsular Gujerat is called, lies on the west coast of India, between 20.40 and 23.25 north latitude and 69.5 and 72.20 east longitude.

The peninsula has an area of about 23,500 square miles. It is a square peninsula standing boldly out into the Arabian Sea between the smaller projection of Cutch and the straight line of the Gujerat Coast.

Boundaries:—The Province is bounded on the South and South-west by the Arabian Sea, on the North-west by the Gulf of Cutch and on the east by the Gulf of Cambay.

From the apex of these two gulfs the 'Rans' of Cutch and Cambay, waste tracts half salt morass half sandy desert, stretch inland towards each other and complete the isolation of Kathiawar except one narrow neck which connects it on the north-east with the main land of of Gujerat.

Mountains:—Most of the Kathiawar hills belong to one of the two systems which, running north-east and south-west, form irregular chains, crossing the country in nearly parallel lines.

Among the noteworthy hills of the northern series may be mentioned Kandola, near Than, renowned as the site of an ancient temple to the sun ; the hill of Chotila, a conical mass rising about 500 feet above the surrounding country, and 1173 feet above sea level; the Gop hill at the northern end of the Dhank group, famous for the asceticism practised on its summit in ancient times; the Alech range at the southern extremity of the same group, including the heights overlooking the ancient city of Tillatila Pattan, Mungi Pattan, or Revas Pattan, and other hills overlooking the

Buddhist caves of Sidhsar and the Jhinjhuri ravine; and, lastly, the temple-crowned peaks of the Abhpura, the highest point of the Barda mountains, overlooking Ghumli the ruined capital of the Jethvas, where in 1859, the Okhamandal Vaghers in retreat from Dwarka, were scattered by a force under Colonel Honner.

Among the specially interesting hills of the southern series are the Girnar, anciently Ujayanta and Raivata, famous for the Jain temples on its summit and the inscriptions of Maurya, Sah, and Gupta Kings carved on a granite boulder near its base; Shatrunjaya or Palitana hill crowned with magnificient Jain temples; Nandivelo and Tulsi Shyam hills of the Gir, the former a well-known landmark for sailors, the latter containing a noted shrine and hot spring reckoned as one of the most sacred spots in the province; and the hills of Talaja, Lor, and Sana famous for their Buddhist Caves.

On the south bank of the Bhadar and scarcely to be included in either the northern or the southern series, is the isolated mass of the Osham, a rocky hill about 1C00 feet high, just nearly opposite the town of Ganod.

Beyond the Shatrunjaya and Lonch hills are two ranges rising abruptly to the heights of 1500 and 2000 feet respectively, called the Lamdhar and Khokhra hills, which carry on the direction northward towards the neighbourhood of Sihor, where they sink within the sight of the waters of the gulf of Cambay.

Rivers:—The two belts of hill country that cross the breadth of Kathiawar constitute two distinct water partings, and from them, as well as, from a narrow stretch of table land, which occupies the centre of the province and form the connecting link between them, flow all the rivers and streams, by which the peninsula is drained. At first swift and clear, gliding along rocky channels between steep banks, these rivers flow from the inner of the two hill

tracts, outward to all points of compass, and winding sluggishly through the low lying lands of the sea board enter the sea at points nearly opposite the slopes where they take their rise.

Though during the south-west monsoon they pour seaward in turbid floods, the Kathiawar rivers are of inconsiderable size.

Among them are nine leading streams, the Bhadar, Shatrunji, Machhu, Aji, Bhogawas, Sukhbhadar, Keri, Ghela and Kalubhar.

The following streams meet the river Bhadar during its course viz., Karmal, Vasuvdi, Gondali, Utawali, Phophali, Moj, Vinu and Ojat.

Shatrunji during its course receives the following streams; Satali, Singavadi, Gagadia and Gagaria.

Machhu with her course of 70 miles flows under the walls of Vankaner and Morvi into the 'Ran of Cutch' at Malia. In the earlier sections of its course it is remarkable for its rocky channels and rugged precipitious sides. It loses itself in the salt, sand and mud of the gulf of Cutch.

The Aji flowing under the walls of Rajkot receives the united streams of Dhondi and Niari and after a course of about 60 miles falls into the gulf of Cutch near Balambha.

The Wadhwan and Limbdi Bhogawa with courses of about 70 miles rise near each other in the hills about Chotila, and flow eastward in broad sandy shallow channels, under the walls of Wadhwan and Limbdi respectively, losing themselves in the sand and silt of the Nal or 'Ran of Cambay'.

The Sukhbhadar flows to the east, passes the town of Ranpur and enters the 'Ran of Cambay' near its junction with the gulf.

The Keri, the Ghela and the Kalubhar are similar in size and character to the three last mentioned rivers. They

flow east from the central highlands and meet on the coast, forming the tidal creek which enters the gulf of Cambay near the town of Bhavnagar.

Of small streams are the Und, flowing to the gulf of Cutch at Jodia, the Demi flowing under the walls of Tankara; the Bambhan rising near Than and the Fulka flowing past Dharangadhra, all losing themselves in the 'Ran of Cutch'; and the Malan, Machundri, Dhatar vari, Singavada, and the picturesque Raval, all rising in the hills of the greater and Lesser Gir, and flowing south to the Arabian Sea.

To these may be added the Hiran and Saraswati near Somnath.

Lastly may be mentioned the Uben and the Ojat which meet the Bhadar a little above Navibandar where it falls into the sea. Besides these there are the Nagmati which rises in the hilly country 30 miles south of Jamnagar, the Nani and Moti Phuljhar and the Manvar.

The above sketch inspite of its detailed survey still leaves many of the smaller streamulets out of its purvey, among which may be mentioned Rangamati, Ramavati, Minsar, Chhaparwadi, Beti, Rupa Rel etc. It should however be mentioned that rivers of Kathiawar play very insignificant role as transport carriers for none of them are navigable.

Lakes :—The province being under the control of the small feudatary chiefs was subjected to a continuous reckless series of homicidal wars with the consequent result that no ruler or no chief was able to divert his attention to the greater problems of State development like Irrigation.

People were living under a continuous threat of unstable Government and were content with what Nature had afforded them. Not a single step was taken until recently

towards the well-planned irrigation scheme and not a single state could boast until recently of a beautiful lake.

Every village had a small tank or a reservoir for storage of rain water and such reservoirs were the only lakes that were in existence until recently.

With the gradual development of economic activities and consequent expansion of trade and commerce few of the leading States became interested in developing well-planned irrigation schemes.

The following is the list of big tanks and reservoirs situated in various states :—

Lakes	Situation	State
Paneli	Paneli	Morvi
Irrigation Tank	Ramdhari	Bhavnagar
Manhar Talao	Bhimdad	,,
Gaurishankar Lake	Bhavnagar	,,
Khodiar Reservoir	Khodiar	,,
Dam (Under construction)		
Adhia Tank	Atkot Taluka	Jamnagar
Hanstahal	Khambhalia Taluka	,,
Vinjarkhi	Panch Koshi ,,	,,
Keshia	Jodia Taluka	,,
Ranjit Sagar Dam (under construction)	Jamnagar	,,
Khodia Tank	Junagadh	Junagadh
Chamundri Tank	,,	,,
Bhavnath Tank	,,	,,
Willingdon Dam	,,	,,
One Lake	Gondal	Gondal
,, ,,	Paneli	,,

It may be noted here that most of the tanks were constructed when relief works were opened during the great famine to give relief to the famine-stricken areas.

How far the big dams and the lakes constructed by the States are useful and instrumental in furthering the progress of agriculture will be discussed later on in Chapter IV on 'AGRICULTURE'.

CLIMATIC CONDITIONS

The climate of the peninsula is in general pleasant and healthy. January, February, and March are marked by heavy dews and thick fogs. These fogs which are more common inland than on the coast and which are generally followed by very hot days, form at day break and are dispelled by the sun at about nine. They are not unhealthy.

The hot weather begins in April and lasts until the rain falls about the middle of June. The hot wind blows in various degrees in different parts and is hottest in the south. The hot weather months (April to June) are the healthier in the year. There is always a cool light breeze.

The rains generally begin in force at the first change of the moon in July and are spent by the 15th of 'Shravan Sud' (August–September). Unlike other parts of Gujerat the rains are never severe and grow lighter towards the west. Except that slight fevers prevail in July, no disease is specially prevalent between July and September. From the end of September the climate undergoes a change and becomes unhealthy. In September and October the heat of the sun is actually felt though the weather is cloudy. The latter part of November and the whole of December are in all respects like January.

In the hottest weather the thermometer is seldom about 110° in the shade, although generally between 102° and 104°. In the cold season it is seldom or never below 42°.

*TEMPERATURE

States	27–28.	28–29.	29–30.	30–31.	31–32.	32–33.	33–34.	34–35.	35–36.	36–37.
Palitana	110°/50°	112°/41°	114°/48°	114°/52°	116°/54°	110°/50°	110°/45°	111°/39°	111°/55°	109°/44°.
Lathi	109°/60°	112°/48°	116°/58°	114°/58°	118°/59°	110°/56°	112°/50°	111°/47°	112°/58°	111°/54°.

Okha Maximum average during last ten years 84°.5F and minimum average of last ten years 67°.34.

Jetpur	114°/50°	108°/52°	110°/40°	106°/42°	106°/58°	112°/58°	108°/54°	110°/46°	110°/38°	108°/58°.
Amreli	108°/36°	111°/32°	112°/36°	112°/48°	115°/50°	112°/55°	111°/39°	113°/35°	112°/35°	111°/39°.
Junagadh	113°/50°	114°/43°	116°/52°	116°/56°	113°/58°	107°/58°	112°/52°	112°/48°	113°/54°	110°/50°.
Jasdan	110°/56°	104°/46°	110°/58°	110°/56°	114°/58°	105°/52°	108°/45°	111°/42°	110°/52°	106°/54°.

Chuda:—Average maximum and minimum during last ten years is 112°.5/50°.8.

Bhavanagar	92°.3/76°	93°/85°	89°/82°	91°/76°	89°/78°	88°/77°	89°/77°	89°/75°	90°/76°	88°/74°.
Jafrabad	86°/82°	84°/80°	84°/80°	92°/67°	92°/72°	95°/59°	92°/69°	91°/65°	90°/70°	90°/70°.
Sayla	110°/56°	113°/54°	112°/48°	112°/52°	114°/58°	114°/56°	116°/53°	116°/50°	114°/50°	117°/54°.

* Figures received from the Chief Medical Officers of the States concerned.

If we take certain factors into consideration as our guiding principles, we can certainly to a greater degree define the exact climatic conditions. Mr. L. Dudley Stamp, B.A., D.SC., (London), in his "Concise Geography of The World" mentions the following factors for the consideration of the Climate.

(1) Latitude or distance from the Equator.

(2) Altitude or height above Sea Level.

(3) Distance from Sea.

(4) Prevailing winds.

(5) Ocean Currents.

(6) Position and direction of mountain ranges.

(7) Nature of Soil.

and (8) Vegetation.

Judging from these factors we can safely describe the climate of Kathiawar as what Mr. Stamp says "The Monsoon Climate". By "The Monsoon Climate" is meant the existence of the cool season with little rain from November to January; with hot season from March to June; and rainy season from June to October. He calls it by another name of "Summer Rain's Climate" for the rain falls in the summer of the year and makes it cooler.

RAINFALL 1925—26 to 1935—36.

State.	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33	33-34	34-35	35-36	Average.
Morvi ...	—	—	—	—	20.5	22 36	18.18	18.79	28.80	—	—	21.72
Nawanagar ...	10.8	25.9	31.7	11.2	35.8	23.3	—	25.93	34.89	15.35	25.97	24.08
Okhamandal ...	8.36	21.63	13.96	19.65	10.16	15.09	13.08	20.91	33.97	12.32	—	16.91
Porbander ...	35.6	33.70	12.75	28.22	29.98	9.57	—	23.71	41.29	16.59	26.33	25.77
Junagadh ...	26.53	72.13	32.6	38.6	18.24	48.28	18.79	50.95	29.87	37.63	—	37.36
Bhavnagar ...	31.60	20.96	20.15	21.1	18.70	24.34	22.30	28.73	17.61	21.50	—	22.70
Limbdi ...	—	—	—	—	—	—	—	—	—	17.82	22.20	20.01
Wadhwan ...	17.21	50.96	29.64	11.6	12.0	12 51	19.54	32.23	8.84	19.91	—	21.44
Dhrangadhra ...	14.75	33.24	—	15.13	16.28	14.24	19.12	14.73	—	—	—	18.21
Muli ...	—	—	—	—	—	—	—	—	—	9.41	23.71	16.56
Rajkot ...	35.32	34.42	26.68	21.65	24.63	18.70	16.80	30.83	18.67	34.96	—	26.26
Gondal ...	—	—	—	—	—	—	—	23.30	35.47	—	—	29.38
Lathi ...	9.17	24.63	21.18	26.83	—	—	—	—	—	—	—	20.45
Amreli ...	11.23	29.71	20.02	21.41	14.60	20.57	15.48	16.10	24.26	12.74	—	18.61
Average ...	20-05	34.72	23.18	21.53	20.08	20.89	17.91	26.01	27.36	19 82	24.55	22.82 23.28

Rainfall:—The above table shows the amount of rainfall at 14 selected stations for a period of eleven years ending 1935–36. It gives a mean average of 22.82 inches.

It is rather a curious coincidence as will be seen from the Table No. I in the Appendix, showing the rain returns from 68 stations in different parts of the province for the 15 years ending 1881, that the mean average during the said period was just nearly 23 inches which exactly tallies with the mean average as given in the table below.

We can safely say that Kathiawar is a peninsula wherein the mean average for a certain number of years never exceeds 30 inches.

The variations in the average rainfall in different centres are due to the working of two different influences, nearness to the south coast which gets the full benefit of the rain-laden clouds and the height above sea level.

The place with highest average rainfall is Junagadh in the south, which is high and at the same time has the full benefit of the rain-laden monsoon clouds.

A further natural coincidence of great interest may be noted from Table No. I in the Appendix which shows the average of eleven places taken in the above table to be 22.81 which is exactly the average as shown in the said table.

Average of eleven places during 1867–1881.

	NAME	AVERAGE
1.	Morvi	21.00
2.	Navanagar	20.00
3.	Porbandar	23.00
4.	Junagadh	38.00
5.	Bhavnagar	26.00
6.	Limbdi	22.00
7.	Wadhwan	18.00
8.	Dhrangadhra	17.00
9.	Muli	16.00
10.	Rajkot	24.00
11.	Gondal	26 00
	Total ...	... 251.00
	Mean Average	... 22.81

Geographical Divisions and Sub-Divisions

The physical features of Kathiawar suggest that it may once have been an island or a group of islands of volcanic origin.

Half way along its northern border stretches a flat desert called the "Ran" which in the rainy season becomes a shallow lake, and in the dry season is bare of vegetation and studded with deposits of salt.

Between Kathiawar and Gujerat mainland a base of salt land with occasional marshes and pulls shows that at one time a channel joined the "Ran" with the Gulf of Cambay, and that the whole northern margin of Kathiawar from the Gulf of Cutch to the Gulf of Cambay was once washed by the sea.

The surface of Kathiawar is everywhere undulating or broken into hills. The highest eminences lie in an arc across the south of peninsula, the loftiest summits from west to east being the 'Barda' which reach 2000 ft., the 'Osham' hill near Dhoraji, the Girnar at Junagadh 3,666 ft. above the sea, and the Shatrunjaya 1,977 ft., North of this arc of hills is a rough tract, lying from South-West to North-East, the highest summits in which do not rise more than 700 or 800 ft., above the sea.

These hills fall away towards the north the last conspicuous eminence being an isolated hill at Chotila 1173 ft., high.

The highest table land in the peninsula is in the centre, from which rivers run towards every side. The surface rocks are limestone in the south and sand stone in the north both of good quality for building.

The higher hills such as the Girnar are granite; the lower hills trap and basalt.

The old and popular division of the province is into ten districts Zalawad in the north-east, Machhu Kantha in the

north, Halar in the north-west, Okhamandal in the West, Barda in the South-west, Sorath and Babariawad in the south, Gohilwad in the South-east, Undsarvaiya in the east, and Kathiawar in the centre.

With no big rivers dividing the mainland and with no chain of mountains sub-dividing the land into various definite portions, it is very difficult to divide the peninsula into water-tight compartments of geographical divisions and sub-divisions.

The sub-divisions noted above though they may not be called strictly geographical divisions, they may be considered convenient as politico-geographical divisions. And even to-day, inspite of the re-shuffling of the various States into several agencies, these divisions remain intact in the minds of the people of Kathiawar. There have been so many shufflings of these divisions for the purpose of general supervision and control that the latest one has come into existence so recently as October, 1924.

This grouping will be discussed later on when we shall discuss the 'Political Conditions of Kathiawar' but it must be noted here that in the absence of any well-defined geographical divisions, we have to rely on those noted above.

CHAPTER II

MINERAL AND FOREST RESOURCES

GENERAL

It has been suggested that in the last resort man is dependent on nature for what he is and what he can be. Without favourable environment however gifted a nation may be, it will not flourish and grow; for man is a part of nature, and his origin, development and efficiency are determined by his surroundings. We already realise that so far as production is concerned man is becoming more dependent on his geographical environment than ever before. Every nation stimulates the production of those articles for which it is best suited. In order to live a fuller and richer life bounties of nature are harnessed by men for the better utilization, and, forces of nature are mastered and directed towards the channels of production.

In the following pages we have endeavoured to survey and arrive at an estimate of the gifts that nature has bestowed upon the land of Kathiawar. For our purpose we shall subdivide the survey into three parts:—

I. Geology of Kathiawar.

II. Developed Mineral Resources.

and III. Forest Resources.

GEOLOGY OF KATHIAWAR

GENERAL

Messrs. Medlicott and Blandford state in their work on 'Geology of India' that the great European sub-divisions of the geological sequence—palaeozoic, mesozoic and tertiary or caenozoic-are ill-adapted for the classifications of the Indian beds. The following table as prepared by them gives

the Indian sub-divisions of geological sequence corresponding to the European sub-divisions.

Caenozoic		Blown Sand.
	Recent & Post Tertiary:—	Modern alluvial deposits of rivers etc. etc.
		Miliolite of Kathiawar.
	Tertiary:—	Sand-Stones, Clays etc. etc.
Mesozoic.		Upper traps and intertrappeans of Bombay.
	Deccan Trap Series:—	Middle Traps, etc. etc.
		Utatur Groups.
	Marine Cretaceous Rocks:—	Bagh Beds.
		Neocomian of Cutch, etc.
	Marine Jurassic Rocks:—	Umia, Katrol Chari and Pancham groups of Cutch Jesalmir limestones etc. etc.
Palaeozoic.		Cutch and Jubbulpore.
	Upper:—	Rajmahal and Mahadina.
Gondwana System.		
	Lower:—	Panchet.
		Damuda
		Karharbari.
	Upper:—	Rewa, Kaimur.
Vindhyan Series:—		
	Lower:—	Karnul, Bhima, Son.
	Upper:—	Galior, Kadapah, etc. etc.
Transition Rocks.		
	Lower:—	Champaner, Arvali, etc. etc.
Metamorphic or Gneissic:—		Gneiss, Granitoid, etc. etc.

The sub-divisions are not always strictly consecutive; some of the marine cretaceous rocks being of the same age as the Deccan traps, and the marine Jurassic beds being contemporaneous with the upper Gondwanas.

In tertiary and post-tertiary times Kathiawar was an Island. The Indus or some other large river, flowed into an arm of the sea, which probably stretched nearly if not quite as far north as Lahore. When the Indus or other river changed its course and entered the sea through the Lesser Ran, Jhalawad was a shallow muddy lagoon connected with the sea both through the gulfs of Cambay and Cutch. During this period the laterite found so universally in Jhalawad was deposited, and the South-western portion of the peninsula may have been connected even at this late epoch with Africa as suggested by Messrs. Medlicott and Blandford. As the western portion of the connecting land area became depressed, this South-western portion of the peninsula seems to have been raised, probably by the volcanic action which forced up the Girnar and Barda ranges and when the Indus left the Lesser for the Greater Ran, Jhalawad gradually emerged with a result that the south-east corner of the inland sea began rapidly to silt. In time the Lesser Ran narrowed to its present size. As the Gulf of Cambay retired rapidly the Bhal district was gradually formed, while the Lesser Ran contracted its limits especially in the south-east corner. When the Indus changed to its present bed Jhalawad became each year more fertile and though now a most excellent wheat and cotton soil, it still partakes of the generally sterile aspects of laterite areas.

Most of the groups of rock that occur in Gujerat are also found in Kathiawar. In the north of the province, especially in Jhalawad, there is a large area of sandstone belonging to the Umia group of Cutch. These Umia beds are of Jurassic age and are the oldest rocks met in the province.

The other beds are the conglomerates which may prove to be tertiary or newer beds of a very bright though somewhat soft laterite are found at Thordi six or seven miles and near Bhandaria about twelve miles South-west of Ghoga.

Of volcanic rocks there are beds of Deccan Trap or homologous beds. With them are the other type of volcanic rocks which in a geological sense seem to belong to the same system of effusion as the Deccan Trap. During the Deccan Trap period, Kathiawar was flooded with Trap flows which gathered to a great thickness. Subsequent denundation considerably reduced and in some parts entirely removed the traps. The fissures of the Deccan Trap period are still conspicuous in the form of dykes, the solidified matter filling the cavities of fissures. These dykes are very numerous, the central of the province being a net work of dykes. Many are of large size forming hill ridges and may be traced for more than twenty miles.

In Central Kathiawar and all round the central system of hills usually called Chotila there have been trap overflows. The Barda hills though rising to a height of 2,050 feet, appear like a vast elevation of trap with no overflow for the adjoining area is covered with limestone. The same may be said of the Alech Range, the Gir, the Lesser Gir or Gohalwad hills, the Shatrunjaya and the Khokhra Ranges. All these are trap and basalt overflows with limestones at their base.

The Osham hills is an isolated block mainly composed of homogeneous trachytic rock.

New tertiary deposits occur between the hill country of the interior and the coast, and formerly overspread almost the entire area, as is proved by the occasional patches and remnants distributed over the plains of the interior. Beyond such scattered and insignificant patches these beds are confined to a belt of country along the

coast, narrowing towards the east to less than a mile but covering a much broader area towards the west. Miliolite limestone occurs in greater or less quantities, almost anywhere except in Jhalawad where sandstones prevail, and in the Bhal.

The variety of newer tertiary known as Piram beds do not seem to occur to any great extent on the mainland.

The Miliolite or the Porbandar Stone is usually seen to rest on a bed of clay, sandy or even conglomeratic towards the base. This stone is a widespread deposit and forms excellent building material. It is largely quarried about twelve miles from Porbandar from which it is shipped to Bombay and other places.

In the North-eastern Kathiawar, on the borders of the Ran, there is a large alluvial tract continuous with the alluvium of Ahmedabad and similar in character. Along the south coast, there is very little alluvium, its place being taken by a calcareous grit with marine shells which is evidently of late formation. According to Messrs. Medlicott and Blandford though the north-western coast of Kathiawar on the borders of the gulf of Cutch does not appear to have been described by any geologist; there is probably a belt of alluvium as there is throughout the coastline of Cutch.

The above survey on the lines of pure geology gives us no definite clue as to the minerals lying below the surface except that Kathiawar is rich in building stones. It is based on the geological sequence and being of purely academical interest takes us no further in the realm of practical economics. What is needed is an all embracing survey of the Economic Geology of Kathiawar. Some of the States have prepared such surveys for the areas within their respective boundaries but no such efforts are made as would take the whole of the peninsula within its compass. However the conclusions arrived at on an

analytical survey on the basis of pure geological sequence help us to compare the various beds of trap, volcanic, tertiary and other origin with those of the similar type found elsewhere in India.

Before we proceed to discuss the developed mineral resources of Kathiawar, it would be quite appropriate to consider the dormant ones which are lying idle and which hold the future possibilities of developments.

Iron:—In 1838 we are informed six iron foundries were in regular work and two or three more were occasionally used. The two principal foundries were at Ranavav ten miles east of Porbandar and at Ranpur in Nawanagar about nine miles south-west of Bhanvad. The foundries were fixed at these places because they were close to the Barda forests. The ore used in the Ranavav foundry was brought from the villages of Bakharla, Palikhra and Visavada. Ranpur was supplied from Ran about fourteen miles west of Khambhalia. But† owing to the absence of coal the scarcity of wood and above all the cheapness of European iron, not one of them is working now. The ore is lying idle. Mr. E. Howard Adye, Director, Geological Survey of Nawanagar State writes:—

"Inquiries have been made from time to time about the iron ore resources of the State of Nawanagar, but it appears that although the laterite area is exceptionally rich in good ore, it would not be profitable on a large scale to export the raw material to the Indian market; so that the only prospect in this connection seems to stand by a revival of the smelting industry on the spot, and the direct supply of "pig iron" to the manufacturing centres. Fluxes are abundant, coal could be reasonably procured, but there is a woeful lack of initiative. Otherwise a good blast furnace at Asota Mota or Bhatia would long since have been established as a tentative test."

† Vide Bombay Gazetteer Vol. VIII page 90.

It is this 'woeful lack of initiative' both on the part of the public and the State that is responsible for the non-utilisation of so rich a field of industrial activity.

With regard to the possibility of iron industry in the Porbandar State the same author remarks:—

"It is not at all probable that the defunct iron industry, at the Bakharla site at all events, will at any future time be revived, though it is commonly rumoured that the smeltings yielded a better quality of iron than the present supply of imported metal. There are other sites, however, belonging to the great lateritic belt, of which the Bakharla site is but a small outlie, where the ore occurs in such profusion, that it would doubtless be commercially possible to erect a few small blast furnaces and keep them profitably active."

As regards other metals, about 1818 according to Captain MacMurdo, small quantities of gold dust were found in the bed of the Aji River which flows under the walls of Rajkot. In 1841 according to Captain (afterwards Sir) George Le Grand Jacob, gold in minute quantities was said to be obtained by washing the sand of the Surekha which has its source in Girnar. The expenses of extracting the gold was more than the value of the produce.

Copper is said to exist near Nawanagar but no mines are ever known to have been worked.

Gypsum is another mineral which is commercialised to a very great extent. It abounds in various districts of Kathiawar but notably in Morvi, Porbandar and Nawanagar. Mr. E. Howard Adye suggests that if properly kilned and pulverised, on the spot, the Nawanagar selemite is sufficiently pure to yield 'plaster of Paris' of high grade quality; while the fibrous, heavier, and impure variety ought to be welcomed by native farmers, as a manure to

improve poor or played out soil. This is the direction in which nobody's attention is as yet drawn.

As regards the possibility of Coal fields in Kathiawar, traces were found near Than in Morvi but the vein with coaly matter was found to be a very small one and no further attempts were made in that direction. Mr. Henry J. Eunson states in his Report on the Geology of the Morvi State that in the 'Umia' of Cutch a seam of coal is reported by the Geological Survey to be 'bright and firm'. We have already noted that in the north of Kathiawar a very large area belonging to the Umia group of Cutch exists and on the authority of Mr. Eunson it will not be too much for us to expect a 'bright and firm' seam of Coal under it.

DEVELOPED MINERAL RESOURCES

We have already noted the mineral resources which are at present lying undeveloped. But before we proceed further, it must be adimitted that in Kathiawar there is a paucity of minerals and the only mineral that is developed to some extent is the building stone. Jhalawad abounds in laterite and sandstone varying in colour from deep red to pink, yellow, and white. The south-west coast and Jhalawad, except the centre, abound in limestone admirably suited for building. Of these the Porbandar miliolite and the grey sandstone of Dhrangadhra are perhaps the best known.

Besides the limestones and the laterites numerous varieties of trap and basalt are much used as building stone and near Gogha an excellent conglomerate is largely quarried. Granites occur in Girnar and there are deposits of gypsum in the Ran and parts of Bhal.

Even here also it must be noted that all the different varieties of building stones are not developed. Many lie unnoticed though their value as building material may surpass that of Porbandar Miliolite or the Dhrangadhra

grey sandstone. Mr. E. Howard Adye notes one of such dormant types and styles it "Pindaralite" from Pindara, a village within the territories of the Nawanagar State where it occurs in abundance. Mr. Adye summarises the nature and uses of Pindaralite as follows:

"The stone varies in colour from a bright dark-yellow to a rich orange-brown; and when sun-baked, acquires a red, sometimes crimson blue. In texture the stone is so fine and compact, that it breaks with conchoidal fracture; nevertheless, it is so soft as to be very easily tooled and delicately carved; while it can also be turned and is capable of taking a fair polish; or what is still better, of yielding a 'dead' and absolutely smooth surface. As large blocks of about 2 feet each way in three dimensions, are available, the stone can be utilised for ornamental architecture of every description-columns, capitals, balustrades, friezes, monuments, mantles and fireplaces; for the manufacture of table-tops, tiles, clock-cases, vases, ink-stands and the like in great variety, so that even small fragments can be turned to good account and wastage reduced to minimum."

Mr. Adye is so enthusiastic about the Pindaralite that at another place he states:—

"A note may here be made about the oft-repeated question concerning the occurrence of marble in the State of Nawanagar. The answer to this question has been fully recorded elsewhere, but if no white statutory marble is available for commercial purposes, it may be correctly announced that in 'Pindaralite' the state is possessed of a very valuable substitute for the uniformly-coloured yellow marble of European importation".

The development of salt industry will be discussed at a later stage, when we shall survey the existing industries of Kathiawar.

Pearls of good quality but inferior in lustre to Basrah pearls are found in the gulf of Cutch within Nawanagar limits and also at Poshitra within the territory of Baroda.

Bloodstone and Agates are common near Tankara in Morvi.

FOREST RESOURCES

The chief direct effects of forests upon climate are:—

(1) Screening the soil from the rays of the sun,

(2) Exposing an immense leaf surface for the cooling process of radiation, and,

(3) Giving off moisture in evaporation.

We get through the existence of forests greater equalibility of temperature, humidity and rainfall. Moreover they supply timber, fuel, material for paper and a variety of valuable substances. In early times Kathiawar might have been covered with dense forests but at present it is comparatively thinly wooded except the Gir Forests in the south and the Barda forests on the west coast. History furnishes us ample evidence that a policy of reckless cutting down of timber has robbed the central area of its rich forests with a result that the hills near Chotila, Than and Bamanbor, which had till lately cover enough to attract lions are now lying bare. The effects of such irresponsible steps can only be ruinous when we remember that it is the central plateau where the major rivers of the peninsula take their rise. We hope that a judicious system of planting would reclothe the hills, improve both the climate and the water supply and provide a much needed store of fuel.

The Gir Forest is about sixty miles long and about thirty miles broad and contains no valuable timber. The area within the boundaries of the Junagadh State is 494 sq. miles in the case of Gir forests and 70 sq. miles for the

Girnar forests. The forest areas have been demarcated by cairns and an elaborate system of exploitation has been evolved. For that purpose the whole area is divided into 32 blocks consisting of 30 coupes each. Six of these blocks are not workable and one is reserved as a sanctuary for lions. The working plan requires one coupe from each of the remaining 25 blocks to be exploited every year. It is interesting to note that there appears to have been some irregularity in this respect in the past, and every effort is being made to bring the exploitation as much in accordance with the working plan as possible.

Similar coupe system is also followed in the State of Porbandar for deforestation of the overgrowth of Babul and Gorad Trees. According to the scheme Babul and Gorad are the only trees to be cut in each block and that too if they are sufficiently old and thick. A passing reference must be made here to the medicinal herbs of Barda. They have been investigated, analysed and arranged in an admirable manner by the late Mr. Jayakrishna Indrajit Thaker in his valuable research work on "Herbs of Barda".

In the Nawanagar State, the Barda, the Alech, the Ranjit (Dalasa) and the salemar hills and the Gurgadh Jungles with their numerous trees are declared as reserved forests.

There is also a small forest in the Sihor Range in Bhavnagar which is carefully looked after but the timber is small and stunted.

In the absense of any definite policy of forest conservation and afforestation, the forest resources were ravaged by a poor people for their daily food and no trees were allowed to reach the well-proportioned height. We are informed that it is doubtful if a single teak plank twelve feet long and by one foot broad could be found in the entire Gir Forest—which is by the way the largest forest area in the province. Kathiawar forests produce no timber and for the purposes of

building constructions it has got to be imported from the other parts of India. The principal forest produce are the Babul trees, Acacia Arabica, the Aval trees, the Gorad and a host of others. There are about 20 lakhs of Babul trees within the boundaries of Nawanagar State, a lakh in the Gondal State and a very great number within the States of Porbandar and Junagadh. Note must also be made here of the Mahuva plantations of coconut trees within the boundaries of the Bhavngar State.

Prescribing a unified policy of afforestation for the whole of Kathaiwar may be next to impossible but a suggestion for a well-planned scientific policy for the major States cannot be considered as out of place. What is needed is a well-balanced active and judicious afforestation policy which would not only keep the forests area intact, but would be able to cope up with the growing menace for deforestation. The policy of broad-cast sowing of seeds may be deemed crude and in its place a better system of planting the trees ought to prevail. The need of afforestation cannot better be stressed than by the following para taken from the Administrative Report of the Limbdi State for the Year 1935-1936.

"There is no forest in the State. . . . .The Thakore Saheb's attention has been drawn to the annually decreasing rainfall in Kathiawar which is considered by agricultural experts to be due partly to the decreasing number of trees and the clearing up of the forests. A programme of tree planting sanctioned by the Thakore Saheb is being carried out and concessions are given to agriculturists in order to encourage them to plant as many trees as possible in each village of the State".

Afforestation is advisable at least for stopping this decrease in the rainfall and especially its uncertainty results in many disastrous consequences, for, spasmodic rains are worse than no rainfalls at all.

CHAPTER III

COASTLINE

[*Kathiawar of to-day finds contrast with the Kathiawar of bygone ages. In the age of Ice and even after—to be brief, in tertiary and post-tertiary times Kathiawar was an island. It was a land of forests and pastures, full of woods with thickly covered groves of trees, inhabited by wild animals. In these early ages climate here was more pleasant, more moderate, and, rainfall abundant.*

But, as the earth spun over on its axis, and its crusts heaved, rising here and falling there, the seasons and climate changed. With these geological upheavals of vast magnitude, the river Indus changed her course, and Kathiawar was an island no more.

It thereby beeame a paninsula, with climate more intense, rainfall scanty, and, as the process of desiccation set in, the, geological properties of the soils suffered, and its forests withered away.[1]

In spite of such wraths of Nature, and varied changes in the fortunes of its inhabitants, its coast-line has played, and continues to play very important historical role in the politico-economic life of this province.

Because of the vast coast line its traders made early contacts with other parts of the globe, amassed riches, and incidentally, gave rise to the pirates as a class, about whose life and heroic deeds history furnishes us ample material.

If the coast-line was responsible for Kathiawar's early contact with the outside world in the past, the same coast—due to its geographical position—is destined to play still greater role in the economic future of this province.

1. It will be interesting to note that mythological references often dedicate this change to the curse of the great sage Durwasha to the 'Vanaspati' (means forests or vegetation) of Kathiawar (at that time known as 'Anart'). Refer " *Barda nu Vanaspati Shastra* ", by Thakar Jayakrishna Indarji p. 685, footnote.

To the memory of the island days of this peninsula the following pages are dedicated. And the attempt is made to present before the readers a vivid picture of the economic-geographic importance that Kathiawar Shore even now enjoys. A. B. T.]

In the early stages of economic life of a nation its geographical position does not play so important a part as its climate, geological features or its flora and fauna. But with the gradual development of its economic activities and a steady growth of its commercial and trade relations with the outside world its geographical location becomes a matter of vital importance. On it then depends the future and further growth of its economic life. The more favourable the position of a country on the face of the earth as regards its easy accessibility to the outside world, the more it is likely to add to its importance as a distributing and clearing centre of trade. Long before the modern ports of Bombay and Karachi were developed, and, acquired commercial importance, the maritime trade of Kathiawar was in a flourishing state. Its native crafts indulged in trading extensively with Africa, Arabia, Persia and a host of other places. Being a small peninsula on the west coast of India its geographical location made it easily accessible to the foreign traders. Even in times of Ptolemy the Kathiawar ports were flourishing centres of trade and commerce, and, according to some authorities "Monoglossum Emporium" referred to by Ptolemy is the present port of Mangrol in the south of Kathiawar. At the beginning of the sixteenth century the Portuguese traveller Barbosa described it as a good port where many ships from Malabar touched for horses, wheat, rice, cotton, clothes and vegetables, and brought coconuts, emery, wax, cardamoms and other spices. In short its geographical position and its extensive coastline were instrumental in the evolution of Kathiawar's many-sided economic life in the ancient as well as medieval days; and the chief historic ports of Kathiawar of these days were Gogha, Diu, Somnath Patan, Mangrol and Porbandar.

POLITICAL DIVISIONS OF THE COASTLINE

Kathiawar's political evolution, resting as it was on the might of the sword, had one good effect inasmuch as the coast line fell into the hands of those who were powerful enough to preserve it. While the inner portion of the province became subject to the constant process of division and subdivison, the coast line was firmly held by the States who resisted even the smallest encroachment on their respective possessions with all their prowess; for, to be the lord of the high seas had its own charm. It is somewhat remarkable to note that in the process of alienation, so patent in the existence of the numerous political jurisdictions within the province no coastal state ever alienated or gave in 'Inam' any town or village situated on the coast within its territories. And if by chance any such town or village was granted, it was always tacitly understood or expressly stated that the 'Bandar' was to belong to the Darbar and that the Darbar possessed the inherent right of levying duties on all the goods entering or leaving the Bandar. The port of Mangrol situated on the south coast furnishes us with an example of such an arrangement. Though the seat and the chief town within the territories of the Sheikh of Mangrol, the rights and privileges of the port are vested in, and exercised and controlled by, the Junagath State. It is a glaring instance demonstrating the extent to which access to coast was prized by the various States.

Beginning from the north-east corner of the province, the port of Dholera and the adjoining coastline in the Gulf of Cambay belong to the Ahmedabad District within the Bombay Presidency. Next comes the coastline right up to Jafrabed in the south belonging to the Bhavnagar Darbar. The coast in the south from Jafrabed to Veraval is not within the territories of a single State. A part of it belongs to the Janjira State, another portion to the Baroda Government, while Gogla on the main land opposite to the island

of Diu to the Portuguese Government, and, the rest to the Junagadh State. The south-west coast from Veraval to Madhavpur falls within the territories of the Junagadh State. The coast-line from Madhavpur to Miani belongs to the Porbandar State while that from Gandhvi to Bhogat belongs to the Nawanagar State. Next comes the coast line belonging to the Baroda Government. Beginning from Kuranga it stretches right up to Port Okha in the North tending again to Aramda in the south whence it goes towards east to the Port of Poshitra. The coast-line on the north of the province belonging to the Nawanagar State starts from Pindara right up to Jhinjhuda. And last comes a short stretch of the coastline whereon stand the ports of Navlakhi and Vavania within the State of Morvi.

Thus the States of Nawanagar, Bhavnagar, Junagadh, Porbandar, Morvi, Baroda, Janjira, and the British and the Portuguese Governments are the only authorities in Kathiawar which have got direct access to the sea.[1]

CHARACTER OF THE COAST

For judging the character of the coast line we shall divide it into four sections : seventy miles from Amli in the North-east to Gopanath, eighty miles from Gopanath to Gogla (on the main land of Kathiawar, opposite the island of Diu, belonging to the Portuguese Government), hundred and sixty miles from Gogla to Okhamandal, and hundred and twenty miles from Okhamandal to the head of the Gulf of Cutch.

The seventy miles from Amli at the head of the Gulf of Cambay to Gopanath is partly a low muddy foreshore and partly sandy and rocky. The other section from Gopanath to Gogla presents a succession of cliffs of moderate height, sometimes hollowed by the sea into caverns. From the

1. It should also be observed that Kachhigadh in Okhamandal belongs to the Cutch State.

sea the South Coast is extremely pleasing. The 160 miles from Gogla to the point of Okhamandal is generally flat and fringed with a line of wind blown sand hills. As we move along the west from Gogla, we come across the creeks of Velan, and the port of Mul Dwarka. Then along the north-west the coast presents an admirable view of the busy ports of Veraval, and Mangrol, against a background of deep green foliage and glimpses of far off hills. At Navibandar the mouth of the Bhadar appears like a small gulf and the town of Porbandar, with its white buildings built from the famous "Porbandar Miliolite" with the works of the Indian Cement Company on the left and the beautiful palace on the right, presents a magnificent appearance of an industrialised centre. Far away behind the town stands visible the Barda which becomes clearer and clearer as we move along the North-west towards Dwarka. The coast from Porbandar to Dwarka, is absolutely a flat one, with no creeks except the Vartu creek near Miani and a small outlet near Madhi. At Dwarka, the creeks of Rupan and Gomti are visible. The Jagat point, the famous temple of Shree Dwarkadhish, the Light House and the big chimneys of the Okha Cement Works make a beautiful panorama. As we move along the north towards port Okha, we come across the Fort of Kachhigadh belonging to Cutch and a small creek. The harbour of Port Okha, (the most natural one and perhaps the only one of its kind where the ships can conveniently take shelter during the South-west Monsoon), with its ocean going liners and a number of country crafts, wears an appearance of a thoroughly modernised port. The 120 miles from Okhamandal point, to the head of the Gulf of Cutch, is throughout a line of low reefs, and muddy foreshore fringed with mangroves and low ugly stretches often transformed by mirage into shifting scenes of rock and castle. Along this section the ports of Poshitra and Salaya deserve to be mentioned specially on account of their natural harbours.

The coastline, whether muddy foreshore, cliffs or sand hills, is broken at intervals by the mouths of rivers and creeks through which the sea gains access to a chain of salt wastes covered in part with mangrove bushes.

CREEKS

Of the salt water creeks the most important are the Hansthal, Bhavnagar, Sunari, Bavliali and Dholera Creeks.

The *Hansthal Creek* is a deep channel and connects the outer and inner Gulf of Cutch. At five miles from its mouth it divides into two channels, one leading northwards towards Cutch and called the Cutch-Khadi, the other leading South-east towards the shores of Halar and called the Halaikhadi. The Halaikhadi is navigable for a distance of four miles and afterwards at high tides only the native crafts can pass as far east as Vavania.

The *Bhavnagar Creek* is a safe but winding passage navigable by large native crafts for about four miles or within a mile of the town. Of late, due to the improvements of the Port, it has become the first port in Kathiawar.

The *Dholera Creek* is a channel leading to the important trading town of Dholera. Recently a committee had been appointed by the Government of India to investigate the problem of its development.

The Sunarai Khadi is about eight miles north of Bhavnagar and is said to contain a fine broad channel of various depths for about four and a half miles inland with a good muddy bottom. The channel does not dry like the Dholera Creek, and is free from mud banks and other serious impediments.

The *Bavaliali Creek* is about two miles north of the Sunarai Creek. It is said to be eight miles long.

Among the smaller creeks may be mentioned the *Mahuva creek* leading two miles to the landing place; the

Chanch creek at the back of Chanch Island about twelve miles west of Mahuva; the *Mandwa creek* running to the village of Velan; the *Somar creek* to the north of Mul Dwaraka near Kodinar; the *Sil creek* between Mangrol and Navibandar; the *Vartu creek* leading to Miani which can only be entered at high water; the *Salaya creek* running about nine miles from the gulf of Cutch to Salaya; the *Bedi creek* leading to Bedi, the port of Nawanagar; the *Jodiya creek* navigable only to the Bandar about one mile; and the *Vavania creek* leading about two miles to the Morvi port of Vavania.

NATURAL HARBOURS

In spite of its extensive coast line and in spite of the existence of so many creeks both big and small, it is regrettable to note that in Kathiawar no really good harbour has drawn attention of the authorities concerned except perhaps the Bet at the North-east corner of Okha-mandal where boats con lie throughout the South-west Monsoon. By the development of Port Okha on the opposite side of Bet, this harbour has been utilised by the Baroda Government. Dredging operations and widening up of the base of the creek may have been responsible for the development of the Bedi, the Navlakhi and the Bhavnagar ports; or the enormous expenditures incurred by the states concerned for their development might have resulted in their attracting a big portion of the Kathiawar's trade, but even then they cannot be as convenient or render as efficient services as natural harbours. Erection of Bonded Warehouses and the construction of Railway-sidings can be useful inasmuch as they help and facilitate the trade, but they cannot overcome the deficiency of good harbours. Thanks to the advancement of Science and Civilisation and also to the enterprise of the Authorities concerned the low muddy creeks of the Bedi, the Navlakhi and the Bhavnagar have been transformed into well developed modernised ports where the big liners from abroad can load and unload

the cargo throughout the year. So far as the Port Okha is concerned it possesses the natural advantages, in addition to all the advantages enjoyed by the above ports which have been utilised mainly due to the initiative and patronage of their respective Governments.

PORTS OF KATHIAWAR

An analytical survey of the ports of Kathiawar will include the discussion as regards:—

A. Old Ports of Kathiawar and the process of Silting up.
B. Present Ports of Kathiawar,
C. Development of the Modern Ports, and
D. Discussion of some neglected Ports of Kathiawar, which deserve special attention of the authorities concerned.

A.—*Old Ports of Kathiawar, and the process of silting up*: For purposes of discussion as regards the old ports of Kathiawar it will neither be convenient nor of any material use to us to enter into a thorough investigation from the records of the earliest visitors of India. We shall content ourselves with a list of the then existing ports of Kathiawar prepared in 1842 by the Government of Bombay. It contains the names of 62 ports along the shores of Kathiawar, where trade centred. Appendix 'A' at the end of this chapter, contains the names of those 62 ports and a closer scrutiny of the names reveal neither the port Okha nor the Navlakhi Bandar among them. Of these sixty-two centres the following twelve were closed in 1842, some owing to the silting up of channels, and, others because they were inconveninent and inadequate to meet the requirements of modern trade. The twelve centres which were closed in 1842 are :—

1. Hadiana, 2. Nagna, 3. Rohjibara, 4. Sil, 5. Devalia, 6. Kalsar, 7. Kotda, 8. Gadhula, 9. Nahana-Gopnath, 10. Mithivirdi, 11. Kuda, and 12. Evania.

Of the remaining fifty centres only twelve, Jodia, Bedi, Veraval, Jafrabad, Mahuva, Ghoga, Bhavnagar, Salaya, Porbandar, Navibandar, Mangrol and Dholera had an extensive trade.

B.—*Present Ports of Kathiawar* : The existing ports of Kathiawar are grouped below according to the States within whose jurisdictions they are situated :—

Ahmedabad District (i.e. belonging to the Government of India) :

There are only two ports of Ghoga and Dholera, situated on the coast of Kathiawar which belong to this District.

Bhavnagar State :

The Bhavnagar State possesses the following ports :

(1) Bhavnagar.
(2) Mahuva and the subordinate ports of (*i*) Katpur, (*ii*) Niclo, (*iii*) Dyal, (*iv*) Ghadhada, (*v*) Kalsar, (*vi*) Naip, (*vii*) Dolia, and (*viii*) Kotda.
(3) Kathivadar now called Port Albert Victor.
(4) Pipavav.
(5) Talaja (Sultanpur).
(6) Jhanjhamer, and
(7) Sonrai.

Janjira State :

This State is having only one chief port of Jafrabad besides some two or three smaller ports.

Junagadh State :

The number of ports and roadsteads are 16.

Among the other ports are : (1) Bherai, (2) Chanchuda, (3) Dhara, (4) Navabandar, (5) Sutrapada, (6) Veraval, (7) Mangrol, (8) Chorvad and (9) Shil.

While the principal roadsteads are : (1) Bela, (2) Kaliadhro, (3) Varahswarup, (4) Rajpura, (5) Simar, (5) Hirakote or Karwar, and (7) Dhamlej.

Porbandar State :

This State has a flat line and hence there are only few ports. The principal are : 1. Porbandar, 2. Navibandar. 3. Madhavpur, and 4. Miani.

Baroda State :

The territories of the Baroda Government in Kathiawar are scattered in various places with a result that the Baroda State possesses coastline at two different places. In the South it possesses the ports of Velan and Mul Dwarka while on the Okhamandal coast its ports are: (*i*) Dwarka, (*ii*) Okha, (*iii*) Bet, (*iv*) Aramda, (*v*) Gopi, (*vi*) Poshitra, (*vii*) Rajpara, and (*viii*) Madhi.

Jamnagar State :

Like the Baroda Government, this State also possesses coastline at two places. On the west coast it has no big ports, while on the north coast it has many ports and one good creek of Salaya : In all there are 32 Bandars in this State, the principal among which are : 1. Bedi, 2. Salaya, and 3. Jodia; while the minor ports include (*i*) Rozi, (*ii*) Navibandar, (*iii*) Baid, (*vi*) Lamba, (*v*) Pindara, and (*vi*) Jhinjhuda.

Morvi State :

It has only two ports of Vavania and Navlakhi. But only Navlakhi is a working Port.

It is impossible to have a comprehensive survey of all these ports in a work of this kind. The majority of these ports are small villages situated near some creeks.

C.—*Development of Modern Ports of Kathiawar* : It will not be out of place to recall here that the modernisation of ports began in Kathiawar after 1917. Viramgam-Dhandhuka Land Customs Cordon was removed in this year by the Government of India, and, the Kathiawar Maritime States

were included in the British India Sea Customs Union. With this change in the policy of the Imperial Authorities, the Kathiawar maritime States became port-conscious and at the cost of enormous expenditure they modernised some of their ports.

Figures for all the states are not available, but the following will give us some idea. According to Mr. John DeLa Valette upto 1935 Jamnagar State had spent nearly £12,50,000 for the development of Port Bedi (which means about one crore and sixty-six lakhs of rupees). Junagadh State has spent upto October 1935 Rs. 59,15,399 after Veraval, (refer Junagadh State Administration Report, 1937-38, p. 87), while the development of Port Okha cost something like Rs. 45,80,939 upto 1939-40 to the Baroda Government (refer Baroda Administration Report. 1939-40 p. 125). Even only a scheme taken in hand as late as March 1933 for the development of Bhavnagar Harbour was estimated to cost the Darbar a sum of rupees thirty-seven lakhs and actually the total expenditure on this scheme amounted to Rs. 40,17,414. (Refer Administration Report of the Bhavnagar State, for the year 1938-39, p. 36).

If the huge amount was expended for the development of the ports, the result attained was also equally promising. Their geographical position gave them an upper hand as compared to Bombay and Karachi ports to cater for the needs of the upper India markets. There was therefore staggering growth in the volume of trade handled by each of these ports. This growth continued unabated and would have still continued but for the intervention of the Government of India from 1927 onwards.

At present the bulk of this province's maritime trade is handled by only a few modernised ports it has at its disposal; and these ports are:—Navlakhi, Bedi, Okha, Porbandar, Veraval and Bhavnagar. Jafrabad has a nominal share in it. The paucity of statistical information as regards the value of

trade with different classes of ports viz. Kathiawar ports, other Indian ports and ports beyond India, is a serious handicap in the way of estimating the direction of the trade carried on at these ports.

Some of the states like Baroda and Morvi give the figures for tonnage only. Thus a comparison between them is not feasible. However, the following figures taken from Kathiawar Trade Statistics give the shares of the principal maritime states in the Foreign Seaborne trade of Kathiawar for the years 1931-32, 1932-33 and 1933-34.

Foreign Sea-borne Trade.

IMPORTS[1]

States.	1931-32 Rs.	1932-33 Rs.	1933-34 Rs.
Baroda ...	55,75,514	58,68,341	48,87,267
Bhavnagar ...	75,85,333	2,33,26,629	2,29,94,631
Jafrabad ...	71,911	35,894	4,23,445
Junagadh ...	24,67,720	13,44,737	23,21,102
Morvi ...	17,68,422	19,91,942	24,88,992
Navanagar ...	84,11,100	71,94,780	59,57,053
Porbandar ...	17,68,262	15,94,424	27,07,457
Total Rs. ...	2,76,48,262	4,13,56,747	4,17,79,947

1. As a maritime trade centre Dholera port is not at all important at present. This will be clearly seen from the following figures of imports at this port. For the convenience the figures are given in round numbers :—

Year.	Imports Rs.
1931-32	89,000
1932-33	1,55,000
1933-34	1,20,000
1934-35	79,000
1935-36	2,03,000
1636-37	1,93,000

This shows the sudden rise in the trade of Bhavnagar ports and a gradual fall in the figures for the Nawanagar State. On the other hand the Junagadh and Morvi States are gradually consolidating their position.

The following table gives the figures of Foreign Sea-borne trade as regards the exports of merchandise from the maritime states of Kathiawar.

Foreign Sea-borne Trade.[1]

EXPORTS.

States.	1931-32 Rs.	1932-33 Rs.	1933-34 Rs.
Baroda ...	2,84,186	6,70,560	22,23,312
Bhavnagar ...	19,41,789	37,29,129	1,08,81,568
Junagadh ...	15,52,714	14,28,433	67,14,227
Navanagar ...	22,55,232	18,03,639	44,72,123
Porbandar ...	7,05,017	4,59,409	3,57,472
Total Rs. ...	67,38,938	80,91,170	2,46,48,702

1. Jafrabad and Morvi hold very insignificant position as the centres of exports for Kathiawar produce via sea. As late as in the year 1938-39 from the Morvi State exports for the first time are mentioned to be of Rs. 5,94,712. Dholera also does not play any important role in this connection as will be seen from the following figures given in round numbers :—

Year.	Exports Rs.
1931-32 ...	... 2,13,000
1932-33 ...	... 2,75,000
1933-34 ...	... 2,37,000
1934-35 ...	... 1,91,000
1935-36 ...	... 2,50,000
1936-37 ...	... 4,02,000

(Figures taken from the Bombay Minor Ports Committee Report, 1939).

Except Porbandar and Baroda, all the States record improvement in this direction.

The following table shows the proportion of the foreign sea-borne trade for the various States out of their total maritime trade for the year 1933-34.

State.	Maritime Trade. Rs.	Foreign sea-borne Trade. Rs.	Trade proportion.
Bhavnagar ...	6,96,07,560	3,38,76,199	48·6%
Navanagar ...	2,11,35,718	1,04,29,176	49·4%
Porbandar ...	1,11,38,827	30,64,929	27·6%

Thus nearly half of the maritime trade of Bhavnagar and Nawanagar States is directly with foreign countries. On the other hand Porbandar State has only 27.6%. The returns of the trade figures of Port Veraval, the chief port of Junagadh State, give the proportion of the trade with ports beyond India for the Samvat Year 1990 at 30.7% of its total maritime trade. The higehr ratio in the case of Nawanagar and Bhavnagar may be due to the extensive facilities afforded to the merchants by the States. It may also be partly due to the existence of the requisite quayside, lighterage, and railway facilities, and partly to the facilities provided for the ready despatch of the cargoes.

Importance of geographical position of Kathiawar ports is vividly brought home to us by the above statistics which go a great deal to convince us about the ever increasing importance of Kathiawar ports as the distributing and clearing centres of trade. Geographical advantage of location is by itself an invaluable asset to the ports of Kathiawar and it is further demonstrated by the following statement :—

Station to	From Bombay Miles.	From Okha Miles.	From Bedi Miles.	From Bhavnagar Miles.	From Navalakhi Miles.
Viramgam	348	271	170	146	134
Ahmedabad	310	312	211	187	175
Mehsana	353	312	211	187	175
Delhi	865	800	708	648	672

Their favourable situation made it very easy for them to snatch away substantial volume of trade of the Bombay and the Karachi ports, with the consequent result that the Government of India's revenue showed a marked decline in customs collections.

Faced with a heavy fall in customs receipts, the Government of India as early as 1927 reimposed Viramgam Dhandhuka Land Customs Cordon against the maritime States of Kathiawar. "Inconvenience" caused by the reimposition of Cordon even Lord Irwin recognised and confessed; and, the Government of India carried on negotiations, one by one with all the maritime States of Kathiawar demanding very substantial portion of the revenues they realised from the imports of goods which subsequently were transferred to the places outside Kathiawar. To this all the States, after prolonged negotiations, agreed, but Bhavnagar hesitated a long while. Even with the imposition of the viramgam Dhandhuka Land Customs Cordon, Bhavnagar State remained immune from its restrictions because of the special treaty rights it enjoyed from the Imperial Government. In order, therefore, to outwit Bhavnagar's competition the Government of India seem first to have thought of developing Port Dholera. But, perhaps, failing in this, or, realising the futility of this measure, in order to arrest the Imperial revenue from further fall, they ultimately applied Cordon to the goods booked from Bhavnagar State limits to outside Kathiawar places, under the plea of Bhavnagar's 'unfair' competition. Thereby the Bhavnagar State Authorities were invited, or rather required to prove the bonafides of their claims of 'special treaty rights'. With the application of the Viramgam Dhandhuka Land Customs Cordon, Bhavnagar Port's importance, as a distributing centre of trade, received a crushing blow. This will be easily realised from the fact that in this connection for the first time demand was made against the Bhavnagar State, by the Government

of India, from June 1st, 1935; and the year 1935-36 showed imports worth Rs. 2,43,17,242 to the credit of Bhavnagar port. But the subsequent years narrate altogether a different tale. From 1936-37 onwards imports showed precipitous downfall. (In 1936-37 the imports were of Rs.83,86,756—in 1937-38 of Rs. 65,79,896—in 1938-39 of Rs. 50,95,263). In 1940, this political crisis, has led Bhavnagar port to fall in lines with other ports like Navlakhi, Bedi, etc. If the fixed amount is to be given to the maritime States, their enthusiasm to devise ways and means to increase the import trade beyond a particular level will wane out. This artificial barrier will thus to a certain degree paralyse the geographical importance of Kathiawar ports. We are however not going to discuss here the 'special treaty rights' of Bhavnagar, nor to study the pros and cons of the Viramgam Dhandhuka Land Customs Cordon levied by the Government of India. Both these problems we propose to take up while tracing the history of the rise and growth of land and sea customs in Kathiawar. Sufficient it is for us to realise the importance of the geographical location of the ports and to note how the political handicaps react upon the inherent advantages conferred by Nature.

If the ports have provided this province with a key to trade, the coastal creeks have also furnished the peninsula with the marine resources from which can develop host of industries. The neglect evinced by the maritime States for utilising these potential resources needs be deplored. Possibilities of developing fishing, pearl fishing, alkali manufactures, etc., etc., cannot be overlooked. But except perhaps Baroda State, no other State has as yet taken any step in this direction. To those interested in the economic regeneration of this province, we therefore, take this opportunity to remind that Kathiawar to this extent remains a land of neglected opportunities. Such a gross negligence and indifference towards the natural resources at their

disposal which, if developed, show tremendous possibilities can never be allowed to pass unnoticed.

Leaving aside the possibilities of trade and industry we again revert to the transport facilities made available to this region by its broken coastline. It should here be remembered that when the States began to modernise some of the ports within their territories, neither they paid proper attention to the natural advantages which all the ports within their jurisdictions enjoyed, nor they weighed in balance the extent of services various harbours were capable of rendering. As a result some ports deserving greater attention of the authorities concerned have as yet been neglected.

D. *Neglected Ports of Kathiawar*: First of all we have to confess the paucity of data available to us on the point at issue. Kathiawar Ports Authorities have all along refused to supply the required data for a work of purely academic nature which ultimately will result in the welfare of their own subjects and in the safety of their own interests. Our repeated requests in the past in this connection have remained unanswered. Under the circumstances we would like to be more cautious in our commitments.

As regards the negligence evinced by the Bhavnagar State Authorities in the development of Port Albert Victor (Kathiavadar), political considerations seem to have played important role. Moreover, Bhavnagar being the capital town the authorities concerned must have been more eager and more interested in developing the Bhavnagar Port. Without, therefore, entering into the merits of the ports selected for development by the various States, we may humbly submit the names of one or two ports of Kathiawar which deserve special attention of those concerned. Poshitra in the north can afford deep water shelter for the largest ships within half a mile of the mainland of Okhamandal.

It has a wide deep water creek and was famous for its pearl fisheries. As for Port Salaya within the territories of the Nawanagar State it is admitted on all hands that it possesses one of the finest natural harbours on the coast of Kathiwar. Preference to Port Bedi might have been due to its nearness to the capital, but as regards the natural advantages and the location, Salaya can easily surpass Bedi. Not only it is sheltered from all winds and possesses the advantage over Bombay of being 300 miles to windward in the South-west monsoon but its entrance has as great a depth at low water as the Mersey at Liverpool has at high water. As early as 1880 it was remarked that its great depth of water and the perfect shelter it afforded marked it as deserving the attention of European merchants. And even to-day in spite of the existence of the modernised port of Bedi it has not lost its importance when we remember that out of a total number of 413 ships belongnig to the subjects of the State and lying in the various ports of Nawanagar, 229 lay at Salaya in 1937-38.

EFFECT OF COASTLINE ON THE DEVELOPMENT OF THE COASTAL TOWNS

As regards the effect of the coastline on the development of the coastal towns we can definitely say that with a sea-board of more than five hundred miles, and no place more than seventy five miles away from the coast, the produce of Kathiawar found a ready outlet. These were the hey days of Kathiawar country crafts which catered for all the coastal as well as foreign trade of the province. Shipbuilding industry was in a flourishing state in Kathiawar, and Veraval was the well-known shipbuilding centre. Swift means of transports—railways, steamships, and automobiles were not available, hence, every little creek that provided a means of access, was utilised as a trading centre. This accounts for the gradual rise of so many small ports in Kathiawar during the era that preceded the invention of the

Steam Engine. However with the rise of the present modernised ports in Kathiawar (where large ocean going steamships, with huge tonnage lie at anchor), we find that Gogha, Diu, Mangrol and Somnath Patan—ancient famous ports of Kathiawar have lost their former importance and glory.[1] They have receded into background and their place has been taken by the Navlakhi, Bedi, Okha, Porbandar, Veraval and Bhavnagar Ports.

Moreover the smaller ports of Kathiawar have practically faded into insignificance. Coastal trade in country crafts does no longer enjoy the same position in the maritime trade of this province and the development of these minor ports is, so to say, neglected by the authorities concerned. Figures of the coastal traffic catered by the country crafts are not disclosed by the maritime authorities; it is, therefore, not possible for us to make out the exact extent of the services they render to this province. However we have ample evidence to prove that railway constructions in Kathiawar and their rapid expansion at the hands of the maritime authorities have minimised their utility to a great extent.

As for the services of the minor ports following figures taken from the Administration Reports of the States concerned give us some idea.

Bhavnagar State's total maritime trade for the year 1938-39 was of Rs. 4,70,25,075 out of which

Bhavnagar Port's Share (1938-39)	Other Minor Ports' Share (1938-39)
Rs. 4,23,06,928	Rs. 47,18,147

As for the Junagadh State, figures for the Samvat Years are available.

1. Of these ancient ports Mangrol is still holding some importance.

Junagadh State's total maritime trade for the Samvat year 1994 (that is, from 1-11-37 to 31-10-38) was of Rs. 3,08,82,262 out of which

Veraval Port's Share Samvat Year 1994 (i.e. from 1-11-37 to 31-10-38) Rs.	Other Minor Ports' Share Samvat Year 1994 (i.e. from 1-11-37 to 31-10-38) Rs.
2,99,00,139	9,92,123

The above figures show that Minor Ports of Bhavnagar are comparatively more busy than those of Junagadh. Appendix B at the end of this chapter, gives figures of the latest seven years avaiable to us. If therefore the railways were instrumental in bringing about the decline of coastal trade in the country crafts, they also to that much extent whittled down the utility of the minor ports. They began to cater for the needs of the internal markets in collaboration with the major ports agencies. Thus, on the one hand, modernised ports snatched away bulk of the foreign trade from these minor ports, while, on the other, the railways usurped much of their importance as collecting or distributing agencies for the internal markets.

Coastline of Kathiawar, which was therefore once found humming with busy life in practically each and every creek of this province, now shows the decay and downfall of these small towns with the decay of these places as trading centres. Modernised ports like Navlakhi, Bedi, Okha, Porbandar, Veraval, Bhavnagar have, on the other hand, added to their fats. Their population has increased, their importance as industrial centres has also increased, and, they show all round progress.

However, it must be remembered that 'transport by water is cheaper than transport by land and the former helps the agriculturists to get their necessaries of life at cheap rates.' Realising this, at its 4th Session, the Ratnagiri

District Co-operative Conference, in 1935, passed the resolution requesting the Government of India to take steps to dredge those creeks which were rendered useless owing to their silting up, and make them fit for navigation. The outcome of the resolution was the appointment by the Government of India of 'Bombay Minor Ports Inquiry Committee' in 1937.

In view of these facts, small ports of Kathiawar deserve greater attention of the authorities concerned. All the possible steps for their upkeeps and development have got to be adopted at the earliest possible opportunity, so that, they can play their due role in the services of the trade and industry of this province.

APPENDIX A.[1]

Appendix giving in details the names of the Ports existing in 1842.

The names beginning in order from the Gulf of Cutch to the Gulf of Cambay are :—

(1)	Vavāniā	(16)	Bet
(2)	Jodia	(17)	Kachhigad
(3)	Hadiāna	(18)	Rupan
(4)	Bālāchadi	(19)	Madhi
(5)	Khiri.	(20)	Bhogat
(6)	Navābandar	(21)	Miāni
(7)	Nāgna	(22)	Porbandar
(8)	Rojhi Bāra	(23)	Navi
(9)	Bedi	(24)	Mādhavpur
(10)	Sarmat	(25)	Sil
(11)	Salāyā	(26)	Māngrol
(12)	Pindara	(27)	Chorvād
(13)	Rājpara	(28)	Verāval
(14)	Poshitra	(29)	Hirākot
(15)	Arambhda	(30)	Sutrāpāda

1. Vide "Gazetteer of the Bombay Presidency", Volume VIII, p. 236.

(31) Dhāmlej
(32) Kodinar
(33) Velan
(34) Vanāgbāru
(35) Goghla
(36) Diu
(37) Navābandar
(38) Jafrabad
(39) Bherāi
(40) Rāmpara
(41) Kathivadar (now known as Port Albert Victor)
(42) Shiāl Bet
(43) Chānch
(44) Devalia
(45) Mahuva
(46) Katpur
(47) Kalsār
(48) Kotda
(49) Gadhula
(50) Sultānpur
(51) Nahāna Gopnath
(52) Mithivirdi
(53) Kuda
(54) Gogha
(55) Evania
(56) Akvāda
(57) Bhāvnagar
(58) Adheli
(59) Gundalu
(60) Kālā Talāv
(61) Bavaliali, and
(62) Dholera

APPENDIX B.

Appendix giving the total maritime trade of the Bhavnagar and the Junagadh States, and, showing the extent to which Minor Ports render their services in this direction to the States concerned.

Years	1932–33	1933–34	1934–35	1935–36	1936–37	1937–38	1938–39
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Bhavnagar Port's share ...	6,47,52,287	6,49,72,140	6,93,46,831	6,69,79,601	4,17,42,381	3,42,02,118	4,23,06,928
Other Minor Ports' share ...	47,28,044	46,35,420	51,19,934	52,71,503	53,22,815	54,96,182	47,18,147
Total Maritime trade of Bhavnagar State ...	6,94,80,331	6,96,07,560	7,14,66,765	7,22,51,104	4,70,65,196	3,96,98,300	4,70,25,075
Samvat Years	1989 (i.e. 1-11-32 to 30-10-33)	1990 (1-11-33 to 30-10-34)	1991 (1-11-34 to 30-10-35)	1992 (1-11-35 to 30-10-36)	1993 (1-11-36 to 30-10-37)	1994 (1-11-37 to 30-10-38)	
Veraval Port's share ...	1,85,48,954	2,03,59,061	2,60,08,732	2,54,87,657	2,59,37,486	2,99,00,139	
Other Minor Ports' share ...	separate figures not available	separate figures not available	16,58,414	15,68,042	14,72,003	9,82,123	
Total Maritime trade of Junagadh State ...	1,85,48,954	2,03,59,061	2,76,67,146	2,70,55,699	2,74,09,489	3,08,82,262	

CHAPTER IV

HUMAN ELEMENT

GENERAL REMARKS

A nation's progress primarily depends upon the manpower that it has at its disposal. Given sufficient supply of raw materials and sufficient supply of capital, no nation can achieve economic progress in the absence of adequate man-power to co-ordinate both the capital and the raw materials. Both capital and raw material lie dormant and idle without man-power. We cannot enter into a lengthy discussion as to the relative importance of the three factors of production of wealth *viz.* Raw Material, Capital and Labour, neither are we going to decide and acclaim any one of the three as the prime factor of production. Sufficient it is for us at this stage to appreciate that Labour is one of the three prime factors of production.

In discussing the population problem of Kathiawar in relation to its industrial development we have to survey the problem from three different angles of view : *viz.*,

I. Constitution of Labour:—
   (*a*) Urban and Rural,
   (*b*) Literate and Illiterate,
   (*c*) Mobile and Immobile.

II. Present Occupational Returns.

III. Need for diversion of occupations.

BASIS OF CALUCLATION

Kathiawar being composed of heterogeneous units under different governments it is an uphill task to carry out absolutely correct investigations of its economic problems in the absence of sufficient statistical data. For the sake of

brevity, we can classify the various political divisions of Kathiawar as under:—

(1) States comprised in the Western India States Agency.

(2) Territory under Baroda Government.

(3) Territory directly under the British Government.

So far as the first division is concerned we have got detailed information of the principal States together with the statistical information of the rest of the States grouped together. As regards the territory under the Baroda Government we have got most of the necessary information. But in the case of the territory under the British Government we are handicapped as the said territory being part of the district of Ahmedabad, no separate and detailed statistical information is available. This will leave about 95 p.c. of the total area of Kathiawar for the purposes of our investigations. However it will not be incorrect to say that the conclusions at which we shall arrive will also apply *in toto* to the said area it being the part and parcel of Kathiawar with similar characteristics.

AREA AND POPULATION

The total area of Kathiawar (under survey for the purposes of this chapter) is 22,150 square miles (for details *vide* Table No I in the Appendix). It is divided into four major units:—

(1) Salute States fourteen in number.

(2) The Eastern Kathiawar Agency with an area of 2,764 sq. miles.

(3) The Western Kathiawar Agency with an area of 2,397 sq. miles.

(4) Territory under the Baroda Government with an area of 1,352 sq. miles.

The population of Kathiawar at the last six censuses and proportionate increase on or decrease from the previous ten years' figures are shown in the statement below :—

Year	Population	Increase or Decrease in population during the ten year period	
1881	23,90,391		Increase in population between 1881 and 1931 is 31.8 p.c.
1891	28,34,575	18.5 p.c.	
1901	24,41,084	13.8 p.c.	
1911	26,92,622	10.3 p.c.	
1921	27,23,768	1.1 p.c.	
1931	31,50,963	15.7 p.c.	

(For details *vide* Table No. 2 in the Appendix.)

These figures compare favourably with the figures for the Western India States Agency taken as a whole where the population remained stationary as can be seen from the following table :—

Year	Total Population
1891	39,56,345
1931	39,99,250

The Population of the area under survey during the same period (*i.e.* between 1881 and 1931) increased from

28,34,575 to 31,50,963 or approximately by 10 p.c. This difference can be easily accounted for when we take into consideration the fact that during the said period the population of the three salute States not considered here *viz.* Cutch, Palanpur and Radhanpur declined from 9,31,296 to 8,49,016 and of the Banas Katha Agency declined from 3,70,662 to 2,03,553.

One thing that may be noticed here is that while the total population of Kathiawar during the last decade increased by 15.7 p.c. that of the salute States increased by 17 p.c. This may be partly due to the industrial development of some of the States.

DENSITY

The density of population in Kathiawar in 1931 was 142 persons per square mile. (For details *vide* Table No. 1 in the Appendix).

This is low and compare unfavourably with the density in adjoining areas and in the Bombay Presidency as a whole as the following statements will show:

Kathiawar	...	...	...	142
Bombay Presidency (including Sind)				173
Baroda	...	...	...	299
Ahmedabad District		...	...	240
Broach	,,	...	...	227
Kaira	,,	...	...	458
Surat	,,	...	...	420

Of the salute States, Rajkot has the highest density of population per square mile *viz.* 268 and Dhrangadhra has the lowest *viz.* 77. The salute States as a whole have a density of 146. The density of Eastern Kathiawar Agency is 102.

In it Lathi with a density of 224 shows the highest figure and Patdi with a density of 66 per square mile the lowest. The density of Western Kathiawar Agency is 159 and in the units composing it the densities range from 402 in the case of Jetpur Bilkha to 64 in the case of Jetpur Pithadia. The comparative densities however possess little more than an arithmetical interest as the size of the unit and the number of villages it contains are clearly the controlling influences. Caution must be taken to check the density against the area and the number of villages contained therein as the units vary enormously in size. For instance Nawanagar has an area of 3,791 sq. miles while Jafrabad has an area of 53, Lathi of 42 and Wadhwan Civil Station of only 1 square mile.

Kathiawar as a whole is very thinly populated as compared with the conditions prevailing in most parts of India.

POPULATION BY TOWNS AND VILLAGES

An economic survey of a particular country is totally inadequate if it fails to take into consideration the distribution of its population between the rural and urban areas. This distribution reveals the fundamental difference between the agricultural and an industrialized country and hence a survey on these lines is essential for judging the relative importance of agriculture and industry. As already noted above we have taken a particular basis of calculation but even in this we are under great handicap inasmuch as no detailed information is being available for each separate State in the previous censuses all of them being grouped under one head of the Western India States Agency. This leaves us no scope for the comparison of the conditions prevailing in Kathiawar in 1931 with those prevalent at the time of the previous censuses with the result that we are left to judge its progress or otherwise by the comparison of the statistics for the whole of the Agency.

There are 61 towns and 4,564 villages in Kathiawar as will be seen from the following statements :—

Unit	No. of Towns	No. of Villages
Salute States	40	3,152
Eastern Kathiawar Agency	7	569
Western Kathiawar Agency	8	559
Territories under the Baroda Government	6	284
Total ...	61	4,564

Table No. 1 in the Appendix gives in detail for every State the number of the towns and villages that it contains.

Between 1921 and 1931 the urban population of the Western India States Agency rose by 21.9 per cent while the rural population rose by only 9.0 per cent. The increase in total population being only 12.9 per cent it may be safely inferred that in the Agency the rural population has been losing ground relatively to the urban. In this respect at least we can safely assert that the same tendency applies *in toto* to the area under survey but it should not mar its salient feature of being a predominantly ruralised land as will be seen from the following Statement :—

Total Population		Urban	Rural
	31,50,963	8,04,166	23,46,797
Precentages	100	25.5	74.5

(For details *vide* Table No. 3 in the Appendix)

Only one fourth of the total population of Kathiawar resides in urban areas. This compares favourably with

other parts of India as will be seen from the following statement :—

Unit	Percentage of Urban and Rural population to total Population	
	Urban	Rural
Kathiawar	25.5	74.5
Bombay Presidency (including Sind)	20.9	79.1
Assam	3.4	96.6
Madras	13.6	86.4
United Provinces	11.2	88.8
North-west Frontier Province	8.2	91.8
Central Provinces & Berar	9.8	90.2
Bihar and Orissa	4.0	96.0
Gwalior	11.2	88.8
Mysore	15.9	84.1
Baroda	21.4	78.6
Punjab	12.4	87.6
Bengal	7.3	92.7

The high degree of urbanisation will be seen to be due to the fact that, of 61 towns in Kathiawar 57 contain a population of over 5,000 persons each. The explanation of this may be the number of independent jurisdictions each of which has for historical and local reasons developed its own resources and drawn people to its capital. Smaller the State the proportion of its town population is naturally higher than its rural one. As most of the States in Kathiawar are small and each has a capital of its own there is

quite a powerful influence making for the success of moderately small towns in an area that is largely agricultural.

Detailed figures in respect of the prominent States are given in Table No. 2 in the Appendix.

It cannot, however, be ascertained that because of the higher ratio of the urban population, Kathiawar is industrialized to a greater degree than the rest of India. On the other hand, a closer study reveals quite the opposite tendency. The statement below clearly demonstrates this fact :

Unit	No. of Towns	Precentage of Urban Population to total population
Bhavnagar	11	31
Jafrabad	1	46
Rajkot	1	63
Lathi	1	65
Wadhwan Civil Station	1	100

To consider Lathi as industrialized to a greater extent than Bhavnagar is to commit a serious blunder in weighing their respective prevalent conditions.

But even this high ratio of urbanisation is not what it seems in fact will be seen when we shall discuss the composition of villages.

THE POPULATION OF VILLAGES

The predominantly agricultural character of the population of Kathiawar is proved by the fact that out of every 1,000 persons, no fewer than 745 live in the villages. If the rural population be taken as a whole 127 per mille of it

will be found living in villages with a population of over 2,000 persons; 548 in villages with a population between 500 and 2,000 persons; and 325 in villages with a population of under 500 persons. Statistical details in respect of each State as regards the number of towns and villages contained therein in various groups is given in Table No. 5 in the Appendix.

The following statement gives the number of villages in different groups :—

No. of Villages	Class	Units	Population
2,959	I	Under 500	7,63,150
1,135	II	500–1,000	7,81,858
373	III	1,000–2,000	5,07,348
101	IV	2,000–5,000	2,98,142

(For details *vide* Table No. 5 in the Appendix)

This will enable us to give the relative importance and due weightage to the various groups. Nearly 65% of the total number of villages has a population under 500. The population of classes I and II together comes to nearly 50% of the total population of Kathiawar. This is the malady of Kathiawar. It depicts that Kathiawar is the land of the highest ratio of urbanisation where inspite of the apparent urbanisation nearly half of the population resides in villages with population below 1,000. If we exclude Nawanagar and Bhavnagar which between them share a population of 1,29,327 equivalent to 16 per cent of the total urban population from the consideration of urban areas, the ratio of the urban population to the total population at once falls to 21.09 per cent which is less than that of Baroda.

The following statement will clearly demonstrate the fundamental difference between the distribution of villages in various groups both in Kathiawar and Baroda.

UNIT	KATHIAWAR				BARODA			
	No. of villages	P.C. to the total No. of villages	Population	P.C. total population	No. of villages	P.C. to the total No. of villages	Population	P.C. to tot a population
Class I. Under 500	2959	65.	7,63,150	24.2	1,580	54.1.	4,00,578	16.7
Class II. 500-1000	1135	24.8	7,81,858	24.8	777	26.6.	5,47,123	22.3
Class III. 1000-2000	373	8.0	5,07,348	16.1	419	14.4.	5,69,393	23.3
Class IV. 2000-5000	101	2.2	2,98,142	9.4	144	4.9	4,02,910	16.4

A perusal convinces us of the comparatively uneven distribution of villages in the various groups in the case of Kathiawar. Population residing in the villages under 1,000 is nearly one-half of the total population in the case of Kathiawar, while in Baroda it represents only 39 p.c. of the total population. Villages in Class I form nearly 65 P.C. of the total number of villages in case of Kathiawar while in case of Baroda they constitute only 54.1 p.c. of the total villages. This ratio in case of Baroda is higher both in the Class III as well as the Class IV. The population in the remaining two classes *i.e.* between 1,000 and 5,000 in the case of Kathiawar is 25.5 p. c. of the whole while in the case of Baroda it is 39.7 p.c. The following statement will illucidate our point a little further :—

Population	Kathiawar	Baroda
Total Class I & II	49 p.c. of the total population	39 p.c. of the total population
Total Class III & IV	25 p.c. of the total population	39.7 p.c. of the total population

The uneven distribution of the population in the various groups is clearly demonstrated in the above statement. It is not the greater percentage of rural area but the uneven character of the various units that compose it which should not be lost sight of when we consider the need of industrialisation.

AGE

A general distribution of the total population according to various age groups is essential for arriving at the conclusion of the availability of able-bodied persons for the purposes of industrialisation. It enables us to find out the exact position where the weakness lies. It reflects the prevalent social and economic environment in the area under investigation and helps us to draw our conclusion as regards the progressive or regressive character of the population.

According to the Swedish Statistician Sundbarg, in Western Countries at any rate, the number of persons aged from 15 to 50 years is uniformly about half the population and variations which occur in the age composition take place in the other two age groups 0-15 and 50 and over. The Sundbarg formula has since been elaborated by Whipple so that five fundamental types of population can be recognized *viz.*, Progressive, Stationary, Regressive, Secessive and Accessive according to the proportion of the population in the three age categories. The Sundbarg formula as restated by Whipple is in accordance with the following plan:—

Age Period	Progressive	Stationary	Regressive	Secessive	Accessive
0–15	40	33	20	40	25
15–50	50	50	50	40	60
50 & over	10	17	30	20	15

An analysis of the population of Kathiawar on these lines yields the following result :—

Age Group	Kathiawar Year 1931	All India 1921
0–15	42.07	39.00
15- 50	47.35	50.00
50 & over	10.58	11.00

The population of Kathiawar can be said to be Progressive. In the statement below the age composition of the population of Kathiawar in 1931 has been compared with the age composition in England and Wales in 1921.

Age Period	Kathiawar 1931		England & Wales 1921	
	Males	Females	Males	Females
All ages	509	491	477	523
0–5	78	80	44	43
5–10	72	67	47	46
10–20	117	107	94	95
20–40	144	143	142	168
40–60	77	72	109	119
60 & over	21	22	41	52

This statement repeats the well-known difference between Indian and British conditions by which the number of persons in the lowest age groups is definitely greater in India than in Britain and the number of persons in the highest age groups is definitely smaller. This is due to the much greater infantile and child mortality in India and the shorter average life.

Table No. 6 in the Appendix shows the distribution of the total population, Males and Females in various age groups.

In the statement below the distribution of the population per mille over the age groups is shown, and comparison made with the Bombay Presidency and Baroda figures, for 1931.

Age Groups	Kathiawar	Bombay Presidency (including Sind)	Baroda
0–5	158	150	149
5–10	139	131	125
10–15	127	115	118
15–20	95	89	99
20–30	164	183	170
30–40	125	146	132
40–50	92	94	102
50–60	57	55	63
60 & over	43	37	42

It will be noticed that in Kathiawar the ratios in the three lowest age groups are higher than in Bombay Presidency and Baroda. But in the Age Groups from 20 to 50 the ratios are unfavourable to Kathiawar. To what extent this result is due to emigration is not known. But emigration probably helps to explain the difference to a certain extent. As Vital Statistics for Kathiawar do not exist it is not possible to ascertain to what extent the mortality rates account for the fall in Kathiawar in the number of persons in the prime of life.

SEX

Of 31,50,963 persons enumerated in Kathiawar in 1931 Census, 16,03,417 were males and 15,47,546 were females

(for details *vide* Table No. 7 in the Appendix). There was thus an excess of 55,871 males. The ratio of females to males was 966 females to 1000 males. In the Bombay Presidency the corresponding female ratio was 909. The following statement shows the comparative number of females to 1000 males for various areas in India and elsewhere.

PROVINCE	FEMALES PER 1000 MALES
England and Wales (1921)	1,087
Scotland (1921)	1,082
Bombay Presidency (Including Sind)	909
Ajmer-Merwara	892
Assam	909
Baluchistan	778
Bengal	924
Bihar & Orissa	1,008
Burma	958
Central Provinces & Berar	1,000
Madras	1,025
North-west Frontier Province	843
Punjab	831
United Provinces	904
Baroda	942
Mysore	955

It will be noted from the above statement that Kathiawar shows a comparatively high female ratio. Male emigra-

tion is accountable for this particular phenomena to a certain degree. Table No. 8 in the Appendix gives separately for each State the ratio of females per 1000 Males.

A further division of the Male and Female population into rural and urban is given in the statement below.

	Total	Urban	Rural
Females	15,47,546	3,99,454	11,48,092
Males	16,03,417	4.04,712	11,98,705
	31,50,963	8,04,166	23,46,797

In the rural areas the ratio of females per 1000 of males is 958 while in the urban areas it works out at 988. This phenomena may be explained either by the emigration of male population from the urban areas to the places outside Kathiawar or by the imigration of female population to the urban areas. The former seems to be the plausible reason although the latter may not be totally brushed aside in view of the development of industrial activity in big centres.

LITERACY

Out of a total population of 31,50,963 persons, 3,88,261 have been returned as literate at the 1931 Census. Of these 3,18,231 are Males and 70,030 are females. The statement given below shows the number of literates in 1931 and 1921 for important Units of Kathiawar.

States	Number of literate Males per 1000 of the male population	
	1931	1921
Bhavnagar	254	208
Gondal	165	240
Navanagar	230	153
Junagadh	186	156

The general improvement is marked. The only exception is Gondal. A possible explanation of the phenomenon may lie in the fact that the population of Gondal has increased much more than the population of Kathiawar as a whole *viz.*, by 22.2 p. c. as against 15.7 p. c. in Kathiawar as a whole. It may also be due to the backwardness in education of the Kanbis and Intermediate Hindus who form the bulk of the population. These classes must have grown in numbers very considerably in the past decade. If the population grows more rapidly than educational facilities in any territory as is certain to have happened in the case of Gondal, the result will be a porportionate fall in the literacy ratio and this seems to be the case with Gondal as there is vary rapid increase in the population of the State.

In the statement that follows standards of literacy are compared for Kathiawar, Baroda and British Districts of the Bombay Presidency.

Area	Literate	
	Number of literate males per 1,000 of the male population	Number of literate females per 1,000 of the female population
Kathiawar ...	234	54
Gujerat ...	254	46
Baroda ...	330	79
British Districts ...	176	31

It will be noticed that Kathiawar figures are better than those for male literacy in British Districts of the Presidency and much better for female literacy. Not much importance attaches to the latter fact as the number of literate females in Kathiawar is only 70,030 as compared with 2,73,375 in British Districts of Bombay Presidency and higher ratios in small figures are statistically of less importance than lower

ratios in large figures, as any one familiar with arithmetical averaging will recognise.

Table No. 9 in the Appendix is the general table showing literacy by Age and Sex. Table No. 10 in the Appendix gives figures for literacy by Age, Sex and Locality.

A perusal of the latter convinces that the standard of literacy differs very considerably in the various units and depends upon the extent of urbanisation and the comparative size of the units in square miles. The educational problem in fact differs entirely according to local circumstances and there is no general policy of educational advance which can be applied consistently over the maze of diverse local conditions.

The statement below gives in detail the backwardness of Kathiawar as compared with the Baroda State.

	Kathiawar			Baroda		
	Total per mille population	for 1000 each		Total per mille population	for 1000 each	
		Males	Females		Males	Females
5–10	80	60	20	118	83	25
10–15	139	105	34	221	159	52
15–20	194	153	41	331	239	72
20 & Over	158	135	23	208	182	26

In all aspects Kathiawar compares very unfavourably with Baroda. Leaving aside the higher male ratio, the proportion of female literacy in the two groups of 10-15 and 15-20 is markedly higher in the Baroda State.

As regards the literacy in English is concerned, out of a total population of 31,50,963 only 35,234 persons are lite-

rate in English in the province of Kathiawar while in Baroda there are 32,022 out of the total population of 24,43,007. The only peculiar feature being 1,804 females in Baroda are literate as compared with 1,222 females in the whole of Kathiawar.

This is the whole problem. Here we have a population predominantly agricultural and relatively backward in education. It is on this very source that the labour supply of the industries will depend.

MOBILITY OF LABOUR

A fact often complained of by the employers and which is considered as the serious handicap to efficiency is the rural bias of the Indian Labour. We shall discuss it at great length at a later stage but sufficient it is for our purpose to acknowledge it and investigate the reasons underlying the same. It cannot be denied that the economic transition in India from field to factory was not only a sudden one but it was a transition from the stage of rural economy resting on custom and tradition to a system of international exchange under the foreign rule by which she was made to part with her raw produce and food-stuffs in exchange for cheap machine made goods which steadily destroyed her indigenous industries and aggravated the distress of the transition period by over-burdening a poorly cultivated soil. As a result of this sudden transition we have a spectacle of the simultaneous existence in India of both the old order based on custom and tradition and a new order based on competition.

The village still retains its predominant position as an economic unit wherein even the humblest worker has a place of his own. The caste system and other social institutions have not lost their hold on the villagers with a result that even the poorest of the lot will not like to lose his position in the village economy and if by the combination of adverse economic factors he has to leave the village for eking out his bare means of subsistence, he will revert back to his old

place at the very first opportunity that circumstances might permit. The associations that he and his ancestors might have made in the local history of the place is another tempting factor that deters him from leaving the village and finding wider opportunities abroad for richer and fuller life. Added to this is the burden of illiteracy.

As for Kathiawar we have already noted that nearly half of the total population resides in villages with a population under 1,000 persons. As regards literacy it is enough if we note that only 3,88,261 persons are literate out of the total population of 31,50,963—literate in the sense in which it is understood in the Census of 'being able to write and read a letter to and from a friend'.

However it can be assumed from the variety of industries which are floated after 1917 and are henceforward flourishing at various ports of Kathiawar, that there is of late a marked tendency amongst the rural populace to sever its age old ties with the village and to flock to the centres of industrial activities; and that by increasing the educational facilities in the province by and by the problem of mobility can be rendered to insignificance.

II. OCCUPATIONAL RETURNS

Scheme of Classifications

All occupations are divided into four classes which are further sub-divided in twelve sub-classes, 55 orders and 195 groups. The four classes and their sub-classes are as follows :—

Class	*Description*	*Sub-Class*	*Description*
A.	Production of raw materials.	I.	Exploitation of animals and vegetation.
		II.	Exploitation of minerals.

Class	*Description*	*Sub-Class*	*Description*
B.	Preparation and supply of material substances.	III.	Industry.
		IV.	Transport.
		V.	Trade.
C.	Public Administration and Liberal Arts.	VI.	Public Force.
		VII.	Public Administration.
		VIII.	Professions and Liberal Arts.
D.	Miscellaneous.	IX.	Persons living on their own Income.
		X.	Domestic Service.
		XI.	Insufficiently described occupation.
		XII.	Unproductive.

PROPORTION OF WORKERS AND NON-WORKERS

Out of a total population of 31,50,963, 8,24,377 persons are returned as Earners and 3,80,171 as Working Dependants leaving 19,46,415 as Non-Working Dependants. (*vide* Table No. 11 in the Appendix). The ratio of workers to non-workers per 1,000 of total poulation comes to 382 to 618.

In the statement below, the proportion of workers and non-workers are compared for the Western India States Agency for the last three Censuses.

Class	Number per 1,000 of total population		
	1931	1921	1911
I. Earners	388	395	425
II. Non-working Dependants	612	605	575

These figures tend to show that the number of non-workers has increased relatively to workers. Hence it is obvious that industrialisation has not kept pace with the growth of population. This tendency may also be safely presumed for the area under survey.

If we turn our attention to the figures of working dependants for Kathiawar, as a whole, we find that the ratio of 120.6 working dependants per mille of the population is made up of 49.7 males and 70.9 females. In other words 14.4 per cent. of the female population is helping to augment the family income by some form or other of economic activity. If females aged under 15 and over 50 are excluded it will be seen that 43 per cent of all females of more or less able bodied ages are doing some kind of economic work.

The statement below shows the ratio per mille of working dependants to the total population and the percentage of female working dependants to the total female population and gives the comparative ratios for Bombay Presidency also.

Item	Bombay Presidency (including Sind)	Kathiawar
Ratio per mille of working dependants to the total population	61.3 Males 23.6 Females 37.7	120.6 Males 49.7 Females 70.9
Percentage of female working dependants to total female population	7.9	14.4
Percentage of females excluding those under 10 and over 60 to the total female population	67.2	65.6
Percentage of female working dependants to able-bodied females	16.0	30.0

Most striking feature of the statement is the way in which it brings out the very high percentage of female

working dependants to able bodied females in Kathiawar.

PROPORTION OF EARNERS AND WORKING DEPENDANTS IN EACH CLASS

The following statement shows the proportion per mille of working dependants to principal earners per mille in the four occupational classes.

Class	Proportion
A	662
B	243
C	86
D	399

From this it is seen that the highest proportion is in Class A which includes the exploitation of animals and vegetation, of which agriculture is the most important component. In Class B, which includes industry and trade the proportion is very much lower. But whereas there are 572 out of every 1,000 occupied persons engaged in the exploitation of animals and vegetation, there are only 213 out of every 1,000 engaged in industry and trade. It is therefore, quite obvious where the occupational foundation of Kathiawar rests.

PROPORTION OF WORKERS IN EACH CLASS

Class	Sub Class	Per 1000 Workers
I.	Exploitation of Animal and Vegetation	572
II.	Minerals	5
III.	Industry	135
IV.	Transport	28
V.	Trade	78
VI.	Public Force	13
VII.	Public Administration	22
VIII.	Professions and Liberal Arts	29
IX.	Persons living on their income	2
X.	Demestic Service	18
XI.	Insufficiently described occupations	79
XII.	Unproductive	19

Out of every ten workers in Kathiawar, between five and six agriculturists and between 3 and 4 are engaged in industry trade. All other kinds of occupation together employ less than 3 workers out of ten. (For details *vide* Table No. 12 in the Appendix).

In Kathiawar 382 persons out of every thousand persons are "Workers". Distribution of persons among the various classes of occupation is shown in the statement below :

Class	Earners	Working Dependants
A. Production of Raw Materials	133	88
B. Preparation and supply of Material Substances	74	18
C. Public Administration and Liberal Arts	22	2
D. Miscellaneous	32	13

This statement again brings out clearly the extent to which working dependants are engaged in agricultural occupations.

Similar figures for Bombay Presidency and Gujerat are given below :

Class	Bombay Presidency (Including Sind)		Gujerat	
	Earners	Working Dependants	Earners	Working Dependants
A.	219	47	177	126
B.	66	6	68	10
C.	14	1	12	1
D.	31	8	28	11

On comparison we find that if agriculture be excluded, there are in Bombay Presidency 15 working dependants to 111 principal earners and in Gujerat 22 working dependants to 108 earners, while in Kathiawar there are 33 working dependants to 128 principal earners. It is suggested that the number of persons supported by agriculture in Kathiawar is probably a sign of lower standard of living.

DETAILS OF OCCUPATIONAL SUB-CLASSES

As regards the Agricultural side of the occupational returns, it would be quite appropriate to discuss them in details in a separate article on the problem of Agriculture in Kathiawar. As regards Sub Class III the statement below accounts for 1,61,728 persons employed.

Order No.	Description	Workers of All Kinds
5	Textiles	37,729
6	Hides, Skins, etc.	11,191
7	Wood	16,885
8	Metals	10,484
9	Ceramics	17,397
10	Chemical Products, etc.	4,679
11	Food	6,155
12	Dress and the Toilet	29,947
13	Building, etc.	11,596
17	Miscellaneous and undefined	15,665

(For details *vide* Table No. 13 in the Appendix)

Textiles are the largest single item contributing to the total. It is rather unfortunate that there is no information available as to the extent to which textile manufacture is an organised factory industry. It is probable, however, that most of the workers are cottage workers and not factory workers as cotton cloth of various distinctive local patterns of a kind not usually associated with machine are produced all over Kathiawar. An examination of other main items reveals the fact that industry is not organised but consists mostly of artisans, craftsmen and homeworkers. The workers in Ceramics are nearly all potters and makers of earthenware; the makers of chemical products are nearly all engaged in refining vegetable oils; the persons employed in industries of dress and the toilet are mostly Darjis, Dress Makers, Washers, Cleaners and Barbers; the persons employed in the building industries are mostly stone-cutters, brick-layers, masons, and the like. The workers in metals are mostly black-smiths and makers of implements; the persons engaged in food industries are mostly rice-pounders, huskers, butchers, sweet-meat and condiment makers and tobacco manufacturers (probably bidi-makers). These occupations are typical of the industrial distribution. Nearly all these workers are cottage and individual workers, having no connection with factories at all. Thus, industry in Kathiawar, though relatively important, is not organised industry and has little relation to 'Industrialism' as that term is generally understood in works on economics.

As regards Sub Class V, the distribution of persons engaged in trade in Kathiawar is shown by the statement below. Trade employs 91,844 persons in all.

Order No.	Description.	Workers of all Kinds
23	Banks, Establishments of Credit etc.	5,223
24	Brokerage, commission agents, etc.	1,348
25	Trade in Textiles	14,643
26	Trade in Skins, Leather, etc.	927
27	Trade in Wood	1,125
31	Hotels, Cafes, Restaurants, etc.	3,931
32	Other Trade in Food Stuffs	31,824
36	Trade in Means of Transport	980
37	Trade in Fuel	2,457
38	Trade in Articles of Luxury	1,629
39	Trade (other sorts).	27,757

(For details *vide* Table No. 14 in the Appendix).

Kathiawar shows the normal relation of Trade to Industry except in one particular and it is the large number of workers engaged in Banking, Brokerage and credit dealings.

On trades in food-stuffs the most important numerically are dealers in grains ane pulses, sweet-meats, sugar and spices, dairy products other food-stuffs and tobacco. "Traders-other sorts", are mostly general Store-keepers and shop-keepers otherwise specified.

OCCUPATIONS OF WOMEN

The female population of Kathiawar has been returned as 15,47,546 of whom 1,00,422 have been returned as earners, 2,23,582 as a working dependants and 12,23,542 as

non-working dependants. In other words, out of every 1,000 females, 209 are workers and 791 are non-working dependants. There are, however, 5,69,619 females aged under 10 and over 55 (assuming in arbitrary figure of 37,898 for the age group 55-60 out of a total of 87,898 for the age group 50-60) and if these be excluded as incapable of work, we get 638 per mille of total female population as available for work either as principal earners or working dependants.

The statement below compares the figures for Kathiawar with those of the Bombay Presidency and Gujerat.

Category	Kathiawar	Bombay Presidency (including Sind)	Gujerat
Workers	209	216	433
Population aged 10 to 55	638	649	684
Non-working Dependants	791	784	567
Population aged under 10 and over 55	362	351	316

Kathiawar compares very unfavourably with the Bombay Presidency and the Gujerat figures; while 216 out of 649 are workers in the Bombay Presidency there are only 209 out of 638 in Kathiawar. In spite of this low ratio of actual female workers in Kathiawar the poverty is appaling as will be seen on a critical examination of the constitution of the female labour into Principal Workers and Working Dependants. The following statement elucidates our point a bit further.

Unit	Total Principal Workers Females	Total Working Dependants Females
Bombay Presidency	17,17,643	9,89,236
Kathiawar	1,00,422	2,23,582

While there is roughly one working dependant to two principal workers in the Bombay Presidency, in the case of Kathiawar the ratio falls to more than two working dependants to one Principal Worker.

The statement below shows the chief female occupations and the number of females engaged in them relatively to 1,000 males.

Occupation	Number of females per 1,000 males	Actual figures
Agricultural Labourers	1,221	1,47,969
Forestry	719	2,414
Textiles	358	9,939
Basket Makers and other Industries of wood materials etc.	478	890
Rice Pounders, huskers and flour grinders	7,295	941
Grain Parchers	6 458	155
Washing and Cleaning	676	954
Scavenging	599	2,206
Dealers in dairy products and eggs etc.	2,039	1,827
Trade in fuel	1,986	1,634
Midwives, Vaccinators, compounders, Nurses and Masseurs	478	254
Procurers and Prostitutes	2,143	15

The number of prostitutes is much under estimated. Probably some of the prostitutes have returned themselves as dancers, musicians and actors.

NEED FOR OCCUPATIONAL CHANGE

The statistics in respect of the occupational returns repeat the same old tale of the preponderance of agriculture in the area under survey. With 58 per cent of the total population engaged in the exploitation of animals and vegetation, Kathiawar presents all the features commonly found in a backward agricultural land. 45 per cent of the able-bodied females work either as principal workers or as working class dependants. Moreover out of 3,24,004 females returned as workers no fewer than 1,47,969 are agricultural labourers.

Mostly the industries are of rural type except a handful of them which are recently floated at various ports. Number of non-working dependants as compared to the working dependants or earners is steadily increasing. A well planned system of economic regeneration must therefore be evolved to bring about the coordination between agriculture and industry. If it is to save itself from the sufferings resulting from its main dependance on agriculture, Kathiawar should work out its future along the lines of economic development. There is urgent necessity of utilising both the material resources and the man-power for a better production of wealth that would enable the masses to lead a richer and fuller life. The industrialisation from the point of view of raw materials we have discussed in Chapter XII, but so far as the man-power is concerned sufficient it is to bear in mind that agriculture in its present state can hardly maintain the existing pressure on land and that there is urgent need to find out other industrial avenues for growing population in order to check the falling standard of living of the people of the province.

CHAPTER V

AGRICULTURE

The production of material commodities which constitute the wealth of a country may be roughly classified into the primary industries like agriculture and mining and the secondary industries like manufactures. Of these the agricuiture is of greater importance inasmuch as it not only supplies the food for the nation but also the raw materials for its industries. Due to the development of the rapid means of transport and communication it may be quite possible at present to bring food and the raw materials from distant lands within no time, but even then it should be remembered that the country's inherent economic strength depends upon the possibilities of its primary industries. The World War amply demonstrated their importance and to-day we find that even the highly industrialised nations of Europe pay more and more attention to their primary industries. We must agree with Hecht that "both a man and a nation which are dependant upon others for their daily necessaries of life are at their mercy—a nation which gives up the production of its own necessaries of life surrenders its economic, and possibly its entire independence, and so long as present human frailties endure no nation should be dependant upon another for its primary necessaries of life".

Among the primary industries, however, agriculture is the most important, and at the same time most ancient. Importance of agriculture cannot better be summarised than in the famous quotation of the German Military hero Moltke that "the German Empire will collapse without firing a shot when German Agriculture collapses". To us who are interested in the economic uplift of Kathiawar, the importance of agriculture is doubly enhanced when we remember that agriculture is Kathiawar's basic industry. With 567 per mille of the total workers engaged in the pursuit of agriculture and pasture, its predominance in the occupational life of the province cannot be underrated. Before, therefore, considering the nature of soil, and the problems connected with it, we shall first analyse occupational returns in relation to agriculture in Kathiawar and compare them with the conditions prevalent in Gujerat and elsewhere. This analysis will give us a vivid picture of the

importance of agricultural pursuits in Kathiawar and also the comparative idea of the conditions prevailing in other parts of the country.

AGRICULTURAL POPULATION

Of the 697,641 persons engaged in the exploitation of Animals and Vegetation 22,709 are non-cultivating proprietors, 82,430 are cultivators, 256,712 are tenant cultivators and 272,144 are agricultural labourers and helpers. The following table gives the figures for the other sub-orders also :—

Sub-Class I	Exploitation of Animals and Vegetation	697,641
Order I (*a*)	Pasture and Agricultural ...	635,181
Order I (*a*) (1)	Non-cultivating Proprietors taking rent in money or kind ...	22,709
Order I (*a*) (2)	Estate Agents and Managers or Owners	1,173
Order I (*a*) (3)	Estate Agents and Managers of Government	1
Order I (*a*) (4)	Rent Collectors, Clerks, etc. ...	12
Order I (*a*) (5)	Cultivating Owners	82,430
Order I (*a*) (6)	Tenant Cultivators	256,712
Order I (*a*) (7)	Agricultural Labourers	272,144
Order I (*b*)	Cultivation of Special Crops, Fruits, etc.	4,832
Order I (*c*)	Forestry	5,892
Order I (*d*)	Stock Raising	49,967
Order I (*e*)	Raising of Small Animals and Insects	3
Order II	Fishing and Hunting	1,766

(For details, *vide* Table No. I in the Appendix.)

Of the total number of agricultural labourers, 182,701 are working dependants, males and females, who are assisting the heads of the families—be these owners, tenants, of mere labourers. The figures for "Stock Raising" include cattle and buffalo breeders and keepers as well as herdsmen, shepherds and breeders of other animals.

The statement below compares the conditions in Kathiawar as regards the distribution of "workers" in Agriculture with those prevailing in the Bombay Presidency and Gujerat.

Workers of all kinds per mille of total workers

Occupation	Kathiawar	Bombay (Presidency including Sind)	Gujerat
Non-Cultivating Proprietors...	18	23	18
Cultivating Owners ...	67	112	245
Tenant Cultivators ...	209	151	31
Agricultural Labourers ...	222	345	259

From this statement many interesting conclusions can be drawn. One is the high ratio of tenant cultivators in Kathiawar, nearly seven times that in Gujarat. This may be partly explained by the system of land tenure prevailing in most parts of Kathiawar. The cultivators are mostly mere tenants at will of the States in this province. They therefore have no interest in the land and they can remain in possession of their lands only at the sweet will of the State Authorities. The high ratio also suggests that there is in Kathiawar a greater number of middlemen between the owner and the actual cultivator than is the case in either the Bombay Presidency or Gujarat.

Another is the low ratio of the cultivating owners in Kathiawar. It is about half the ratio in the Bombay Presidency and about one-fourth of the ratio in Gujarat. Even this low ratio looks ridiculously low when we take into account that the Baroda Government's territories in Kathiawar—about one-seventeenth part of the area under survey—contain 37,055 cultivating owners out of a total of 82,430 for the whole of Kathiawar.

The low ratio for agricultural labourers suggests that the land is not so fertile as in the Bombay Presidency and Gujarat. It may be also inferred that a greater portion of the tenant cultivators and their family members do all the work and no extra hands are engaged. This may be partly due to the poverty of the agriculturists and partly due to the low returns from the farming operations. The high ratio of landless labourers in Gujarat, Mr. Keatinge suggests, is due to the fact that whole classes of cultivators who formerly used to do their own field work have now ceased to take any active part in field operations. Mr. Keatinge quotes Mr. Gulabbhai N. Desai who estimates that during the last generation, from the Patidars, Kanbis, Anavalas and Bohras of Gujarat alone, some 300,000 able-bodied men have withdrawn from the ranks of active labourers. Thus in Gujarat an active demand for agricultural labourers has arisen with the result that they have secured a position of relative strength, and they are able to form the class of the agricultural labourers. In Kathiawar, the tale is a different one. Out of 272 thousands of landless labourers as already noted two-thirds are working dependants who are augmenting the family income by their work, therefore agricultural labourers as a class have as yet gained no standing as such in the province of Kathiawar.

Barring the figures relating to the non-cultivating proprietors, the remaining three classes of Cultivating Owners, Tenant Cultivators, and Agricultural Labourers attract as

many as 635 and 608 workers per mille of total workers in Gujarat and the Bombay Presidency, while in Kathiawar they attract only 498. We can safely assert that agriculture in Kathiawar is not as paying a proposition as it is in Gujarat or the Bombay Presidency. Where the roots of this palpable malady lie, our attempts at an analysis of the same will surely reveal, but before we arrive at any particular conclusions and formulate our opinion of the same, we shall take the survey of the whole problem of Ariculture in Kathiawar from the following points of view, viz. :—

(1) Soil and Problems connected with the Soil including the Problems of Low Productivity, Sub-division and Fragmentation, etc., etc.,

(2) Tillage, Technique and Cattle Problem,

(3) Agricultural Indebtedness,

and

(4) State Policy including Land Tenures and Agricultural Finance.

This will enable us to have a clear perspective of the whole situation as it stands to-day, and, at the same time, it will enable us to suggest the remedies for the same.

THE SOIL AND THE PROBLEMS CONNECTED WITH THE SOIL

Nature of the Soil

Kathiawar has the chief essentials for prosperous agriculture. The climate is on the whole temperate, the rainfall moderate, streams abound, ponds and wells are fairly numerous and there is much variety in the texture, quality and the depth of the soil. The soils of Kathiawar may be classified under two main heads : Kali or Black and Goradu or Red, the red being considered slightly inferior to the black. The Kali or black soil may be further sub-divided into Kampal or the best cotton soil; the Kali Besar, a dark brown soil suited for wheat, barley, etc.; Naram Karal,

Kathan Karal, etc. The red soil is of four kinds: Kampal or red alluvial deposit suited for wheat, barley, vegetables; Malin; Retal suited for Til, Pulses and Bajri; and Rechak or a saltish clayey earth. Besides these two there are other varieties as Kankarial, etc., etc.

The varied nature of the soils warrants the cultivation of a variety of crops and a casual survey of the same confirms our opinion. Some of the richest tracts lie along the course of the Bhadar River which rising near Jasdan, flows south-west past Adhot, Jetpur, Dhoraji, Upleta and Bantwa into the Arabian Sea. Gohilwad has some highly productive lands notably at Mahuva and Lilia where excellent fruit and vegetables are grown, sweet water being found ten or twelve feet below the surface. Chorwad in Sorath is famous for its betel-vines. Khambhalia and its neighbouring districts in Halar contain the rich alluvial tracts within the boundaries of the Nawanagar State. Gondal is famous for its cotton and so is Jhalawad. In the northern and eastern districts of Jhalawad and Gohilwad much cotton is grown. Halar in the west yields excellent Juwar, Bajri, wheat and other grains. Sorath is rich both in cotton and grain. In the Bhal districts of Limbdi wheat is successfully grown without manure and with less attention than ordinary land requires. Cotton and grain are also grown in Bhal.

The soils of the Amreli District may be classed under two main heads—Black and Goradu. But the Black and Goradu soils of this district appear to be much inferior to the similar soils of the Baroda and Nawsari districts on account of the shallow depths, scanty rainfall and dry climate. In Okhamandal, the northern half is slightly red but the whole of the coast line is sandy and unproductive. Inland the soil is fairly productive and fertile.

Nature is lavish and bountiful to a certain extent in Kathiawar. The black cotton soil and the rich alluvial tracts together with the Bhal Districts of the Limbdi State formed

by the silts of the four great rivers falling into the Bay of Cambay and where wheat can be grown even without manures are but the few instances of the gifts of Nature. But as Mr. Keatinge rightly suggests a civilization that is based on natural advantages and not on the energy of man contains within itself the seeds of its own destruction. We may not go into a detailed discussion as to whether the civilization of Kathiawar is based on the natural advantages or not, all the same we can certainly agree with him that the land may be good or bad and the plough may be good or bad, but it is the man behind the plough who counts for most in the long run. As regards the man behind the plough we shall consider the problem at a later stage.

Main Crops

The leading crops of Kathiawar are Cotton, Juwar, Bajri, Wheat, Oil-seeds, Groundnuts, Castor seeds, Sesamum, Paddy, Sugarcane, Gram, Urad, Mag, Barley, Chena pulses, Onions, etc., etc. In ordinary season the staple good grain is Bajri but in the seasons of the drought Juwar takes the foremost place because it can be pilted for several years without spoiling. The names of the various kinds of vegetables, condiments, spices, fruit trees, cereals, etc., grown in Kathiawar are given in the Gazetteer of the Bombay Presidency (1884), Vol. VIII, Kathiawar, pages 182–84. But it must be noted that most of them are consumed locally and except a few items among them others are not worth naming in the export or import trade statistics of Kathiawar. Whatever is grown is meant primarily for satisfying the needs of the local inhabitants and export to the places outside the Province is limited to only a few leading items of production.

We have already stressed the handicap in the way of obtaining the necessary statistical data in the absence of which it is difficult for us to arrive at a particular conclusion or to grasp the situation and view the same from a true

perspective without any political bias. Year in and year out comes a series of the administration reports which marks every year the progress of the States concerned. It is a hobby with those in charge to be apologetic in their tone and to show to the outside world that their State is progressing every year whether it be one of the larger States like Bhavnagar, Nawanagar and Junagadh or smaller ones like Muli. It seems to be hobby of the framers of the Administration Reports to point out every year in their panegyric works a few hundreds spent for building new wells or a few hundreds spent on education. If half of the zeal shown by them in preparing a list of the distinguished visitors to their States would have been directed towards pointing out the areas cultivated under different crops and the total yield under them, we would have been in a safer position to judge the real progress of these States. Let us reiterate again that we are not in any way concerned with the thrift or otherwise of any prince of ruler in Kathiawar, however we surely feel that if money is found for spending lavishly after foreign tours, it can well be spared for the creation of a statistical department which will render immense service to the State subjects. For the reason best known to themselves, some of the States even do not disclose the separate heads of revenue and expenditure. These handicaps require immediate solution and we hope that proper steps in this direction shall be immediately taken up by the authorities concerned.

The evolution of the various political divisions of Kathiawar has made the system of land tenures a somewhat novel one. In former times lands were used to be granted to the sons and relatives of the ruler or to some officers of the State or public for their meritorious acts. This gave rise to the new classes of landlords usually called the Bhayats of the State, and the Garasias. This process of parcelling out has reduced the size of many States, *e.g.*, Lathi, etc.

Briefly lands may be divided into:—

(1) Darbari,

(2) Bhayats, Mulgarasias, and

(3) Alienated for charitable and other purposes.

Most of the Administration Reports deal only with the Darbari land and hence it is not possible for us to arrive at an estimate of the total area under cultivation in Kathiawar in a particular year. The following table gives the areas of cultivable lands lying idle in some of the States:—

States	Land under cultivation	Cultivable land lying idle
1933-34	In acres	In acres
Nawanagar ...	1,098,286	68,985
Bhavnagar ...	735,536	41,819
Junagadh ...	682,413	73,868
Gondal ...	352,006	12,261
Porbandar ...	163,723	Figures not available
Wadhwan ...	75,473	Do.
Rajkot* ...	107,619	Do.
1934-35		
Amreli	882,085 bighas	76,731 bighas
Okha	173,805 „	71,047 „

* Samvat Year 1990.

It should not be supposed that the various areas lying idle in compact blocks. They are usually distributed over the whole territory and that too in some pieces of odd sizes. It also suggests that the agriculture may not be a paying proposition.

As regards the size of the various crops we are not in a position to ascertain but the following table will give an idea of some of the important crops raised within the territories of some of the principal States :—

Crops	Bhavnagar	Junagadh	Nawanagar	Wadhwan*
1933–34	In acres	In acres	In acres	In acres
Cotton ...	209,396	164,410	45,655	50,534
Bajri ...	471,668	128,710	299,289	17,237
Juwar ...		66,963	300,233	14,443
Oil-seeds ...	63,131	122,326	.....	.....
Wheat ...	30,727	14,019	38,404	875
Sugarcane ...	1,251	2,186	1,894	.....
Sesamum ...	.....	.....	116,412	.....
Groundnuts ...	.....	.....	97,329	.....
Castor seeds ...	.....	.....	44,414	.....
Gram ...	.....	4,560	44,764	337
Paddy ...	.....	4,320	.....	.....

* Figures include Bhayati lands also.

From the point of view of commercial importance the following figures taken from the Kathiawar Trade Statistics reveal that the main items of agricultural produce which are exported from the Province are cotton, castor seeds, groundnuts, pulses, wheat, onions, chillies, etc.

Export from the Maritime States of Kathiawar

Articles	Quantity			Value		
	1931-32	1932-33	1933-34	1931-32	1932-33	1933-34
				Rs.	Rs.	Rs.
Onions ... Cwts.	16,970	16,353	8,189	35,186	19,915	11,100
Rice ... Tons	55	52	47	8,223	7,028	5,674
Wheat ... ,,	17	6	2	2,205	849	288
Juwar, Bajri ,,	16	987	54	1,176	97,432	3,495
Pulse ... ,,	25	15	9	3,773	2,417	809
Castor seeds ,,	1,764	5,180	5,930	2,38,595	6,42,277	5,54,261
Cotton seeds ,,	11	...	...	9,450	...	...
Groundnuts ,,	22,143	9,816	29,991	30,71,549	13,02,093	31,58,808
Cotton ... ,,	645	6,301	25,133	3,63,232	34,29,205	1,71,32,687

Statistics of Imports into British India across the Viramgam-Dhandhuka Land Customs Line

(The figures include the local produce and reimported goods)

Articles	Quantity			Value		
	1931-32	1932-33	1933-34	1931-32	1932-33	1933-34
				Rs.	Rs.	Rs.
Grains and pluses (maunds) ...	632,981	798,691	870,158	26,49,007	31,75,391	35,09,372
Chillies and Ginger (maunds) ...	10,374	9,142	20,474	57,741	58,190	2,02,463
Cotton (maunds)...	147,334	229,513	198,389	25,30,131	45,84,971	38,00,780

The figures of the exports across Viramgam give no real clue as to the actual amount belonging to the Province because they contain figures for reimports also.

As regards the other problems connected with soil, *viz.*, the yield, etc., we shall content ourselves with the typical example of the Nawanagar State, the largest and perhaps the most advanced State in the province of Kathiawar.

In an "Atlas of the Progress of the Nawanagar State" accomplished since the accession in March 1907 of H. H. Sir Ranjitsinghji, by John DeLa Valette, we have some illuminating data concerning the real progress of the people. It contains twenty-one charts and we are told by the author that "they not only record progress; they illustrate the progress and measure it in a way which affords the student of this material an insight into human forces at work below the surface of mere administrative achievement." For the purposes of our investigation we have taken Chart No. 3 being the chart showing the distribution of crops in acres in Nawanagar State. A striking comparison is made between the years 1906–07 and 1929–30. The statement below is what the author has tried to make out :—

——	1906–07	1929–30
Total cropped area ...	951,881 acres	1,128,493 acres
Total value of all crops ...	Rs. 65,98,638	Rs. 1,17,75,090
Paid to Darbar (i.e. Revenue Dues to the Nawanagar State) ...	Rs. 16,77,814	Rs. 29,57,181
Balance (Cultivators' Share)	Rs. 49,20,824	Rs. 88,17,909

We are led to infer that the cultivators' share is increased by something like 40 lakhs of rupees a year within a short space of 23 years.

The following table constructed from the same chart gives the areas cropped under six main items of production :—

Kind	Area cropped in 1906–07	Area cropped in 1929–30
Bajri	370,462	329,545
Juwar	352,607	352,805
Cotton	129,972	60,290
Sesamum	19,062	114,531
Gram	14,584	39,227
Castor	19,008	27,208
total ...	905,695	923,606
Total cropped area ...	951,881	1,128,493

The following table taken from the same chart gives the total yield under these crops in the years 1906–07 and 1929–30 :—

Kind	Total yield in maunds 1906–07	Total yield in maunds 1929–30
Bajri	1,399,578	1,187,354
Juwar	1,343,389	825,130
Cotton	358,463	240,898
Sesamum	379,015	153,474
Gram	60,476	128,502
Caster	117,295	81,184
Total ...	3,658,216	2,616,542

These two tables read together give us enough material to think regarding the progress achieved by the people during the space of 23 years. Behind the dazzling magnificence of the Port Bedi and the jugglery of the higher and higher figures of imports and exports lie the miserable state of an impoverished soil and a poor people. In spite of an increase of something like 18,000 acres in the area cropped under these six main items, the yield declined by more than ten and a half lakh of maunds. It is certainly not an encouraging state of affairs when we remember that the areas under these crops represent 95 per cent. of the total cropped area in one case and 82 per cent. of the total in the other. We are not sitting in judgment neither is it our province to ascertain and adjudge the party responsible for such a havoc but to submit humbly and join the ever-growing circus of court flatterers is not what we as humble research workers are supposed to do. It is really regrettable that these lines have got to be written concerning a State that has always responded to the appeals for the necessary facilities for research work. But that should not come in the way of finding out the pure and naked truth. To call such a state of affairs a progress is nothing but the travesty of facts pure and simple.

The following table compiled from the said chart gives the yield in lbs. per acre of those six crops in the years under comparison.

Kind	Yield in lbs. per acre 1906–07	Yield in lbs. per acre 1929–30
Bajri	151	144
Juwar	152	94
Cotton	110	160
Sesamum	795	54
Gram	167	131
Castor	247	119

This yield per acre has declined in all the above crops except cotton. Within a short space of 23 years, the yield of castor per acre declined from 247 lbs. to 119 lbs., of grams 167 lbs. to 131 lbs., of Juwar from 152 lbs. to 94 lbs. and of sesamum 795lbs. to 54 lbs. If we estimate the decline in yield from the figures of the total yield, we can safely assert that the soil has declined in yield by something like 30 per cent. Such a calamitous state, which evinces progressive deterioration of soil in Kathiawar cannot be termed progress, and if this is what is meant by progress, the agriculturists would like to be without it rather than have it and pay the penalty.

The question then, that would naturally commend itself, is whether the agriculturist was better off in 1930 than in 1906? The following table computed from the chart gives the money value of those six main crops at the prices ruling in 1906-07 and 1929-30 respectively.

Kind	Year 1906-07	Year 1929-30
	Rs.	Rs.
Bajri	13,99,578	31,16,804
Juwar	13,43,389	14,44,002
Cotton	8,62,215	7,22,694
Sesamum	12,55,486	2,68,579
Gram	79,373	2,89,129
Castor	2,05,267	2,28,330
Total value ...	51,45,308	60,69,538
Total area cropped under these six crops	Acres 905,695	923,606

If 905,695 acres be taken in the case of 1929–30 for the sake of comparison, the total value of crops for that area comes to Rs. 59,50,416.

The statement below gives the incidence of the Darbar's share in the Nawanagar State per acre of cropped area in both the cases.

Particulars	1906–07	1929–30
Total Darbar's share	Rs. 16,77,814	29,57,181
Total area cropped	Acres 951,881	1,128,493
Darbar's share per acre of cropped area	Rs. 1·76	2·72

Taking this as the basis of comparison the Darbar's share amounted to Rs. 15,94,023 in 1906–07 and Rs. 23,72,910 in 1929–30. Deducting this from the money value of the produce, we get the following result :—

——	1906–07	1929–30
	Rs.	Rs.
Money value of the produce ...	51,45,308	59,50,416
Less Darbar's share	15,94,023	23,72,910
Balance (Cultivator's share) ...	35,51,285	35,77,506

It shows only the total increase of Rs. 26,221 in the cultivators' share, or less than 2 pice increase in cultivator's share per acre. This at least cannot be called progress. The method of assessing the progress may be prone to criticism from the interested quarters but the figures shown are taken from a book which was published for

His Highness Sir Ranjitsinghji's Government (i.e., for the Government of the Nawanagar State). Against this meagre rise in income, it may be stated, the cultivator had an advantage of a remarkable rise in prices as will be seen from the following statement :—

Kind	Price per maund 1906–07	Price per maund 1929–30	Rise in price
	Rs. a. p.	Rs. a. p.	per cent.
Bajri	1 0 0	2 10 0	162·5
Juwar	0 14 0	1 12 0	100
Cotton	2 10 0	3 0 0	14
Sesamum ...	3 5 0	3 12 0	13
Gram	1 5 0	2 4 0	71
Castor	1 12 0	2 13 0	61

One wonders why, with such a phenomenal rise in prices of his produce, the agriculturist was able to obtain only the increase of less than 2 pice per acre of cropped area? The reasons were not far to seek. The benefits of this rise were wiped out by two mighty forces: one was the declining productivity of soil that he could not control while the other was the rise in the incidence of the Darbar's (Nawanagar State's) share to which he had no other alternative but to surrender. Between these two unavoidable forces the gain in the value of the produce was crushed with a result that the period of 23 years of progress saw him as skeletonous as before. His plight had become more pitiable when we remember that the poor fellow had to pay an increasing rate of wages to the labourers due to the

abnormal rise in the prices of the two main food produce—Bajri and Juwar. Hence it was a rise an advantage of which it was not in his poor lot to take. He had to console himself with his apparent gain of less than 2 pice per acre. His real wealth declined and his resisting power gave way under the crushing burden of indebtedness. Nemesis had its turn and the aftermath of the tale of progress is altogether a different story as will be judged from the following figures :—

Year	Cultivable land lying idle
	A. g.
1929-30	42,324 27
1930-31	42,762 14
1931-32	47,642 2
1932-33	61,117 19
1933-34	68,985 15
1934-35	82,719 20
1935-36	98,377 9
1936-37	115,527 11
1937-38	122,179 20
1938-39	127,638 21

More than 85,000 acres of cultivable land were abandoned by the agriculturists within a short space of a decade ! The ebb-tide is rapid and deserves special attention of those concerned.

If the soils within the territories of the Nawanagar State exhibit a declining tendency in spite of the concern shown by the State as will be seen from the following statement, the conditions of the soil within the territories

of the smaller States with no resources at their disposal can be easily judged.

*Between 1906-07 and 1929-30

Number of new wells	9,410
	Rs.
Expenditure incurred on irrigation tanks	13,45,129
Expenditure incurred on storage tanks ...	6,63,916

The example of the Nawanagar State is taken in order to have a comparative idea as to the conditions prevailing in the smaller States. Nawanagar being the largest and perhaps the most advanced among the 200 odd States of Kathiawar may be said to possess ample resources and a definite policy. But even if the resources of such a prominent and big State in Kathiawar fail to arrest the declining productivity of the soil within its territories, it is neither exaggeration nor a generalisation to assert that during the last 30 years the soil of Kathiawar has declined in yield.

Causes of Low Productivity of Soil

The various causes leading to the low fertility of the soil may be broadly divided into two parts :—

(*i*) Uncontrolable, and

(*ii*) Controlable.

Under the Uncontrolable factors, we may include—

(1) precariousness of the rainy season,

(2) epidemics and famines.

and under the Controlable causes may be grouped—

(1) lack of manures,

*Figures taken from Chart Nos. 5 and 6 from "An Atlas of the Progress in Nawanagar State" accomplished since the accession in March 1907 of H. H Sir Ranjitsinghji, by John De La Valette.

(2) lack of equipment,

(3) sub-division and fragmentation of the land,

(4) insufficiency of plough cattle, and

(5) lack of irrigation facilities.

Against the uncontrolable factors as the freaks of Nature and epidemics it is impossible for the farmer to withstand. However even against such heavy odds he can protect himself by his ingenuity. He can store enough food supply and fodder for bad days but this will depend to a greater extent upon the possibility of his having a surplus to store. It is impossible to enter into a lengthy discussion regarding the margin of surplus which he may be expected to store for the future use but once we take into consideration the fact that every third year is generally a lean year, its expediency cannot be questioned. Thanks to the rapid means of communication and the existence of the modern transport facilities that immediate relief can easily be secured. Otherwise, Kathiawar's proneness to famine is almost proverbial. It would not be out of place here to note that Bombay Gazetteer Vol. VIII for Kathiawar mentions about 31 famines which occurred in this province between 1559 to 1879, that is, within a period of 320 years. Horror-stricken events which took place in the severe famines of:—1631-32 (Samvat 1687) "Satasio" famine, 1681-82, 1686, 1696; 1718-19 (Samvat 1775) "Panchotra" famine, 1731-32 (Samvat 1787) second "Satasio" famine, 1747 (Samvat 1803) "Tilotra" famine, 1790-91 (Samvat 1847) "Sudtala" famine, 1813-14-15, and 1877-79, deserve some attention. During these famines at times children were sold for bread, at times men ate one another, and at times people forsook their faith for a piece of bread!

If we pause a while and think about the conditions prevailing in Kathiawar during the 20th century they also confirm our above remark. In 1899-1900 there occured a

famine called " Chhapanio " (Samvat 1956) and throughout the province people had to undergo severe hardships. In 1911–12 and 1915–16 rains failed in most parts of the province. In 1918–19 because of heavy rains ("Ati Vrashti,") crops suffered heavily. In 1931–32 frost (" Him ") destroyed the winter crops. In 1939–40 because of the failure of rain, cattle perished in thousands and the agriculturists have been left totally impoverished. Added to these wraths of Nature low prices of agricultural produce and depression in trade from 1930 onwards have reduced the resisting power of Kathiawar peasantry to a zero degree. Most of the cultivating owners are indebted and others live from hand to mouth. Hence agriculture deserves immediate attention of the authorities concerned.

The problems connected with the questions of equipment, plough and cattle and irrigation facilities will be discussed along with the questions of tillage and technique and State policy respectively.

Manures

Manure secures the first place amongst causes that have led to increase in yields. Under the question of manure is included not only the artificial manure but in an even greater measure the increased supply of farm-yard manure also. It is generally accepted as a universal truth in agriculture that what is taken off the land in crops must be put back into the soil or else it will suffer exhaustion. If the soil is to maintain its productive powers and retain its nutritive elements, it is imperative that it must be sufficiently tended with manure and carefully looked after. It is really painful to record that the soils of Kathiawar had experienced a criminal neglect at the hands of the cultivators. The most easily available and at the same time "rich both in organic and inorganic substances, both in nitrogen and in minerals," the farm-yard manure is used not in fertilising the soil but mostly as fuel, and its utility as a manure is not properly appreciated.

The cowdung is picked up and plastered in cakes on the walls of the houses so that it may dry in the sun. Sometimes it is kept for the use of the householder and sometimes sold in the town for the use of people there. Even the big cities like Jamnagar and Bhavnagar are not free from the use of this kind of fuel. People from the adjoining areas come with cartloads of cowdung cakes and dispose them off to the city dwellers. This most uneconomic, unprofitable and ruinous use of such a rich manure should not only be stopped by the States but any breach of the State's orders must be attended with exemplary punishments. If such drastic measures are not possible to be undertaken by the authorities, then at least instructions should be given to forest officers in every district to take on hand the plantation of sufficient trees and plants which would supply fuel, so that people will not be obliged to burn cowdung for fuel. Babul trees grow very easily in the soils of Kathiawar and judicious plan of planting them will not only save the rich kind of manure from going into the hearths but will indirectly be instrumental in increasing the humidity of the air with a consequent increase in the rainfall. Relaxation of forest laws on the part of the States is another measure in the same direction which is calculated to relieve the agriculturists from using the cowdung for fuel purposes. It is really our painful duty to point out that in many of the Administration Reports of Kathiawar States efforts made in planting the trees are boldly announced. According to information made available to us by these reports thousands of trees have been planted every year by various States during the last decade; but it seems all the attempts made by the authorities concerned have proved to be futile. We have no other go but to feel inclined to believe that either Nature is very harsh to this province, or else, the statistics given in the Administration Reports in this connection are incorrect. Definite attempts have got to be made in this direction. Here is a field of activity that will cost

little, and yet will result in the wellbeing of the masses of the province. However about the Forest Resources of Kathiawar we propose to write at a later stage, sufficient it is to note that hills of Chotila have been innocent victims of reckless deforestation and except the Gir and the Barda other parts of the province have little forest wealth to boast of, and no proper efforts have been made in this direction by most of the Kathiawar States.

Regardidg the importance of the oilseeds and oilcakes for maintaining the fertility of the soil we have taken the testimony of the Department of Agriculture of the Government of India itself. In one of its reports we are informed that "oilseeds contain a large percentage of nitrogen," which is the most valuable of all manure constituents and is absolutely necessary to maintain the fertility of the soil. A cursory glance at the Trade Statistics of Kathiawar shows us that oilseeds and oilcakes figure prominently in the export trade of Kathiawar both as regards the quantity and as regards the value. We have in Kathiawar absolutely a unique as well as a perplexing situation. On the one hand the rich farm-yard manure is daily being dedicated to the family hearth, on the other hand the equally rich manure in the shape of oilseeds and oilcakes is daily being exported to the foreign markets. Prejudice has come in the way of utilising night soil as a rich source of manure while the artificial manures are considered as out of sphere of practical economics. The peasantry of Kathiawar cannot afford to have the luxury of artificial manures and if some of the States distribute the packets of Sulphate of Ammonia and Nitrate of Soda the quantity is quite insignificant as compared with the areas concerned. Picking up of bones is usually auctioned by the States and those who secure the rights are mainly the exporters. Thus what remain in the hands of the cultivator and go to enrich the soil are only the leaves, stalks and stems.

With such a state of affairs, we have only to agree with Dr. Voelcker and confirm that a country that exports both crops and manure must be declining in fertility. If prohibition of the export of oilseeds, oilcakes and bones are not within the reach of practical politics, an export tax to check the evergrowing volume of their exports is at least feasible. Some may doubt the wisdom of such a step which in their opinion may deprive the cultivator of the high price of his produce but a view, that is primarily concerned with the high price of the produce, without in any way showing its concern for the wellbeing of the producer, is not only unrighteous in its inception but derogatory to the welfare of society in its repurcussions. Bold steps in the direction of levying export duties are a matter of economic expediency and no half-hearted measures will save the farmers from the entangled situation.

Sub-division and Fragmentation

One of the most ineradicable root causes of the low productivity of the Indian soil is the existence of the excessive parcelling out of the land into various blocks. We may not enter into a detailed and technical discussion of this problem in the absence of a thorough investigation but we have ample opportunities to mark the tendency as will be seen from the following table :—

BHAVNAGAR STATE

Year	Number of Durbari Kheduts	Total area cultivated by them In Acres	Area per Khedut In Acres
1912–13	19,857	8,19,119	41.2
1931–32	22,413	9,07,200	40.4
1932–33	22,243	8,01,048	36.0
1933–34	24,552	7,76,173	31.6
1934–35	29,827	7,95,395	26.6

(For details, *vide* Table No. 2 in the Appendix)

The average area fell from 41·2 acres per khedut in 1912–13 to 26·6 in 1934–35. Even this figure does not represent the real state of affairs. Not only this average of 26·6 acres may be spread over the village area in scattered holdings but the khedut may have again sub-partners whose names do not appear in the register. Various measures have been suggested and devised to combat the evil but they have been mere palliatives.

The Baroda Committee suggested a permissive Law to be passed by the Government for bringing about the consolidation of small and scattered holdings. An Act was passed but as admitted by reponsible officials of the State it has remained a dead letter on the statute book.* If consolidation is to come it is to come by education and co-operative efforts. Discussion of the problem of sub-division and fragmentation leads naturally to the question whether the holding of the agriculturist is an economic one. In the olden days a "Santi" was considered an economic holding and a cultivator who happened to possess a "Santi" of land was secured of his status both from the social as well as the economic points of view.

A "Santi" varied in size according to the different localities but generally it amounted to 35 to 40 acres of land. If we take "Santi" as the standard measure of an economic holding we can confidently assert that the present holdings of the cultivators are far from being economic. Even assuming that the lucky ones among them happen to have holdings of the size of a "Santi" it is almost certain that they are not at least compact blocks.

An economic holding presupposes that the farmer has enough left over to him for the maintenance of himself and his family after defraying the necessary expenditure involved in the farming operations. A block of land that yields

Vide Sir Manubhai Mehta, the Dewan of Baroda State, in his Presidential Address at the Bombay Provincial Co-operative Conference in 1926.

the farmer this surplus is an economic holding whether it be of 15 acres or 50 acres. Judging the Bhavnagar holding of 26 acres in the light of this criterion, it is impossible to call it an economic one in view of the following table :—

Acres	26·6	Average holding of the farmer.
	× 12	Value of produce per acre.
	319·2	
	90·0	*Less* average land revenue at Rs. 3·41 per acre.
	229·2	
	104	Cost of ploughing at Rs. 4 per acre.
	125	Balance.

To expect the farmer to maintain himself and his family within Rs. 125 is to suggest a very low standard of comforts. One of the retired officials of a prominent state has given the following material which tallies with our conclusions.

Rs.	a.	p.	
300	0	0	Value of produce grown over an area of Santi of 36 acres
75	0	0	State dues
225	0	0	Balance of 36 acres
i.e. 162	8	0	Balance of 26 acres

This figure includes seeds charges and labour charges. So the net produce into the hands of the farmer will hardly be worth Rs. 125.

TILLAGE AND TECHNIQUE

"There is no feature of Indian Agricultural practice," wrote the Agricultural Commission, "which more forcibly

strikes the agriculturist from other countries than the apparent inadequacy of the Indian plough to the work it is called upon to do." But it is well adapted to local conditions. Not only it is within the capacity of the draught oxen but it is comparatively inexpensive, light and portable, and, above all, easily repaired and constructed out of the materials which can be easily obtained. Its defects lie in the want of a mould board and the narrowness of the share which make it work slowly.

We are told that the Indian plough is a simple stage ahead of the stake with which the savage scratches the soil and does little more than scarify the ground. This may be true in the case of some lazy farmers but with the industrious farmers like Kanbis of Kathiawar that primitive instrument also becomes paying. Any plough calculated to take place of the plough at present used in Kathiawar must be cheap, simple and light. This means that the new plough must be within the reach of the cultivators. Not only that the device must be a simple one which can be worked upon by even the most ignorant among the farmers but it must be light-meaning one which the oxen may successfully ply. Besides the plough there are other implements which the farmer has got to use in the process of farming operations. The harrow, seed dril, pat, pickaxe, the shovel, weeder, the axe and the Kosh are but the few among them. With such primitive instruments at his disposal, it is no wonder that his labours are not handsomely repaid.

The situation becomes exceedingly distressing when rugged plough is called to work upon large areas—large in view of the ill nourished and hence inefficient bullocks at his disposal. The following statement gives the average

area cultivated per plough in the six principal States of the province :—

Year	State	Number of Ploughs		Total area cultivated	Average area per plough
		Two Bullocks	Four Bullocks		
				Acres	Acres
1934–35 ...	Bhavnagar	29,827	..	735,538	24.6
1933–34 ...	Jamnagar...	35,051	...	1,098,286	31.3
1933–34 ...	Junagadh..	30,000	595	682,413	21.8
1933–34* ...	Rajkot ...	3,677	599	107,688	23.0
1933–34 ...	Gondal ...	10,627	...	352,006	33.
1933–34 ...	Porbander	9,573	...	163,862	17.0

*Samvat year 1990.

In calculating the average, a four-bullocks plough is taken as equal to 2 two-bullocks ploughs. The Bhavnagar figure is worked out on the assumption that each Darbari Khedut possesses at least one plough.

The average area per plough taken in conjunction with the average area that a pair of bullocks is called upon to work—as will be seen from the following table—clearly demonstrates the nature of the farmer's task.

Year	State	Number of bullocks	Total area cultivated	Area per pair of bullocks
			Acres	Acres
1934–35 ...	Bhavnagar...	55,529	735,538	26.5
1933–34 ...	Jamnagar ..	82,636	1,098,286	26.6
1933–34 ...	Junagadh ...	98,767	682,413	13.8
1933–34* ...	Rajkot ...	14,213	107,618	15.0
1933–34 ...	Gondal ..	29,064	352,006	24.2
1933–34 ...	Porbander ...	28,335	163,862	11.6

* Somvat year 1990.

The lower figures for Junagadh and Porbunder may be partially due to the nearness of Gir and Barda ranges of hills. If bullocks used in riding carts (that is, in carrying passengers, etc.), be deducted from the total number of bullocks in the Rajkot State, the remaining will give a higher average of cultivated area per pair.

The insufficiency of the bullocks as well as the implements is obvious. When a farmer tries to work out an area of 20 to 25 acres with a pair of bullocks, the results cannot be encouraging. The following statement gives the corresponding figures for some of the districts of Gujarat.

District	Cropped area, per pair of plough cattle, in acres*
Ahmedabad	24.8
Kaira	16.2
Panch Mahals	10.5
Broach	22.8
Surat	11.8

Coupled therefore with the comparative inadequacy of the plough cattle, in most of the Kathiawar States, is the growing complaint of its inefficiency. We may not enter into the lengthy discussion of the quality of the plough cattle but hope that the interest evinced recently by some of the states towards better breeding will be helpful to a certain extent in combating this particular evil.

And then comes the man behind the plough. The Kathiawar cultivator may be illiterate and his ignorance may be colossal. He may be rotting in abject poverty or plodding his weary way through the life with infinite timidity and incredible forbearance but as regards the

*Vide "Life and Labour in a South Gujarat Village", by Mr. G. C. Mukhtyar, p. 10.

technique and the skill with which he manœuvres his primitive implements, he is no worse than his brethren elsewhere. Among the Hindus, the Kanbis, Sathawaras, Rajputs, Ahirs, Mers and Kathis, and among the Mohamedans, the Memons, Ghanchis and Bohras are the skilful and careful workers. As a class, the Kathiawar peasantry is orderly and sober and though thrifty in everyday life becomes foolishly wasteful on the betrothal, marriages and funerals. If the cultivator's plough is as rugged as that used by his forefathers, it is because he has no means to replace the same by a better one. A diminishing return and an increase in the incidence of land revenue have deprived the farmer of the legitimate fruit of his labours with a result that he is gradually being dragged down to the paths of misery and the entangled and hopeless state of indebtedness from which he finds it impossible to extricate himself.

Rural Indebtedness

It is not possible to follow the Baroda Committee's method of ascertaining the extent of rural indebtedness in Kathiawar. The nature of tenancy precludes us from guaging the extent of indebtedness from the value of mortgages registered every year. Some of the states do not give the separate figures for mortgages, sales, gifts, etc. An attempt was made by the Bhavnagar State to estimate the indebtedness of the agriculturists within the state and its conclusions we shall take to be reprcsentative of the whole of Kathiawar :—

Total Debts of the Kheduts in the books of the Shahukars in 1933-34	Rs. 86,00,000
Aggregate remission of the State dues between 1929-30	,, 49,00,000
Total Debt of the Agriculturists	,, 1,35,00,000
Total area under cultivation in 1933-34	,, 750,000 acres

Debt per acre of area under cultivation ... ... Rs. 18

Taking Rs. 18 per acre of area under cultivation as the basis of our calculation, we get the following estimate of the total agrarian indebtedness of Kathiawar :—

Total Area of Kathiawar including British Districts ... ... 22,500 sq.ms.

Taking 50 per cent. of the total area as under cultivation, we get area under cultivation ... ... 11,750 sq.ms.

One square mile = 640 acres ... 11,750 × 640
= 7,520,000 acres

Rs. 18 per acre : 7,520,000 × 18 = Rs. 13,53,60,000

The Agricultural indebtedness of the whole of Kathiawar comes to Rs. 13 crores and a half. To some the figure will sound as absurd and fantastic but on a closer scrutiny it will be found to be rather an underestimate than an overestimate. If we take into consideration the Baroda Government's findings in 1911-12 as the basis of our calculation as is done by Prof. C. N. Vakil, in estimating the rural indebtedness of Gujarat (*vide* p. 20 of Mr. G. C. Mukhatyar's "Life and Labour in a South Gujarat Village") we get the following result :—

Total Land Revenue of Kathiawar ... Rs. 2 crores

*The Ratio worked out from Baroda Government Officer's findings in 1911-12 ... ... × 8

Rs. 16 crores

Hence our above estimate of Rs. 13½ crores is a very moderate one.

*The Baroda Government appointed an Officer in 1911 to report on the agricultural indebtedness of its subjects. His estimate of the indebtedness of Baroda territory in 1912 was of more than 8 crores of rupees, and the total land assessment for the same year for the Baroda State territory was more than one crore rupees. Baroda State territory is also interspersed with the territories of other States in Kathiawar It being so, if we assume that the amount of indebtedness in Kathiawar as a whole bears the same proportion to land revenue as it does not in the Baroda State, we get Rs. 16 crores as Kathiawar's total agriultural indebtedness.

The per capita indebtedness works out at Rs. 43 and it can be compared with Mr. Mukhatyar's estimate of Rs. 31 in the case of Kaliparaj and Rs. 66 in the case of Ujaliparaj in the village of Atgam in the Bulsar Taluka.

STATE POLICY

I. *Irrigation*

Various measures have been taken by the Kathiawar States for the amelioration of the conditions of the agriculturists. Increasing irrigation facilities are being provided and new wells opened every year by almost all the States. Figures mentioned in the Bhavnagar, Junagadh, Morvi, Jamnagar and other Kathiawar States' Administration Reports bear enough testimony to this fact. We may not enter into the question of the adequacy or inadequacy of the measures taken by the States and may rest content by merely noting the growing concern exhibited by them for the welfare of their ryots. However it must be conceded by us that these measures have failed to arrest the declining productivity of the soil. Enough expenditure is incurred for erecting storage or irrigation tanks by many states in Kathiawar, but judging from the returns we can safely infer that either they must be beyond the reach of the majority of the cultivators or the incidental charges for the facility may be too heavy to be paid.

II. Land Tenures

As already noted the growth of the various political States in Kathiawar has given us an absolutely new type of Land Revenue Administration. The divisions of the territories of a State into the Khalsa, Bhayati, Inami or into Darbari proper and alienated land have been described by us in the foregone pages. But what surprises one most is the diversity of the land tenures existing in the province. Broadly speaking majority of the Kathiawar peasants are mere

tenants-at-will. With the exception of some States like Gondal, Bhavnagar, etc., the other States do not recognise any interest of the peasants in the land which they can alienate by mortgage, sale, gift, etc. The cultivators in most of the States are mere tenants-at-will, and though the permanency of their tenure is assured so long as the State dues are regularly paid, they have no permanent interest in the land cultivated by them. This may possibly account for the indifference shown by them towards the development of a permanent character. In some of the States the rights of sale and mortgage are given under Buta Hak on payment of extra revenues.

Different systems of collection of revenue prevail in different States. Broadly speaking they may be divided into two main divisions :

1. System of Bhagbatai and 2. Vighoti.

The Bhagbatai system derived its name from the word Raj Bhag or State's Share in the produce. Under this system the State takes its revenue dues in kind. Formerly the State's share was ascertained from a survey of the standing crops by an official in the presence of the cultivator. This left the cultivator totally at the mercy of the State officials who would generally overestimate the crop. Over and above this Raj Bhag miscellaneous levies in kind called Babats like Havaldari, Mandvi, Sukhadi, Khurajat, Jhampo, etc., etc., were also paid by the cultivator. When the cultivator paid all these miscellaneous taxes together with the Raj Bhag, the Raj Bhag was called the Mela Bhag. Nowadays instead of the Mela Bhag to the State and other and miscellaneous levies, the ryot pays to the State a lump of his produce which includes the State Bhag as well as all these levies. This is called the Chokha Bhag and under it the cultivator has not to pay any other levies. Under Chokha Bhag the plan is to bring the crops as they are reaped to the

public grain yard or " Khalawad " where it is trodden out, winnowed and measured. None of the produce is taken away until the state demands are satisfied. Over and above this Bhag which is called Vaje, a small payment called " Santi Vero " is also levied.

The Vighoti or Faram is a cash payment per Bigha or acre of the land levied according to the nature of the soil and the cultivator has to pay a special levy if his soil is under irrigation. Under the Vighoti the cultivator has to pay a fixed amount as his dues. This amount is revised by the State every 15 or 30 years.

Both systems have their advocates and we may not enter into a nice discussion of their respective merits and defects. But we can at least hope for a uniform system to prevail in the province.

The third system is called Udhad System and under it a lump sum is fixed by the State which the cultivators have to pay. The beauty of the Land Revenue Administration in Kathiawar is that in some of the States all the three systems exist simultaneously.

III. Land Revenue

A tendency which is criticised by the politicians and local patriots is the growing incidence of the land revenue charges upon the shoulders of the public. We have already noticed the increase in the case of the Nawanagar State where within 23 years the incidence of the land revenue charges of the State per acre rose from Rs. 1·76 to 2.62. In Bhavnagar the incidence rose from Rs. 2·68 in 1912–13 to Rs. 3·41 per acre of cultivated land in 1933–34. Such a rise may not be desirable in view of the impoverishment of the soil and the growing burden of rural indebtedness. The following figures of the per capita land revenue charges of

the six principal States compare very favourably with the conditions prevailing elsewhere.

Year	State	Total Land Revenue	Per Capita incidence of Land Revenue
		Rs.	Rs.
1933–34	Junagadh ...	24,55,658	4.5
1933–34	Bhavnagar ...	26,48,799	5.3
1933–34	Jamnagar ...	29,03,113	7.09
1933–34*... ...	Rajkot ...	3,50,294	4.6
1933–34	Gondal... ...	15,98,248	7.7
1932–33	Porbandar ...	8,37,514	7.2

*Samvat year 1990.

(For verification see Table No. 3 in the Appendix)

It is risky to compare the conditions of the agriculturists in the various States merely on the basis of per capita incidence of the land revenue charges. This table is only constructed to compare the conditions prevalent outside the province of Kathiawar.

Following statement taken from Dr. Pillai's "Economic Conditions in India" gives us an idea of the top heavy incidence of Land Taxation in Kathiawar.

	Charges of Land Revenue Rs. a. p.	
Bombay Presidency (including Sind)...	2 3 0	per head
Bengal	0 11 0	,, ,,
United Provinces	1 7 0	,, ,,
Madras	1 10 0	,, ,,

IV. Agricultural Finance

History of rural economy has no lesson more distinct than this that the agriculturists must and will borrow. We have already arrived at an estimate of the total agrarian debt of Kathiawar and from the Bhavnagar inquiry-figures

we can confidently assert that the Shahukar or the village money-lender is the only source of finance to the cultivator. The States's advances by way of Tagavi are but nominal. The co-operative movement has found some footing in the bigger States like Bhavnagar, Baroda and Junagadh, but compared with the huge volume of agrarian indebtedness, and the insignificant resources of the societies we can safely ignore their existence. Moreover in all other States of the Kathiawar the movement is conspicuous by its absence. The local Darbar Banks within the various States are nothing but the treasuries of the Chiefs and no steps in the direction of supplying cheap credit to the agriculturists are taken by them. The Bhavnagar experiment of the wholesale redemption is viewed and followed with interest by other States. But does the work stop at a wholesale redemption of the agriculturist from the shackles of indebtedness? If no further facilities are provided to him for securing cheap credit, he shall again fall into the inevitable clutches of the money-lender and the whole experiment will set a bad precedent.

CONCLUSION

An humble analysis of the agricultural problem has been made in the foregoing pages. It has revealed to us an extremely distressing situation—a situation which has been brought about by the diminishing agricultural returns and increasing incidence of taxation. It has also revealed some of the features peculiar to the conditions of Kathiawar. Each state presents certain peculiar characteristics of its own. Each has its own special problems and different ways of solving them. It is difficult to assimilate them and analyse them all within so short a compass but that should not deter us from suggesting the ways and means for combating certain evils regarding agricultural problems which more or less confront them all. In a predominantly agricultural province like Kathiawar no measures must be

spared to alleviate the conditions of the agriculturist who forms the backbone of the total populace. In the betterment of his lot lies the prosperity of the princes. Land Revenue forms the chief item under the heads of revenue in almost all the States, and if enough is not spent after the amelioration of the agriculturist's condition, or increasing his means of production, the activities of the States may tantamount to nothing short of betraying the trust levied in them by the majority of the people in whose wellbeing lie the surer foundations of peace and progress of their territories.

A happy and contented peasantry is not only a source of economic strength to the State but it is a formidable fortress against the political agitation. Economic expediency apart from political wisdom demands that active measures must be immediately undertaken in hand so as to relieve him from a situation which is holding him tighter and tighter everyday and from which all his endeavours fail to extricate him.

The Land Revenue System must be reorganised—reorganised in the sense that the permanency of holding must be guaranteed. He must feel that he has an interest which may be considered his own in the land which he cultivates. Almost all the Administration Reports emphasize that permanency of occupancy rights are ensured but at the same time they do not fail to maintain that the agriculturists are mere tenants-at-will. This Damocles's Sword—the fear of eviction—must be removed from over his head, so as to allow him free breathing.

Against sub-division and fragmentation if no radical steps are considered wise and prudent, the States at least must declare in unequivocal terms that within their territories no parcelling of land beyond a certain minimum will be tolerated, and they must also favour the law of primogeniture for the succession to the agricultural lands. If it is

not possible or practicable to favour the law of primogeniture, then on the death of the agriculturist his land must be handed over to one of his sons intact. For a fixed period of a decade or so, he who inherits the land should give a fixed share of the produce to others in lieu of his getting the sole possession of the land.

A suggestion may be made that on the death of an agriculturist his land must be sold to the highest bidder from amongst his heirs, and the sale proceeds be distributed between the rest in lieu of their shares. However on closer scrutiny it appears that this is not a judicious step as it will give rise to other evils.

One of the most important directions of the agricultural problem towards which hardly any State has drawn its attention is the question of manure. In providing the agriculturist with better facilities of irrigation or in demonstrating to him the use of iron-ploughs, some States may have tried to do something, but so far as the problem of manure is concerned, it has failed to attract the attention of the authorities. The problem of the Agriculture in Kathiawar is predominantly the problem of an impoverished soil and declining productivity, and no further irrigation or good implements will help the agriculturist if the soil will be allowed to rot and decay. Efforts towards supplying the agriculturist with cheap nitrogenous manures are urgent and imperative. Hence, the measures adopted by the Baroda State in this direction should be carefully observed and introduced in their territories by the other Kathiawar States.

As regards the heavy burden of indebtedness, Bhavnagar has given the lead and has shown to the outside world what a State can do towards relieving the agrilcultural population from the crushing burden. We may not expect other States to take such bold steps of wholesale redemption of debts but we can certainly expect them to do

at least this much for their people. The Bhavnagar Committee compromised and compounded the debt of the agriculturists to only one-fourth of what was claimed from them by the Shahukars. Is it expecting too much of them if we ask the other States to appoint such committees and find out ways and means to relieve their peasantry from the crushing yoke of heavy indebtedness?

And lastly, a word about the heavy incidence of land revenue charges. Within the last twenty-five years the land revenue charges in many of the States have increased and the notable exceptions like Gondal are few. What a nominal increase of 6 annas per acre means to the poor cultivator may be easily judged from the following excerpt taken from the Administration Report of the Rajkot State for the year 1906-07:—

"The Udhad of Nawagam under Sardhar was first fixed at Rs. 52 per 'Santi' of 40 acres. It was raised to Rs. 65 in Samvat 1949 and then it was pitched to Rs. 80 per Santi in about Samvat 1953. This enhancement proved too much for the poor cultivators because at the end of the last year, i.e., Samvat 1963, the town which was about 22 Santis of cultivable land got indebted to the extent of Rs. 5,000 only on account of successive arrears of Udhad."

The case of Nawagam at once exhibits the arbitrary manner in which a State usually increased the burden of cultivators, and also the extent to which a nominal increase of six annas per acre—i.e., Rs. 15 per Santi—may throw the cultivator into the depth of indebtedness. Such arbitrary methods are followed to a more or less degree in almost all the States and their replacement by a scientific system of assessment based on the nature of the soil is not only desirable but is a matter of economic expediency. It is also found out that in case of some of the Kathiawar States which have tackled the problems of rural indebtedness by wiping out or consolidating the debt of private parties

or cancelling the State debt, etc., they have subsequently increased the incidence of land taxation. In such cases the States concerned should note the case of Nawagam and realise that instead of solving the problem of indebtedness they have been rendering the situation more complex for the future generation.

We may be treading on dangerous grounds when we ask the various princes to let go a part of their share in view of the high rate of per capita incidence and the heavy burden of the rural indebtedness. In the past on various occasions they have shown their concern for their ryots by remitting the part and sometimes the whole of their dues from them and if we ask but a little more from them by way of a permanent boon to the poor ryots we may naturally expect not only the same kind of generous treatment but the same munificent heart towards those whose welfare should be nearer to their hearts, and on the solid foundation of whose happiness and prosperity depends the stability of their thrones.

CHAPTER VI

INDUSTRIES

GENERAL

Industrialism in the modern sense is of comparatively recent origin in the province of Kathiawar. The constant dread of feudal wars and the consequent instability of the political government were great hindrances in the way of the widespread growth of economic activities. In the absence of security of life and property, industry received neither encouragement nor impetus at the hands of the then trading communities and whatever industries were there, they were in the nature of handicrafts or cottage industries. The political history of Kathiawar during the period of two hundred and fifty years ending with the Great Mutiny represents a tedious continuation of a long period of constant warfare and petty feuds among the various titular heads of the province. It is a woeful tale of glorified bloodsheds—glorified according to the standards of prestige, heroism and chivalry as then prevalent—which not only failed to benefit the victorious but at the same time by kindling within the hearts of the vanquished a dreadful feeling of vengeance was instrumental in perpetuating the evils of constant strifes and bickerings. Unstable governments were the order of the day and it was only after the Walker Settlement and the penetration of the British that the province got relieved of such internal feuds. It is not intended here to enter into a lengthy discussion of the present political situation of the province but then it can be easily ascertained that looking to the interests of the trade and industry of Kathiawar and also to the interest of the province as a whole these constant feuds and petty warfares were utterly deplorable.

Can we then say that the village communities were not at all affected by such a state of affairs or that they were

left untouched and unperturbed in their possessions? If the narratives of the various feudal wars and of the exploits of the various outlaws are to be relied upon, we have no other recourse but to admit the vulnerable position of the villages to the sudden and unprovoked attacks from without. Destruction and plunder of the enemy's villages were considered as great acts of heroism and bravery. We may concede that the standard of judgment, varies according to the time, place and surroundings and what seem to us at present as plunder and destruction might at those periods have the backing of the sanctified traditions, but we cannot help reiterating that the villages were the ordinary innocent victims of devastating ravages at the hands of brigands and petty chiefs. To expect the village industries to thrive under such surroundings will be the last thing which a closer consideration of the then existing circumstances might warrant.

It is not at all suggested that during that period Kathiawar was devoid of any industrial activity. On the other hand we have ample evidence to show that Kathiawar had attained all-India fame for some of its manufactures. The gold-thread, knot printing and brocade works of Jamnagar, the ivory in-laying work of Mangrol, the copper and brass wares of Sihor in the Bhavnagar State are but the few instances of skilled manufacture works of Kathiawar which are able to hold their own till this day. But the artisans and manufacturers generally resided in the capitals of chief towns of the native princes where under a comparatively better atmosphere of safety and security they would execute their works of art and beauty. Court patronage was generally extended to them and they could find ready markets for their works in the towns. But even they were not destined to be left unperturbed in their professions. A growing menace to the very existence of their industry and handicrafts appeared with the importing of cheap British machine-made goods. The fiscal policy pursued by the

Government of India allowed these imported machine-made goods a free and unrestricted market in Kathiawar and these industries and crafts shared the same fate of utter annihilation as was the case with Indian Industries as a whole. The result was an increasing process of ruralisation and a consequent heavier burden on the soil. Even the Official Reports as quoted below admit this process of industrial decline.

We are told that[1] 'the cloth trade of Nawanagar was formerly very brisk as the art of printing in colours by the method called Bandhani, a most laborious and expensive process, is there carried to great perfection. Specimens were, however, sent to the exhibitions at Broach and South Kensington, and in a year or two imitations came out from Manchester, etc., printed in fast colours at about fifteen to twenty times less cost. The Nawanagar manufacture of Bandhani cloth was at once extinguished and supplanted by the articles of European manufacture, and it only now survives on any large scale for orders, as Rajas and great men consider it fitting to give their sisters, wives and daughters, cloth of this description. But the trade is doomed as is the manufacture and in a few years the very method of manufacture will be forgotten.'

In connection with the Junagadh Crafts we are informed that 'the competition of European and Bombay machine-made cloth has destroyed the old hand loom weaving at Veraval.'

The Iron Industry also did not escape this fate. While admitting that iron ore abounds throughout the northern portion of the peninsula, as ferric oxide and in other forms, the Official Reports state that 'owing to the absence of coal, the scarcity of wood, and *the cheapness of European iron*, the ore does not pay the cost of working.'

1. Vide "*Gazetteer of the Bombay Presidency*," Vol. VIII, pages 565.

SCHEME OF SURVEY

In surveying the existing industries of Kathiawar we shall not enter into a detailed discussion of the history and growth of each particular industry as some of the industries are of recent origin and the tracing out of their early history has very little significance. For the purpose of our investigation a rough classification of the industries has been adopted and they are distributed according to their nature into:

I. Organised Industries,
II. Unorganised Industries, and,
III. Agricultural or Pastoral Industries.

Under the head of the Organised Industries are grouped together those industries which employ a comparatively larger number of workmen under one roof irrespective of the use of modern machinery. All small industries and handicrafts like stone carving, ivory work, enamel work etc., together with the fishing industry are served under the head of unorganised industries while under agricultural or pastoral industries are reviewed the ghee industry, honey making, etc. Though scientific nature is not claimed for this sort of division at the same time it cannot be denied that it is not incomprehensive. The nature of some of the iudustries preclude the use of machinery and hence a classification based on the use of machinery and motive power will not suit our purpose. The pharmaceutical industry is an instance of such a type.

Before proceeding to survey the various existing industries of Kathiawar the paucity of available statistical data has got to be stressed. The Administration Reports sometimes do not mention the number of industrial concerns within the territories of the State, and if by chance they state the number of industrial concerns, they fail to supply the necessary information as regards the number of persons employed in those industries or their total output. In view of this the survey is bound to be inadequate in a certain measure.

I.—ORGANISED INDUSTRIES

A.—COTTON INDUSTRY

Raw cotton is the largest single item in the export trade of Kathiawar. In 1933-34 exports of raw cotton to the foreign countries through the maritime States was valued at Rs. 1,71,32,687 while its imports into British India across the Viramgam Dhandhuka Land Customs line was estimated at about Rs. 38 lakhs. Even though the latter included the value of reimported goods also, the premier position of cotton in the trade of Kathiawar is sufficiently borne out. For our purposes we shall divide the Cotton Industry into two sub-divisions :—

(i) Ginning and Pressing Industry,
and (ii) the Textile Industry.

A survey along these lines will give us an idea of the relative importance of the two component parts of the cotton industry.

(i) *Ginning and Pressing Industry.*

The extensive cultivation of cotton in Kathiawar has led to the rise of a number of ginning and pressing factories distributed all over the province. Formerly cotton was cleaned by the common hand gin or charka. It consists of a hand supporting iron and wooden rollers revolving at such a distance from each other as to allow the cotton to pass between them but not the seeds. There are two handles moving the rollers, one at each end of the frame which require two persons to work, one of whom feeds the rollers with seed cotton. The output of the handgin per hour is about four to four and a half seers of clean cotton. Formerly almost every farmer used to possess a handgin by which with the help of his family, he used to clean his cotton. But now with the appearance of the ginning factories on the scene, the quantity of cotton cleaned by handgins is negligible.

Introduction of the ginning foctories dates so far back as 1866 when the Wadhwan Gin and Press Company,

Ltd., was started by Mr. J. M. Drennan. Between 1866 and 1882 several attempts at opening ginning factories were made of which only few succeeded and the rest had to be closed down due to financial mismanagement and the severe competition of the hand-ginning yards or "Ad" where the native merchants collected the owners of the handgins to clear the cotton purchased by them.

The following statement shows the distribution of the ginning factories at different places within the province. They are arranged according to the territories of the different States within which they are situated. Wherever possible the figures are taken from the latest available Administration Reports but as some smaller States do not issue such reports the character of being exhaustive is not claimed for such survey.

State	*No. of Ginning Factories*	*Particulars*
Nawanagar	15	There are four factories in Atkot Mahal (two in Atkot proper and one each at Bhadla and Barwala) and one each at Jamnagar, Amran (Jodiya.) Padhari, Khijadia (Kandorna), Raval (Kalyanpur), Khambhalia, Saliya, Jamjodhapur, Vansjalia, Wadala (Jamjodhpur) and Lalpur. No particulars regarding the number of gins, their total output or the number of persons employed are given in the Official Reports.
Junagadh	31	No particulars are given.
Dhrangadhra	6	The State owns six ginning factories of which four are situated at Dhrangadhra and others at Halvad and Sitapur.
Limbdi	3	There are three ginning factories in the State, of which two are situated in Limbdi proper while the third is situated at Pansina. They contain 40, 80 and 32 gins respectively.

State	*No. of Ginning Factories*	*Particulars*
Rajkot	1	There is in Rajkot a cotton ginning and pressing factory which is a Joint Stock concern with 50 gins.
Morvi	8	There are 8 ginning factories in the Morvi State, one each at Morvi, Khakhrala, Chanchnapar, Ghantila, Tankara, Mota Dahisara, Nani Bural and Jetpur.
Gondal	9	There are nine ginning factories within the State.
Wadhwan	8	There are four ginning factories in the Wadhwan City, and four in villages viz. one at Rampura, one at Jorawarnagar, one at Khodu and one at Vastadi.
Muli	2	There are two ginning factories at Muli.
Lathi	1	This is started under a monopoly given by the State to the owner.
Porbandar	6	No particulars are given.
Bhavanagar	48	There are four factories in Bhavnagar proper while 44 are situated in the Mahals. Viz. in Sihar 1, in Botad 9, in Kundla 11, in Mahuva 5, in Liliya 2, in Umrala 10, in Victor 2, in Talaja 1, and in Gadhuda 3.
Baroda State[1] Territory in Kathiwar, (Ginning factories each employing 20 or more persons.)	15	There are three ginning factories at Amreli, one at Khambha, three at Kodinar, two at Damnagar, two at Ambardi, one at Sakhapur, one at Rupavali, and two at Dhari.

1. Figures taken from the Large and Small Industrial Establishments in the Baroda State during the year 1936-37.

State	*No. of Ginning Factories*	*Particulars*
Baroda State[1] Territory in Kathiawar (Each employing less than 20.)	10	There are two ginning factories at Khambha proper, one at Tatania and one at Ingorala (in Khambha Peta Mahal) one at Chalala (in Dhuri Taluka), one at Damnagar, three at Gantwad and one at Haramadia (in Kodinar Taluka).
British Territory in Kathiawar[2]	11	There are four cotton Gins at Dhandhuka, one at Dholera, three at Barvala, two at Ranpur, one at Tagadi

As regards the other parts of the province no figures are available.

Kathiawar cotton was formerly pressed by steam presses and by native screw presses. The screws for the latter were made of local babul wood on account of its peculiar toughness while the frame was made of teak wood imported from Malbar. They were set by the local carpenters and twelve men were required to work one press. Cotton was turned out from these presses into what was known as half pressed bales of 7 cwts. each. Even though there was that temptation of good saving in sending cotton to Bombay in half pressed bales due to the difference in freight rates the pilfering adulteration and wastage, to which half pressed bales were exposed on the way and at the time of sale in Bombay, was so serious that it was found more profitable and advantageous to send cotton in full pressed bales.

The first Steam Press was started at Bhavnagar by the Volkart United Press Company in 1871. Its capital was Rs. 1,53,650/- and it used to employ daily 199 men and 40 women. The statement below will give a survey of the cotton presses at present working within the province with

1. Figures taken from the Large and Small Industrial Establishments in the Baroda State during the year 1936-37.

2. Figures taken from Seasonal Factories List prepared by the Factory Department of the Bombay Government for the year 1937.

the possible exception of few for which no information could be gathered at all:

State	*No. of Presses*	*Remarks*
Nawanagar	2	One of them is in Jamnagar while the other is situated at Jamjodhpur
Junagadh	5	.....
Dharangadhra	2	.....
Limbdi	1	It was started by the State in 1909 but now it is owned by the Fatehsinghji Ginning, Pressing and Manufacturing Company Limited.
Rajkot	1	The Ginning and Pressing Factory has capacity to turn out 200 full pressed bales of cotton per day.
Morvi	1	.....
Gondal	2	.....
Wadhwan	2	Both are situated in the Wadhwan City.
Muli	1	.....
Porbandar	1	The number of bales pressed at the Cotton press at Porbandar during the fifteen months ended October, 1935 was 9,550.
Bhavnagar	10	Four of these ten are situated in Bhavnagar proper while 6 are situated at different places in Mahals.
Baroda State Territory in Kathiawar (pressing factories each emyloying twenty or more.)	2	There are two cotton presses at Amreli each of them employing 48 persons.
British Territory in Kathiawar.[1]	2	There is one cotton press at Dhandhuka where average number of workers employed daily is 58, and one is at Dholera where average number of workers employed is 50.

The above mentioned tables clearly demonstrate the importance of cotton in the economic life of the province. Not only it is the largest single item of Kathiawar's foreign trade but it is also an industry that is distributed all over the area. It will not be exaggerating if it is asserted that the cotton industry forms one of the main sources of employment in Kathiawar in both of its aspects viz. ginning and pressing as well as spinning and weaving.

II.—TEXTILE INDUSTRY.

The beginning of a new era of large scale textile production in Kathiawar may be said to have commenced in 1873 when in consultation with the Bhavnagar Joint Administrators Messrs E. H. Percival, C. S., and Gaurishankar Udayashankar, C. S. I., steam spinning and weaving mills were started at Bhavnagar by Messrs Forbes & Co., of Bombay. It was registered in Bombay under the name and style of the Bhavnagar Mills and Press Company, Ltd. In 1879 on account of the bankruptcy of Messrs Forbes & Co., the management was vested in a board of directors and in 1881 the company was reconstructed under the name of the Bhavnagar Cotton Manufacturing Company Limited with a capital of Rs. 9,00,000/- divided into 9,000 shares of Rs. 100/- each. This is the short history of the first venture and even during the interval of 65 years no phenomenal progress has been achieved in this direction. With plenty of raw material and abundant supply of cheap labour, textile industry in Kathiawar lags far behind in comparison with the industry at Ahmedabad or Bombay.

We are not going to discuss here the reasons for this slow pace of advancement, nevertheless we have to observe this and remain satisfied with what little achievement we have at the end of a long period of three score years and five.

In 1929 there were 6 textile Mills in Kathiawar with 1.4 thousands of looms and 87 thousands of spindles.* After 1929 two more mills were started one each at Morvi

*Vide "Growth of Trade and Industry in Modern India" By C. N Vakil, S. C. Bose and P. V. Deolalkar, Page 159.

and Porbandar. The Morvi Mills have changed hands recently and at present they are managed and controlled by Sir Chinubhai Madhubhai of Ahmedabad. No figures as regards the number of looms and spindles worked therein are available.

The following table gives the names of the various mills together with the number of looms and spindles :—

Name	Where Situated	No. of looms	No. of Spindles	Average No. of persons employed
The New Jehangir Vakil Mills.	Bhavnagar	718	30,342	1,290
The Mahalaxmi Mills ...	„	280	10,416	1,036
The Spinning Mills	Māhuva	—	7,200	250
The Maharana Spg. & Wg. Mills	Porbandar	266	10,912	—
The Rajkot Spg. & Wvg. Cotton Mills	Rajkot	155	10,372	445
Morvi Mills	Morvi	—	—	—
Amarsinghji Mills	Wankaner	—	—	—
Wadhwan Camp Mills ...	Wadhwan	—	—	—

The Maharana Mills possess a capacity upto 26,000 spindles and 650 looms. As regards the figures of cotton consumption and production of yarn and cloth only the Bhavnagar State Reports give some idea. The following are taken from the State Administration Reports for the year 1933-34.

Name of Mills	Quantity of cotton consumed	Quantity of Yarn. lbs.	Value Rs.	Production of Cloth.	
				Quantity lbs.	Value Rs.
The New Jehangir Vakil Mills ...	23,104 cwts.	23,86,417	10,51,515	29,45,489	21,01,517
The Mahalaxmi Mills...	20,619 „	—	—	21,80,214	15,56,007
The Mahuva Spinning Mills	14,47,412 lbs.	10,81,130	3,31,000	—	—

Over and above these eight mills one more textile mill is under construction at Jamnagar, while small weaving factories are situated at different places in the province. At Bhavnagar there are six such factories with 90 looms. In 1933-34 they turned out 6,81,824 lbs. of khadi cloth valued at Rs. 2,98,380. The average number of men employed in these factories was 153. The Harkisondas Weaving Works at Porbandar are such a type of small factory employing about 21 persons, while in Rajkot there is only one private factory with improved handlooms turning out fabrics of an up-to-date type. There is also a small weaving factory run with electric power at Morvi. As regards Baroda State territory in Kathiawar there is a Cotton Weaving Factory known as Jamnadas Premchand Weaving Factory employing 11 persons at Damnagar; while for the British territory in Kathiawar there is one Shah Harilal Mohanlal Weaving Factory at Gogha employing 31 persons.

One thing must be noted here that some of the so-called progressive States have refused to give the Administration Reports while some have point blank refused to accommodate a humble research worker. The survey under these circumstances may remain inexhaustive and imperfect and the tendency and demeanour of the States concerned may be considered really regrettable.

As already noted while discussing the population problem of Kathiawar 37,729 persons were returned at the time of the last Census as workers in textiles. In the absence of any woollen or silk mill and in view of roughly seven thousand persons engaged in the organised textile spinning and weaving industry and perhaps an equal number employed in ginning and pressing factories, it can be easily stated with confidence that a bulk of the textile industry remains unorganised and a great portion of the industry is carried on by individual cottage workers. The large quantity of cotton that is usually exported to foreign countries

deserves to be utilised within the province by the erection of a few more mills. How far this is feasible from tha practical point of view we shall see while discussing the problem of the development of industries for which Kathiawar is best suited.

B. POTTERY WORKS

The pioneer effort in this direction was made by the Morvi State. In His late Highness's time the pottery works were started but had ceased working. In July 1929 the present Highness opened the Parshuram Pottery Works—perhaps the old works under new management. It is one of the biggest in India and has its branch at Than.

The Works produce goods worth Rs. 3 to 4 lacs per year and give employment to about 150 people. The production embraces a variety of articles including jars, pots for curded milk, gutter pipes, inkstands, toys for little children and busts of national leaders. The jars manufactured in these works are sold all over India and we are informed that in spite of the working of 4 kilns the demand is so great that it is very difficult to meet it.

The Than branch produces flower pots of various designs, cups, saucers and jars.

Persons returned as workers in ceramics in Kathiawar according to the last census are 17,397 and except the workers employed in the above two works they are potters and makers of earthenware not usually organised.

C.—GLASS WORKS

There are at present three glass works in Kathiawar of which two are closed down while the third is working at a loss. The Wadhwan Glass Works of Wadhwan and the Western India Glass Works of Porbandar have fallen victims to the trade depression and intense competition of foreign goods, while the Morvi Glass Works is still not a paying concern.

The Wadhwan Glass Works was worked under the supervision of Mr. G. P. Ogale of Ogalewadi and in order to carry on the Glass Works on a fairly large scale, an improved type of furnace was started. Plenty of goods were produced and a large variety of articles was made. But owing to the depression in the market and reduction in the market price of the articles the Glass Works produced, it was decided to suspend working of the Glass Factory and it was closed on 1st August, 1931. Subsequently we note the anxiety of the State 'to dispose of them as early as possible,' and ultimately the works were sold at a heavy loss to some private individual who tried to run them on profitable basis but did not succeed in his attempts. According to Sjt. Harilalbhai Raval, the then President of the State Administrative Council, this industry has no future at Wadhwan as the requisite material is not to be found within the State's boundaries.

In the year 1935-36 the Western India Glass Works at Porbandar exported 10,000 dozen chimneys, globes, etc., by Sea to Karachi, Cutch Mandvi but later in the year they had to close down owing to intense competition of foreign made goods.

The Glass Factory at Morvi produces 10,000 lbs. (capacity) per day. It has three furnaces and each furnace consumes 7 tons of coal per kiln. This concern is still not a paying one.

D.—OIL MILLS

A noteworthy tendency of agriculture in Kathiawar is the increasing cultivation of oil seeds. As regards their importance in the trade of this province, it should be noted that they form a substantial portion of Kathiawar's exports to foreign countries. With the increase in cultivation and a growing volume of export, the oilseed crushing industry has developed to a certain extent and, apart from the existence of the old type Ghanis, Oil Mills and Oil Expellers

have sprung up at various centres in the province. While admitting the incompleteness of the data, it is hoped that the following will be able to give some idea of the existing oilseeds crushing industry in Kathiawar. It is really unfortunate that a uniform system of giving necessary data has not been adopted by the States.

In Gondal State at present there are two oil expellers at Gondal proper, two at Upletta and two at Bhayavadar. Power driven oil mills employ about 300 persons and oil is mostly extracted from groundnuts.

In Rajkot State the number of oilseeds crushing mills worked by oil engines is 3. The Junagadh State has within its territories 77 oil mills, and 24 oil and flour mills, while within the territories of Bhavnagar State there are 15 oil mills of which 6 are situated at Bhavnagar proper, while 9 are situated within Mahals.

The Nawanagar State Administration Report for 1935-36 while noting that "factories have been erected at various places for preparing seeds, oils, oil cakes to be exported via Bedi to foreign countries" gives no particulars as regards the number of such mills or the persons employed.

The Natvarsinghji Oil Mills at Porbandar continues to work, though under unfavourable conditions, to surmount which the State gave it reasonable help and protection.

There is also one oil expeller at Dhrangadhra belonging to a Parsi gentleman. At Amreli* (under Baroda State Territory) there are three oil mills run by oil engines employing in all 42 persons.

The growth of this industry is only recent and in the absence of sufficient data regarding their capacity and average output, no comparison can be made as regards its

* Vide Large and Small Industrial Establishments in the Baroda State during the Year 1936-37, Page 28.

sufficiency or efficiency with the oil mill industry elsewhere.

E.—CEMENT

The manufacture of cement in India was begun in 1914 when the Indian Cement Company at Porbandar, and the Katni Cement and Industrial Company at Katni began working. It is the only industry in India which has developed immensely within a short period of less than 25 years into a formidable combine. The merger of various cement companies into the Associated Cement Companies, Ltd.,—a dream of the late Mr. F. E. Dinshaw and made possible through his ceaseless efforts—is at once the culminating point of the romantic growth of this most important industry and at the same time a striking example of capable Indian stewardship. Kathiawar has two cement factories which are now merged into the Associated Cement Companies, Ltd., one at Porbandar and the other at Dwarka. The factory at Dwarka was started in 1921-22 through the efforts of late Sir Vithaldas Damodar Thackersey. It was then called the Dwarka Cement Company, Ltd. It worked for three or four years and due to the serious fall in the price of the cement from Rs. 52 per ton in June 1923 to Rs. 36-12-0 in May 1924, the works had to be closed down. (Baroda State Administration Report 1924-25 on page 195 mentions that 'this factory has been closed since June 1924 for lack of working capital and depressed condition of the market. The same report on page 356 mentions that 'after the lamented death of Sir Vithaldas Thackersey, the Dwarka Cement Company is practically on its death-bed. Efforts are being made to save the concern from destruction.' Annual Report of the Department of Commerce and Industry, Baroda State for the year 1927-28 on page 4 mentions that as reported in the previous year the Dwarka Cement Factory was purchased by the Government in the year 1925-26 and continued in their possession. However, by

the close of the year, arrangements were made to sell the factory. A new Company called the Okha Cement Works, Ltd., has agreed to purchase the factory for Rs. 13¼ lakhs. The legal documents have been drafted and the whole transaction would be completed before long.') Ultimately the works passed into the hands of the Okha Cement Company, Ltd., in 1929, after the liquidation of the former company. Since then there has been a continuous expansion as will be seen from the following figures:—

Year	Production in Tons
1931-32	40,080
1932-33	47,430
1933-34	57,031
1934-35	62,596
1935-36	75,550
1936-37	85,621

The progress of the Indian Cement Co., Ltd., can easily be guaged from the amount of royalties paid by them to the State.

Year	Royalty.
1932-33	Rs. 3,922
1933-34	Rs. 6,499
1934-35	Rs. 8,309
1935-36	Rs. 12,162

In 1935-36 the Indian Cement Company produced 38,918 tons of cement.

F.—SALT WORKS

With a sea-board of nearly 500 miles Kathiawar areas can almost be described as "one vast natural salt pan." in days gone by, salt was produced in considerable quantities. But during the latter part of the nineteenth century the Government of India struck at the very roots of this industry by various agreements with the salt producing

States. The Davidson Committee observe "Efforts were made by the Government of India at the same time as settlements were reached in Rajputana, to bring Kathiawar States into line with all other Indian States on the basis of commercial salt agreements, but the difficulties were too great and negotiation was finally abandoned. Resort was then had to paramountcy, and the Kathiawar States while left free to continue the manufacture of salt were subjected without compensation (granted to other States) to very definite restrictions in regard to the quantity of output and the sale of salt so manufactured—a preventive line is maintained on the inland boundry of the peninsula, across which no Kathiawar salt is permitted to pass into the markets of India."

The result was a gradual increase in the supply of the imported foreign salt in British India. This import grew to such an extent, that, alarmed at its rapidity of increase and largely due to the outcry of the Legislative Assembly, the Government of India ordered in July 1929 a Tariff Board inquiry on salt industry with a view to make India self-sufficient in the matter of her supplies of salt. The Committee completed their labours in 1930 and the Government of India and the Legislature decided to accept their findings. The first Salt (additional Import Duty) Act was passed in the year 1931. The rate was fixed at Rs. 63-11-0 per 100 maunds and a duty of 4½ annas per maund was levied on foreign salt.

A short while before the Committee was appointed restrictions on Kathiawar salt were relaxed and it was allowed to be exported to Bengal and foreign countries by sea only. So far its entry into British India via land route is concerned the restrictions are still in existence.

Before the removal of the restrictions imposed upon the Kathiawar Salt only Dhrangadhra State was able to develop its salt industry largely due to the agreement by which the

Government of Bombay used to buy from the State 5,00,000 maunds of salt every year. This agreement was terminated by the Government of Bombay with effect from 1929. This gave a very serious set back to the development of the industry and the State had made very strong representations to the Government against it. It is not known whether as the result of these representations any satisfactory solution of a materially beneficial nature to the State has been arrived at by the contending parties.

Only three States have taken advantage of these relaxations of restrictions on the part of the Government of India. The Okha Salt Works, Ltd., of Mithapur in Okhamandal (Baroda) was registered on 10th September 1926 and was authorised to commence business from 22nd February 1927. The first shipment from the works for Bengal was sent off on 5th May 1928. For the first time Calcutta received fine white crushed salt of Indian manufacture comparable in quality with foreign imported salt. The shipment was sold off within a few hours of the arrival of the steamer at Rs. 97 per 100 maunds.

The following are the figures of production:

Year	Tons
1931-32	34,833
1932-33	34,859
1933-34	48,553
1934-35	63,950
1935-36	44,370
1936-37	58,590
1937-38	43,696

The Nadir Salt Works at Porbandar were started in 1931.

The Morvi Salt Works at Dhashi started work on 16th September 1929. At the invitation of the State, the Salt Survey Committee visited Morvi on 19th November 1930 and the next day the name of the salt works site was

changed to Lavanpur by Sir Chunilal V. Mehta, the President of the Committee.

The working partner of the works, Mr. Gunvantrai Kamdar on the occasion remarked, "We are confident of being able to develop the large uncultivated resources at our disposal to their fullest extent, and have no doubt of being able to produce salt of the standard quality to the extent of one lakh of tons."

However, at the conference of Salt Manufacturers held in Bombay from 22nd to 25th August 1934 the following import quotas were fixed. Total imports into Bengal was fixed at 5,33,000 tons out of which shares of Okha Salt Works the Nadir Salt Works and the Morvi Salt Works were fixed at 65,000, 33,000, and 25,000 tons respectively.

Over and above these big works which indulge in the export trade of salt from the province, salt works are situated within the territories of Jamnagar, Junagadh, Bhavnagar, and Kodinar districts of Baroda. From these sources salt is not exported beyond the limits of the province.

In the Jamnagar State, salt is manufactured at Dhichda, Hadiana and Gurgadh, 'at the first two places from brine wells and the last from Sea Water.' No figures are available as regards the total production. The salt works are managed departmentally and the expenditure incurred in the year 1935-36 was Rs. 18,815.

The manufacture and export of salt from Junagadh State in the year 1934-35 was carried on by the State monopolist Messrs. Jayanarayan Gaurishankar & Co., Ltd., of Calcutta. During that year 1,81,894 maunds of salt were produced out of which 1,57,679½ maunds were sold to the State subjects and 40,977½ maunds to merchants of other States in Kathiawar making a total of 1,98,657 maunds. The total receipt from the sale of salt amounted to

Rs.80,731 while the net profit was Rs. 4,109. The sum of the minimum Royalty was fixed at Rs. 20,500 per annum.

In the Bhavnagar State Rs. 1,63,653 Bengal Maunds of salt was sold during 1933–34, of which 65,524 were consumed in the State and 98,129 were sold to other States in Kathiawar.

As regards the salt production in the Kodinar districts of Baroda State in the South of Kathiawar, the quantity manufactured during the year 1935-36 was 1,01,040 maunds. This together with the balance of 28,554 maunds of the previous year gave 1,29,594 maunds of which 21,906 maunds were consumed during the year leaving a balance of 1,07,688 maunds at the end of the year.

Without entering into a discussion of the ethics of salt duties imposed by the Government of India or without going into a detailed and analytical examination of the protective character of the additional duties on imported salt we have only to note that even these latter have failed to stimulate the production of salt or to protect the existing works. Mr. Kapilram H. Vakil, Secretary of the Indian Salt Association in a recent interview stated "while the Salt Industry in Aden is putting on additional fat to its body by virtue of tariff protection, the infant Indian Industry for which the tariff rate is intended as a protection against foreign competition, is faced with the problem of keeping its rattling skeleton covered with bare skin." Referring to the profits made by Aden manufacturers, Mr. Vakil said that one Joint Stock Company had cleared as much as Rs. 12,00,000 (equal to its capital value) within the first five years of tariff protection while during that period almost all the Indian Concerns lost considerable sums of money.

G.—MATCH WORKS

There are at present three match factories in Kathiawar, one each at Bhavnagar, Veraval and Jamnagar. Under

a monopoly of 10 years the factory at Bhavnagar was opened in August 1933. It produced during 1933-34, 54,000 gross boxes of matches. The new Excise Duty Act, came into operation from 1st April 1934 and in its final form excise duty of Re. 1 per gross of boxes which contain no more than 40 splints was levied. New additional rules were published for banderolling all boxes and in the absence of the supply of the banderolls the factory had to close down from the month of June. During the greater part of the year 1934-35 also the factory remained closed.

The match factory at Veraval is one of the leading industrial concerns of the Junagadh State and under the able guidance of the present proprietors it is the only concern which has somewhat remarkable success to its credit.

The factory at Jamnagar started its operations only recently. The manager of the factory, when interviewed said that aspen is being imported from Japan while for boxes Simora Wood from Bilimora is utilised. It is generally imported in native crafts. According to the manager, the Swedish Match Company has also acquired some rights in the Bilimora forests.

H.—BONE MILLS

There are at present two Bone Mills in Kathiawar one each at Bhavnagar and Veraval. The Bhavnagar Bone and Fertilising Co., was started by Messrs. Rustomjee Perozshah Dubash in 1934-35. It produces fertilisers of crushed bones. Bones are crushed into pieces in six qualities of different sizes, the largest being an inch and a quarter. The crushed bones exported to England and European countries generally fetch Rs. 20 per Khandi. This Bone Mill was started at Bhavnagar instead of in the interior because of the higher railway freight rates in case of crushed bones. As the major portion of the output is exported to foreign countries the

facilities provided by the Bhavnagar Port were the other considerations. Its maximum capacity is reported to be 500 Khandis per day.

The factory at Veraval is owned by an Arab gentleman Mr. M. Abdulla. No particulars regarding the nature of its working or capacity are available.

Over and above these two factories there is a possibility that a third concern may be started at Navalakhi in Morvi. When interviewed Mr. Joseph Bennie, Port Officer of Morvi said that concessions were given by the State to one Sheth Valimohamed of Rajkot who had secured the lease to collect bones from the territories of the Lathi, Dhrangadhra and Dhrol States. A plot of ground of about 200 feet square was leased by the State to Sheth Valimohamed at Navalakhi for the erection of a yard for storing bones and Sheth Valimohamed hoped to export 200 tons of crushed bones every three months to foreign countries.

I.—TIN FACTORIES

Shri Digvijayasinhji Tin Factory at Jamnagar has the capacity to produce 3,200 tins per day but at present the production averages at about 300 to 400 tins per day. The reason for this serious fall in the output is attributed to the prohibitive duties imposed by some of the States against the produce of this factory. This is one of the glaring instances which clearly demonstrates the extent to which industrial development is retarded by the existence of interstate tariffs. If the factory had been situated at Viramgam the States would not have been able to impose those severe duties. The factory imports tin plates of 20" by 28" and of smallar size from England. Sometimes they buy their requirements from Tatas also. But the material from Tatas is subjected to heavy duties by the State, in its anxiety to preserve the quota of the Imperial Revenue derived from the imports of the tinplates from falling below a fixed standard.

This is one of the curious instances, which has come into existence as a result of the recent tariff agreements by the Government of India with the Maritime States of Kathiawar, where the interests of the Indian Industries are sacrificed. In their zeal to ensure a particular amount of Imperial revenues the States take such abominal steps without caring a fig for the repurcussions of their steps on the development of the Indian Industries. This is not peculiar to Jamnagar only. Only recently a complaint regarding the heavy duties levied on Indian Sugar by Porbandar was heard. The problems of political bondage—in the shape of interstate tariffs, Viramgam Cordon etc., that strangle the economic and industrial development of Kathiawar are discussed in Chapters IX and X where we have tried to study at length the origin, growth and the repercussions of these tariff barriers on the industries of Kathiawar. Here we simply content ourselves by mentioning the existence of these factors which seriously handicap the economic growth of the province.

Another factory is at Bhavnagar and engages generally 25 to 30 men per day. It started its operations in May 1934 and during the 4 actual working months it produced 2,48,000 tins bringing the average of about 2,000 tins per day.

J.—BRASS AND METAL WORKS

Brass and Metal works are situated at various places in the province. There is at Jamnagar, the Ranjit Metal Works. At Rajkot there are five factories worked by oil engines to turn out brass and copper utensils and fittings. The Brass foundry at Gondal turns out parts of heavy machinery and articles of furniture. Nut crackers made in this foundry are in great demand. Nut crackers are also made at Limbdi.

The most famous centre for the manufacture of copper and brass utensils on handicrafts basis is Sihor in Bhav-

nagar State. For centuries past the workers of Sihor are well-known for their craft and artisanship. At present there are 21 brass and copper utensils moulding concerns in Bhavnagar State, one at Bhavnagar proper and 20 in Mahals. Amreli under Baroda territory, is also famous for its copper and brass utensils. But during recent years exports of its vessels to outside places has fallen to a considerable extent. Amreli's 'Handas,' 'Bedas' and 'Gagars' have enjoyed good reputation. But all the brass and copper ware artisans throughout the province complain severely of the competition they feel of the machine-made goods (that is of metal stamping machines). The artisans, of Barvala (in Dhandhuka Taluka) are also noted for their brass and copper wares. The brass and copper industry as a handicraft is hard hit and is losing ground fastly against the cheap machine-made better polished and attractive utensils. Shops have come into existence in the province dealing solely in such imported machine made utensils, while other shops, together with the hand made utensils, import stock and sell these factory produced goods.

K.—IRON AND IRON WORKS

Once the iron industry in Kathiawar was in a flourishing condition. In 1838 we are informed that six iron foundries were in regular work and two or three more were occasionally used. The two principal foundries were at Ranavav ten miles east of Porbandar and at Ranpur in Nawanagar about nine miles south-west of Bhanvad. The foundries were fixed at these places because they were close to the Barda forests. The ore used in the Ranavav foundry was brought from the villages of Bakharla, Palikha and Visavada. Ranpur was supplied from Ran about fourteen miles west of Khambhalia. But* 'owing to the

* Vide Bombay Gazetteer Vol. VIII, p. 90.

absence of coal the scarcity of wood and' above all 'the cheapness of European Iron' not one of them is working now. The ore is lying idle.

At present, however, there are 2 iron foundries at Rajkot, a cast iron factory at Limbdi and 3 iron works in Bhavnagar State, one being situated at Bhavnagar proper and the other two in the Mahals.

Over and above these there are two factories for manufacturing travelling trunks from sheets of corrugated iron and steel at Rajkot and two such factories are situated at Bhavnagar. A few more might be there in other parts of the province but no statistical information about them is available.

L.—PHARMACIES AND CHEMICAL WORKS

Of these by far the most well-known are the Rasa Shala Aushadhashram of Gondal and the Bhavnagar Chemical Works of Vartej belonging to Messrs. Parekh Brothers. Of course there are other chemical works and pharmacies of Indian Medicines whose existence must be noted. The branch of the Zandu Pharmaceutical Works with its botanical garden and the Antak Nigraha Pharmacy both at Jamnagar. The Rudraprasad Aushadhalaya of Rajkot and the two chemical works of smaller dimensions one at Bhavnagar and the other at Vartej, are the other prominent chemical and pharmaceutical works in the province. The progress of the Rasa Shala Aushadhashram can be easily guaged from the following table :—

Year	Income (Sale-proceeds)
1913-14	Rs. 3,416—6-9
1917-18	Rs. 13,458-10-0
1922-23	Rs. 38,442—1-1
1927-28	Rs. 1,84,538-11-3
1931-32	Rs. 2,44,864-13-1

From a meagre sale-proceeds of Rs. 3,416-6-9 to Rs. 2,44,864-13-1 within a period of less than 20 years throws immense light on the skill, organisation and capable management of the promoter. This phenomenal success seems more staggering when it is realised that it is the work and achievement of a single individual—Raj Vaidya Jivram Kalidas. The increase in income may also suggest the extent to which native medicines are prized by the public if available from authoritative sources of supply. The Bhavnagar Chemical Works bears no less testimony to this observation. Established in 1910 with a meagre investment of Rs. 6000/- the invested capital of the works is now valued at Rs. 1,00,000. The sales of the works have risen from Rs. 600/- in 1910 to Rs. 2,00,000 in 1939 and every year the works has been able on an average to sell 1 lac lbs. of tinctures, spirits etc. This plant owes its existence to its pioneers Sjt. Devchandbhai Parekh, M.A., (Cantab), Bar-at-Law and Sjt. Vallabhbhai Parekh, M.A., B.SC., M.S.C.I. (Lond.), Chancellor's Gold Medalist, aided in their efforts by their younger brothers equally qualifiied and capable for this line. The pioneers of the Gondal Rasa Shala Aushadhashram and of the Bhavnagar Chemical Works are the ardent workers, with great experience and business acumen, both dreaming of developing their works to their best capacity. But handicapped in financial resources and by other restrictions the progress of their works (which otherwise would have been very remarkable in their opinion) is hitherto very moderate.

Over and above these works, Shri Shakti Alkali Works at Dhrangadhra represent altogether a new and a very important venture. It is claimed that they are the only one of their kind in the whole of India. They manufacture Soda Alkalis from Salt. They also produce Sodium Carbonate and as its byproduct lime. But the limestone required for the purpose has got to be imported from Porbandar and

other outside territories. In spite of the existence in abundance of other requisites and cheap labour the Alkali Works are closed due to the financial bungle of the State.

Sea water contains, besides common salt, several minerals which remain in the end liquors discharged from salt works after the recovery of salt. It is a general practice, in most of the sea salt works all over the world to treat the end of the mother liquors generally known as bitterns as a waste product. To recover several useful minerals from this waste product, that is, to start subsidiary industries for the manufacture of several useful by-products from bitterns, the Okha Salt Works in collaboration with the Pioneer Magnesia Works, Ltd., made first of all beginning with the manufacture of Magnesium Chloride in 1932. Magnesium Chloride is used in large quantities for sizing purposes in textile mills in India. The Kharaghoda factory has replaced the German imports to a very large extent. The factory at Okha was designed for a high grade product marketable in England and Europe. Within a short time shipments of Magnesium Chloride made at Mithapur were regularly made to the English and European Ports. The purity of the product enabled the pioneer industry at Okha to stand in competition both in quality and price with the best European product.

After continuous research at the laboratories of the Okha Salt Works about 1935, fresh proposals were made to the Pioneer Magnesia Works, Ltd., to establish three more industries at Mithapur. These proposals were for the manufacture of high grade chemically pure Epsom Salt i.e. Magnesium Sulphate, Potassium Chloride and Magnesium Oxide. The Epsom Potash plant was completed in November 1936. It is now in operation. The present Company, the Okha Salt Works, Ltd., has thus been able to put to a beneficial use its waste products which as a rule are discarded in all the leading salt works of the world.

There still remain other products besides those already established at Mithapur, which can be manufactured from bitterns. The work on the recovery of Bromine has been completed and it will be the next subsidiary of the Salt Works. There is only one Bromine factory in the whole of the British Empire and as such the prospects of Bromine industry at Mithapur are promising.

The plans for starting a Soda Ash Factory at Porbandar are also under consideration.

M.—ICE AND AERATED WATER FACTORIES

The number of Ice Factories situated are as follows:—

State	No. of Factories
Rajkot	2
Jamnagar	1
Bhavnagar	3
Veraval	1
Junagadh	1
Gondal	1
Palitana	1

The information regarding the number of persons employed or their total output is not available. Each factory caters for the territories adjoining to the place where it is situated. Thus the ice factory at Gondal supplies ice to Gondal and Dhoraji divisions. The product of the Jamnagar factory goes right up to Port Okha the other terminus of the Jamnagar Dwarka Railway.

The Aerated Water factories are generally not large scale concerns. However, we take them along with the ice factories. There are in Rajkot State 37 aerated water factories, while in Bhavnagar State out of 9 factories, 3 are situated in Bhavnagar proper and 6 in Mahals. Many States do not report the existence of these factories because they are not large scale industrial concerns.

N.—SOAP FACTORIES

Wadhwan in Kathiawar is known for its indigenous soap. In the year 1925-26 there were 11 soap factories which exported soap worth Rs. 2,24,625/- to various parts of Kathiawar, Gujarat etc. In 1934-35 though the number of factories were 10 the value of the soap exported was only Rs. 62,682/-.

There are four factories for manufacture of soap at Limbdi while at Rajkot there are six factories turning out ordinary washing soaps. At Jamnagar, soaps of different qualities, ordinary and essence as well, for bathing and washing purposes are locally made in large quantities. The products of the Kanak Soap Factory of Jamnagar find markets even in Africa.

At Bhavnagar also there is a soap factory.

For manufacture of the washing soap sometimes cocoanut oil is used and sometimes tallow is also used. Cocoanut oil is imported from Ceylon, while tallow can be had from Cawnpore, Agra, Delhi, Bombay etc., etc.

There are many washing soap factories in Kathiawar but there is not a single Toilet Soap Factory worth mentioning and what is needed is a move in this direction.

O.—TANNERIES AND SHOE FACTORIES

Except in the Rajkot State this industry is not developed at all. In spite of the existence of a number of Babul trees, 'Acacia Arabica' and the Aval trees no proper attention is paid for developing this industry. In the reign of the late Maharaja Ajitsinhji a Tanning Factory was established within the Dhrangadhra State but owing to mismanagement and consequent heavy losses the factory was closed. In Gondal State a factory for tanning hides is owned by a Mohamedan merchant at Upleta.

The progress of the tanning industry in Rajkot State can be judged from the following statement :—

Year	No. of Tanneries
1926-27[1]	20
1933-34[2]	54

In the Administration Report for the year 1926-27 (i.e. Samvat Year 1982-83) the authorities hoped that because of the abolition of the export duty on hides by the Government of India the trade in dressed hides and skins had a bright future before it. And the increase in the number of tanneries has well justified their hope.

There is not a single leather shoe factory in Kathiawar. The Hindustan Rubber and Shoe Factory at Bhavnagar manufactured rubber shoes and other articles of rubber. The proprietors Messrs. Nassur Haji Mowjee imported Japanese experts for its construction. The raw material was imported from Ceylon. The works possessed a full capacity of manufacturing 10,000 pairs per day and formerly used to turn out something like 5,000 per day. Nearly 275 persons were given employment within the works. But as a result of the application of the Viramgam Cordon against Bhavnagar their goods became liable to heavy duties. And the Kathiawar demand being very small, the works had to close down.

The development of tanneries on a large scale and starting up of new leather shoe factories deserve special attention as there is ample scope for both, both as regards the supply of raw material as well as the existence of potential demand.

---

1. Samvat year 1982-83.
2. Samvat year 1990.

P.—SAW AND FLOUR MILLS

Saw Mills exist within Bhavnagar, Jamnagar, Junagadh States and in other parts of Kathiawar. We have no actual figures available for the Nawanagar State while as regards Bhavnagar and Junagadh States we are informed that they possess 9 and 3 Saw Mills respectively. Of 9 within Bhavnagar State 7 are situated at Bhavnagar proper while 2 are within the Mahals. There is one Usafali Abdulali Saw Mills at Amreli employing 11 persons. Sometimes Saw and Flour Mills are situated within the same compound and possess the same source of Motive Power.

As regards the flour mills the only industrial concern which may be correctly classified as large scale is the Lakhajiraj Roller Flour Mill Co., Ltd., of Rajkot. In almost all the towns there exist one or two flour mills with oil engines for grinding corn. We cannot classify them under the head of organised industries, however, we may note their existence.

At Rajkot there are 20 small electrically run and one oil driven flour mills while the Bhavnagar State possesses 62 flour mills of which 41 are situated in Bhavnagar City and 21 are within the Mahals. In Junagadh State there were in 1934-35, 91 flour mills and 24 oil and flour mills. The Administration Report of the Nawanagar State for the year 1935-36 though not giving separate figures informs us that there were at the close of the year under report 131 different factories such as flour and saw mills, decorticators and other workshops.

Q.—PRINTING PRESSES

The existence of a number of printing presses appears normal when we remember that some of the States find it both difficult and inconvenient to depend for their requisite printing work on establishments which are not controlled by them. Generally every pretty large State possesses a State Printing Press and side by side with such State

Printing Press doing exclusively the work of the administrative departments, there exist sometimes other small printing presses which usually do the job work. These give employment to a good number of people and it is but natural that they ought to be included in this survey.

State	State Printing Press	Other Printing Presses	Total
Nawanagar	1	10	11
Gondal	1	10	11
Bhavnagar	1	17	18
Junagadh	1	Inf. not available	
Porbandar	1	5	6
Morvi	1	Inl. not available	
Dhrangadhra	1	" "	
Wadhwan	...	2	2
Limbdi	...	3	3
Rajkot	...	24	24

(*N. B.*—The figures are taken from the latest possible available Administration Reports.)

Thus Wadhwan, Limbdi and Rajkot do not possess State Printing Presses. The greater number for Rajkot State owes its existence primarily to the geographical position of Rajkot, its position as a flourishing commercial centre and also due to its position as the capital of the Agent to the Governor General for Western India States Agency. Swadhin Mudranalaya and Type Foundry at Rampur (in Dhandhuka Taluka under the British) employs about 60 persons. Over and above these presses there might be a few more in the province.

R.—CEMENT TILES WORKS

The "Shri Krishna Tiles Works" of Bhavnagar produce tiles, railings, pipes, flowerpots, etc. The tiles produced at these works were tested at Poona and a Government Certificate has been issued showing the strength and quality of the tiles.

Another small concern going by the name of "The Saurashtra Tiles Works" was established at Ranawav within the territories of Porbandar State in 1935-36.

A monopoly for starting similar works at Rajkot was given to one Sheth Damji Devshi by the authorities of the Rajkot State but due to his sudden demise the project did not materialise. Besides the above-mentioned tiles works there is also one such Tiles Works at Jamnagar.

8.—PEARL FISHING

Okhamandal and Jamnagar are the only places in Kathiawar where pearl-fishing is carried on successfully. At Jamnagar this industry is directly worked by the State Department, and hence, more information is not forthcoming. But, at Okha the Baroda State leases the right of fishing the beds to the private individuals while at the same time it evinces keen interest in its further development. It being so, very valuable information about pearl fishery of Okhamandal is available, and, for this, we are indebted to the Report on the Marine Fisheries of the Baroda State by Mr. James Hornell. It was during his investigation of the marine resources of Okhamandal in 1905 that Mr. Hornell recommended to lease out the right of fishing these beds. His recommendation was carried out later on by the State authorities and the amount paid by the lessees to the State from 1911–12 to 1928–30 amounted to Rs. 1,84,333/-. One of the new industries thus came to be established at the Okhamandal Coast of Kathiawar.

It is calculated that not less than two-thirds of the pearls obtained are extracted from the bed of dead oysters which have died with their valves tightly closed, thus retaining the pearls even when the flesh has decayed. Because of this peculiarity, there is no material loss if a bed of living oysters should die off before being fished—their shells merely increase the quantity of dead oysters available

for collection in after years; this characteristic marks off Placuna from the true pearl-oyster which, if not fished alive, loses its pearls from corrosion and spilling within a very short time after death.

The dead oysters are fished solely by Vagher inhabitants of the adjacent Okhamandal villages. Conversely, the living oysters for the most part are fished by Mohamedan Vaghers from the Jamnagar State; unlike their Hindu confreres from Okhamandal, these Mahomedan Vaghers, are capable of diving in shallow water. They obtain most of their harvest by wading and diving in shallow water, down to a depth of about nine feet. From his investigation in 1905 Mr. James Hornell found that the oysters become too scarce to be worth attention in water deeper than 1½ fathom at low spring tide.

The dead oysters lie buried in extremely soft glairy—mud—the remains of untold generations. The mud is too soft to be dug out; Vaghers of Okha by lying sidewise on the mud or rather on gunny sacks spread on the surface, are able to collect down to a depth of 18 to 20 inches—just over a cubit's length. To traverse the muddy stretches in which the shells lie embedded, mud so soft that a man without adventitious aid sinks to the knees at every step taken, each collector propels in front a shallow tub or a wooden box, resting his hands upon it, whilst using his feet, swathed in broad, roughly made mocassins, to skim over the mud much as a swimmer uses his feet in the water, pushing his way ahead. As little weight as possible is rested upon the feet, all that can be, being transmitted to the tub through the hands.

The deposits of dead oysters occupy the same area where at present living oysters form the only workable bed. This is the muddy area lying upon the western shore of Rann Bay; it stretches southward from a point on the coast due east of Poshetra until it meets the boundary line

with Jamnagar, half way across the entrance to the Rann of Okha. Living oysters on the surface and dead ones in the mud are found everywhere, varying however in profusion. As elsewhere Placuna placenta favours extremely shallow water.

The beds of dead oysters are found generally closer in shore than the habitat of the living ones. This follows naturally from the fact that the bay is in process of silting up; in former centuries the extent of shallow water was less than at present, thereby circumscribing their habitat in area. So to-day we find the Okha Vaghers collecting dead oysters from the mud over the whole area laid bare at low tide, whereas living oysters are not found in any quantity till we approach low tide level; from that point to to a depth of nine feet is the horizon most favourable to their well-being—the optimum depth; it is there that the Jamnagar divers reap the main harvest of living shells.

The pearls yielded by dead oysters are more or less discoloured when found, but the lessees employ means which restore them to whiteness sufficiently good to make them readily saleable at only a few rupees per tola under the market price for pearls from live oysters. This ratio is expressed roughly in the difference in remuneration given to the collectors for the two descriptions, Rs. 12/- being the rate for "live" pearls, Rs. 10/- that for "dead" ones. The actual market rate in Bombay is approximately double these figures.

The fact that the dead oysters are found in the mud to as great a depth as the collectors can reach, about 20 inches, has led to the belief that they may also be found in quantity at further depths. No method has so far been devised or put into practice to reach a lower depth but a proposal to use mechanical means of dredging the beds of dead oysters, was put forward by one of the lessees.

As for this either a grab dredger or a suction dredger can be used. Mr. James Hornell was invited to give his opinion on the matter. In his opinion, the heavy capital cost and expensive running charges of a suction dredger put it out of consideration, unless it were to be worked so hard and continuously that the whole of the deposits were exhausted within comparatively a very short time; enormous quantities of oysters would have to be dredged to make the operations profitable in view of their great cost. This, however, would mean the virtual extinction or exhaustion of the bed probably within less than a couple of years. The State might conceivably receive in this period a sum somewhat greater than they might expect to receive under present conditions of fishing over a period of perhaps twenty or thirty years. This was the only advantage to the State while the disadvantages were many :—

(*a*) A considerable proportion of the Vagher villagers in Okhamandal had come to value the pearl fishery as one of the mainstays of their existence in season of scarcity. The industry supported directly several hundreds of the population, for the collection of dead oysters was confined solely to these people. Taking this industry out of their hands meant depriving them of a lucrative and highly valued means of livelihood during a substantial portion of the year. These people had an inherited dislike of regular employment; the pearl fishery suited their taste exactly; they could work when and how they pleased and they got prompt payment for their labours.

The work of fishing dead oysters gives employment to several hundreds of Vaghers in the season. (Mr. Gupte puts the number at work in the height of the season at about 1,000.) It is work of a congenial nature to these people and in years of scarcity they flock to it in increased numbers, whereby the State is relieved in a large measure of the burden of affording famine relief as used to be the ordinary

concomitant of famine conditions before the discovery and exploitation of these deposits. All means possible should therefore be taken to maintain the prosperity of the industry.

(*b*) Loss of employment in the pearl fishery in famine years will entail increased expenditure by Government upon famine relief; and the amount gained in revenue by allowing a lessee to use a suction dredger might conceivably have to be spent in the relief of the sufferings of the people. In years of famine the number of oyster collectors rose most markedly and in such years the oyster fishing lessees were prepared to give much enhanced rates for the right to fish or collect.

(*c*) Extensive operations by a suction dredger would discharge such immense quantities of liquefied mud into the bay that the beds of living oysters would of a certainty be overwhelmed. Restocking of the disturbed area would presumably take place eventually, but there was no forecasting how long this would take. The depth of water over the present deposit of dead oysters would also be considerably reduced, but it was not possible to say whether this would be prejudicial or not.

(*d*) The same objections but in lessened degree applied to the employment of a grab dredger. The period within which the deposits of dead oysters would be exhausted would be greatly extended and instead of two or three years this might not occur perhaps for 15 or 20 years.

(*e*) If a grab dredger became available in the near future, Mr. Hornell recommended that a trial be made and the results very carefully watched and recorded. Such an experiment would give data at present entirely wanting, as to, (*a*) the depth of the deposit in the prolific area; (*b*) the quality of the pearls from depths greater than two feet; (*c*) the profits to be derived from this mode of fishing; (*d*) the effect of the disturbance caused by the operations upon the depth of water on the beds and upon the well-being of

oysters living in the vicinity and (*e*) data whereby to guage whether such a method would be remunerative or not.

(*f*) According to Mr. Hornell even if the outcome of such an experiment were to be found to be more favourable, in would be more politic to defer the dredging of the deposits of dead oysters till such time as it was no longer profitable to collect by the manual system at present employed, in order that the local population may not be deprived of a valuable source of employment.

Once the surface deposits be exhausted, of which there was no present indication, the area being very extensive, this reason against dredging disappeared under such altered conditions, grab dredging might with advantage of empolyed, provided it be found by experiment to warrant the expense.

Whenever an extensive spatfall occured transplantation of large quantitities of young Placuna oysters was advocated by Mr. James Hornell for two principal reasons: (*a*) to permit of freer growth by reducing over-crowding and (*b*) to give opportunity for the formation of new beds by multiplying the number of separate breeding stocks.

Accordingly in 1919, when famine conditions prevailed in the district, one million and a half of brood oysters of an age estimated at from two or three months, were relaid in Balapur Bay. According to the Superintendent's report, the beds in Rann Bay were very densely populated. The operations appear to have had a thoroughly satisfactory result so far as they concerned the well-being and growth of the transplanted oysters.

This experiment came to a premature end as in the spring of 1922 when the oysters were barely three years old, all the beds of transplanted oysters were leased through an oversight and fished for pearls "for about five periods," i.e. for five springs tides; fifty fishermen on an average were engaged on the work of collection each

day; these men were paid at the rate of Rs. 9 per tola of pearls obtained and as their earnings are given at Rs. 30 during the time the fishery lasted, it is evident that the oysters were already yielding a satisfactory return. The Superintendent states that the yield to the Izardar was about 600 tolas of pearls (one tola equalling the weight of a rupee). It seems clear that a much greater yield would have been obtained had the fishery been delayed for six months or a year.

Results obtained from transplantation to the muddy flats in Byet Channel between Aramra and Kiu, showed that these areas were suitable, for the growth of oysters and equally favourable for pearl formation. Mr. Dotiwala in 1927 observed that "between Aramra and Kiu the beds were thick with oysters and most of them living. A few only were found to be dead. The living ones were well matured and were all about five inches long and almost all contained pearls." Again in 1928, Mr. Dotiwala observed that "all the shells picked up were fully matured and contained pearls. Most of them were alive."

According to Mr. Hornell both the Balapur and the Aramra Kiu grounds were suitable areas whereon to form new beds by transplantation from the natural beds in Rann Bay. Balapur appeared the more satisfactory because it is nearer to the Rann beds, is more sheltered from current interference than the Aramra Kiu beds, and appears to be more suitable to catch a spatfall than the latter. On the other hand it seemed that the growth was more rapid on the Aramra Kiu bed and that pearl formation was more abundant, because of the greater food supply there due to the greater strength of the tidal current in Beyt Channel.

According to Mr. Hornell the rate paid in the past of four annas per hundred was altogether too high. He reported that transplantation should not be attempted except in seasons when the brood oysters were so abundant

that a rate of one anna per hundred would enable the collectors to obtain a reasonably good return for their day's labour. It was only when brood occurred in phenomenally large quantity that the collection of the great numbers requisite for successful transplantation could be effected at a cost sufficiently low to justify the expenditure.

Baroda State Administration Report for the year 1937-38, mentions that the "Pearl Fishing at Aramra was worked departmentally during the year as a relief work for the Waghers of Okhamandal. 225 tolas of pearls were secured at a cost of Rs. 1,673".* This might be as an experiment to test whether pearl fishing operations can be managed departmentally with a greater profit to the State. Anyhow this suggests an inclination towards it, because, otherwise the State would not have deviated from its policy of leasing out the area to private individuals as it did in the past.

Pearl fishing at Jamnagar is carried on by the State Department. As such more information is not available on the subject matter. There are 52 oyster rocks forming pearl fisheries on the northern coast of the State in the Gulf of Cutch.

Valuable pearls of all sizes are obtainable from these oyster beds. Besides smaller varieties of pearls designated "Kansara", pearls are also found in shells buried in slit and lying on the bed near Sika, Pindara and Rozi.

The total receipts and expenditure to the Department for the Pearl Fishing during the recent years is given below :—

Year	Total Receipts Rs.	Total Expenditure Rs.
1933-34	3,367	18,681
1935-36	10,484	3,334
1936-37	4,740	10,484
1937-38	26,682	15,723

* Refer to page 205.

We cannot arrive at any conclusion from the above figures. But the Administration Reports for the years 1936-37 and 1937-38 make mention that the services of the State-owned aeroplane can be 'utilised as a means of prevention against pearl fishery poaching.....This arrangement would serve as a warning to pearl fishery poachers against their illegal practices, who, if located by the Pilot while reconnoitring, could be brought to book and dealt with, according to law.' This shows that the State is taking some interest in this industry and under the able guidance of the present President of the Board of Trade, Commerce and Industry, Rai Saheb Girdharlalbhai D. Mehta, it is hoped that the State will not spare any effort to put this industry on more scientific basis.

T.—MISCELLANEOUS

The above survey though by no means exhaustive in details gives a very good background for judging the industrial pursuits of the population of Kathiawar. It is rather risky to assert that the above-noted are the only industries which exist in Kathiawar. In so short a compass as this, it is very difficult to give each industry a due weightage according to its place in the economic life of the province. However, a humble attempt at an assimilation of material facts concerning the various industries has been attempted in this Chapter.

Over and above the industries described herein before, we may note the existence of the Sugar Candy Factories of Bhavnagar, and Gondal, the Confectionary at Bhavnagar, and the Peppermint Factories of Jamnagar and Rajkot. Mention must be made of some of the new factories started at Bhavnagar notable among them being the Hoisery Factories, and the Indolite Factory. The Distemper and Paint Manufacture Works, exist at Porbandar, while within Jamnagar State, Distemper Colours of various kinds and the Chocolate paints, Plaster of Paris, glazing powders

etc., etc., are being made from the local mineral products. We cannot at the same time ignore the existence of Cotton Thread Machines within Bhavnagar State or Gold Thread industry at Wadhwan, Bhavnagar and Jamnagar.

These and a host of others exist and their rise and growth form a special subject which can be conveniently handled in all their details by a special inquiry.

II—UNORGANISED INDUSTRIES

In surveying the unorganised industries of Kathiawar one thing should not be lost sight of that the industrialisation as it is understood in the modern economic phraseology is of recent origin in the province. Except a few mills or some two or three salt works or two cement factories the bulk of the other industries remain unorganised. The economical disadvantages arising from the lack of organisation are too obvious to be mentioned here. In buying the raw materials required the individual has to pay a comparatively higher price, while in effecting the sale of his manufacture he realises a low value. Thus at both ends of his activities he is a loser.

The survey of the unorganised industries in Kathiawar will include firstly a brief discussion of the handloom industry, secondly a survey of some of the handicrafts and small industries which exist in more than one State and lastly we shall note the specialised small industries of some individual States.

1.—HANDLOOM INDUSTRY

A majority of the workers in textile industry are mere cottage workers or handloom weavers. Handlooms are to be seen in every nook and corner of the province and even the smallest village had its handloom weaver. He was a part and parcel of the old social order and village economy. How far his position has been undermined by the competition of the textile mills we shall presently see.

No statistics regarding the total number of handlooms or regarding the rough estimate of their total output are available as only few states mention those datas in their Administrative Reports. The following figures will enable us to judge for ourselves the widespread existence of the handloom industry.

State	No. of Cotton hand-looms	Total area of the State
Gondal ...	... 1,046	1,024 sq. miles
Rajkot ...	... 207	282
Wadhwan	... 328	242
Total ...	1,581	1,548

The foregoing figures are taken from the latest available Administration Reports.

Thus more than one handloom per sq. mile is the average. It is risky to generalise from the average but it is certainly not incorrect to assert that in spite of the severe competition of the modern textile mills the handloom weavers are still able to hold their own.

History of handloom-weaving industry of Amreli will be of more interest here. It was considered to be an important weaving centre in Kathiawar before the competition from foreign and machine made cloth was felt. Until more recent times the use of hand-spun yarn was extensive in this region. The use of Khadi was more common than in the rest of Gujarat when the first movement towards Khadi was started. But,* "The reasons for the downfall of this industry are not far to seek. The import of fine cloth such as Longcloth, Mulls etc., and those with fancy effects and colours caught the eye not only of the well-to-do people but also

* Vide Department of Commerce, Industries and Labour, Baroda State Bulletin No. 33, Weavers' Studies No. 3, Amreli 1932, page 2.

found favour with farmers and others in remote villages. It was no wonder therefore, that the cheap machine made article deprived the local weavers, dyers and calico-printers of their ancestral occupation." Thereafter Amreli's Vanjahs, Tais and Antyaj Weavers began to use mostly mill yarn and to weave various types and designs of cloth mostly in demand by labourers and farmers; special cloth produced by them being: 'Chofals' (Wrappers), 'Pachhedis' (for winding round the waist), 'Pania' (used as turban) 'Dhotis,' 'Thepadas' and 'Sadlas' (to meet the requirements of the shepherd class) and Khadi.

The weavers survey carried on by the Baroda Government in 1932 showed that a greater percentage of weavers were in debt and that for the most part, yarn merchants were their money lenders.

However, Baroda State has evinced keen interest in the weaving industry and under the supervision of the Gram Punarghatana Samiti at Amreli, now and then demonstrations are given in sizing and weaving handspun yarn, tape making, newar weaving, preparing cords, gofuns as well as moria and jotras for bullocks etc.

The only suggestion that can be made here is that the State with the co-operation of the above Samiti and of Khadi Karyalaya worked by the Amreli Shaher Samiti, by co-opting the services of the self-less workers like Sjt. Ramjibhai Hansraj and others should speed up its activities for improving the economic lot of these weavers by improving the marketing conditions of their products, and, by helping them to find the way out from their indebtedness by co-operative efforts. All the States in Kathiawar should devote greater attention to this industry which serves as the subsidiary industry to the agriculturists, and is a boon to them in times of crop failure. Experiments in improving the designs, patterns etc., should be carried on and all possible

steps to improve the marketing conditions of the handloom products require urgent attention.

Side by side with the cotton handlooms there exist separate handlooms for weaving wool. Though no figures for the whole of Kathiawar are available we are informed that within Gondal State there are 144 such looms while in Rajkot State the corresponding number was 14. Porbandar and Dhrangadhra State though famous for their blankets give no statistics regarding the number of handlooms for weaving wool within their respective territories.

2.—BLANKET MAKING

In Gondal State the best blankets are the Dhablas of Dhoraji. Gondal produces good quality of wool which is cleaned by the Musalman Pinjaras and is warped and sized by the weavers. In Porbandar State the woollen blankets manufactured by the weavers of Chhaya have more than local reputation. The weavers of Chhaya also manufacture cotton and woollen fabrics of marketable standard. The stout woollen blankets of Ghadhada in Bhavnagar State are more in demand than they were some time ago. Dhrangadhra is also famous for its blankets because of the sufficiency of raw materials required. One of the important centres for blanket making is Aniali in Dhandhuka Taluka. About 20 families of Dangsias (considered to be untouchables) are engaged here in this industry. They hardly earn to-day Rs. 10/ per month per family. Two Khatri merchants from Wadhwan come over to this place and purchase blankets from them, and at times these merchants lend some money to them. The imports of foreign 'rugs' etc. have reduced the demand for these blankets and their price is falling year by year. Competition of the foreign substitutes is becoming more severe day by day. There is urgent need to have a marketing organisation that can provide them raw wool and take from them their finished products, and thus can eliminate the middlemen's profit which this industry can hardly bear in its present condition.

3.—STONE CARVING

At Dhrangadhra and Halvad (in the Dhrangadhra State) are important stone hand-mill factories. The stone which is taken from the State quarries is sandstone of various qualities, the harder or "Ghantia" being worked into hand-mills and the softer into stone dishes, cups and other articles. Stone images and "Orasias" are exported from the State.

4.—IVORY WORKS

For centuries Kathiawar has acquired a reputation for her products of ivory bangles or "Hathidantana Chuda." The Khatris of Jamnagar are famous for the mastery and skill with which they make these "Chudas" and also for the fastness of their dyes. In Limbdi also there are artisans who are well-known for their beautiful ivory bangles and it is one of those industries which deserve mention while surveying the industrial development of the State. In Morvi State also one of the chief articles of Industry is the ivory bangle work.

On the other hand Mangrol was once famous for its ivory inlaying work.

5.—TAPE AND LACE WORK

Tape and Lace Industry is chiefly carried on at Wadhwan where there are two small factories for their manufacture. As regards the Jari Lace there are very small looms for preparing them at Jamnagar.

6.—TULSI BEADS MAKING

Bagad in Dhandhuka Taluka is a very important village where this industry exists. Beads of Tulsi are also prepared at Khas another village in this taluka. The art of preparing the beads from 'Haldarvo' or yellow wood, 'Sisam' or black wood, 'Ratanjalo' or red wood is being taught to these people by one of their ancestors Jatakia Madha Dosa who it

is reported learnt it at Gadhada a town in Bhavnagar State. Since then (i. e. since last four or five generations) these potters ('Kumbhars') of Bagad are engaged in this industry. At present about fifteen to seventeen families are engaged in this industry here. But the number of artisans in this industry is increasing year by year, while on the other hand, the market for these beads is fast declining. Prices of beads have, therefore, gone down considerably and internal competition has come into existence. One Kodi Malas which used to fetch eight annas in 1932 to-day fetch only five annas. These Tulsi Beads have inter-provincial markets. The demand is mainly from religious centres, and from religious-minded people like Brahmins, Sadhus and Bavas. But there appears no scope for any substantial increase in the demand of Tulsi Beads.

7.—SILVER WORK ON 'HUBBLE-BUBBLE' OR 'HUKKA'

This is practically done at many places in Kathiawar by Sonis (gold-smiths) but by far the most well-known place to-day is Khas, which is perhaps made famous because of the art and skill of Soni Durlabh Baval.

According to Mr. Baval there was good demand for Hukkas 10 years ago. He can prepare a hukka, with silver work on it within six days by working for 10 hours a day. Formerly (about 10 years ago) he used to concentrate only on this industry but now with the fall in the demands of 'Hukka' he has started preparing other ornaments that meet the requirements of the village folk.

He used to earn Rs. 6 to 7 per 'hukka'. He shows great skill and labour in the workmanship of the 'hukka', and makes designs on it by means of thin silver wire. The design made by him is truly exquisite and when Mr. G. P. Fernandes was deputed to study the conditions of Arts and Crafts in the Bombay Presidency by the Bombay Govern-

ment, he was much impressed by it. Instead of obtaining orders to prepare 60 to 65 hukkas as he formerly did, to-day he hardly gets orders for 25 to 30 hukkas during the course of a year. Orders for 10 to 15 hukkas he obtains during the fair of Bhimnath Mahadev that is held during the monsoons at Bhimnath (a place in Dhandhuka Taluka). Only Garasias (Rajput Land-lords) and other orthodox well-to-do people favour the use of 'hukkas'. Hence with the passage of years, and with the change in the taste of the people, the demand for hukkas is fast declining. Under the circumstances it is not possible to suggest as to how to develop this industry.

8.—CART MANUFACTURING

This is done at various places in Kathiawar. Carts of Dhola (in Bhavnagar State) and of some of the centres of Gondal, Junagadh, etc. are well-known. But a famous centre for especially light carts (Riding Carts) is Dholera (in Dhandhuka Taluka). At present there are about 30 shops (pedhis) of carpenters, out of which 17 are cart-makers, 2 of Sanghedias, 4 of Pattarawallas, while others prepare cradles, furniture, etc. But the cart-makers have of late started preparing cradles, etc. and hard and fast rule is not observed in following this industry at present at Dholera. There are about 50 houses of carpenters at Dholera but others are working as 'Kadia suthars' when their services are required in constructing new buildings, otherwise they are agriculturists. Demands for wooden trunks (pattaras) have fallen and so also of the riding or load carrying carts. With the advent of railways and bus services, it is difficult to suggest how to develop this industry. However, if some "zones" are created, as it is desirable to give some subsidiary occupation to the agriculturists, this industry will be able to maintain its hold as a passenger traffic carrying agency to a certain degree.

Otherwise, the cart industry as such will be subsidiary to the requirements of agriculture, but as a means of passenger traffic carrying agency it has no future.

9.—SHIP BUILDING

Ship building is an old established industry at Veraval. However it seems that the ship building industry has lost its importance in Kathiawar with the decline of its coastal trade. The following table gives the figures of the ships built at Veraval during the recent period:

Year	No. of country crafts in use at the end of last year	With an aggregate tonnage of	No. of newly built country crafts	Tonnage	Boats foundered	Tonnage	No. of country crafts in balance left	Tonnage
1931-32	150	7418	2	74	-4	-140	148	7352
1932-33	148	7352	5	232	-5	-270	148	7314
1933-34	148	7314	9	370	-2	-115	151	7569
1934-35	151	7569	8	434	—	—	159	8003
1935-36	159	8003	4	294	-1	—70	162	8227

These figures clearly bring out that practically overhaul work is done at Veraval. The six years' figures do not add substantially to the number of crafts or to their tonnage. From 148 in 1931-32 the number of these country crafts rose to only 162 in 1935-36 while from 7,352 their tonnage has gone up to only 8,227 in 1935-36. Moreover there appears no appreciable demand for the country crafts built at Veraval from other ports of Kathiawar. In reply to the special inquiries regarding the number of new ships built in their ports the Customs Officer, Dwarka informs that no new ships were built at the port during the last decade. At Port Okha only 2 ships of total tonnage of 75 tons have been built during the period.

10. FISHING INDUSTRY

As regards the fishing industry of Kathiawar it can be said that it has received very little notice of the authorities concerned. With a coastline of more than 500 miles, this is one of the most important industries of Kathiawar having vast potentialities. Still it has remained unorganised since ages, and there appears no sign of its development in the near future. Except, the Baroda State, no State has evinced interest in this industry. In 1884 Bombay Government Gazetteer Volume VIII on Kathiawar observed that 'on the shores of the Indian Ocean especially at Porbandar, Mangrol, and Veraval, the fishermen are very skilful in catching fish in nets from boats. Pomfret, sole, 'bhoi,' 'palva' or pala, and 'raus' are the prevailing kinds but numerous other species abound. In the cold weather large number of fishing boats come from the Gujarat coast, Daman and Bassein and catch fish on the south coast between Velan and Jafrabad. They dry the fish on the shore employing a large amount of local labour. They stay for three or four months and then leave taking the fish with them.'

As regards the Gulf of Cambay, the report proceeds, 'little attention is given to fisheries, though excellent fish are found all along the coast, especially the 'bumblo' which is common from Bhavnagar to Hathab.' 'The fresh water-fish' it is given further 'are inferior in flavour. Huge turtles are caught all round the coast, but no use is made of the shells and the fishermen usually boil them down to make oil.' If the report has depicted the conditions in the above lines as existing in 1884, the same hold true to-day. The fishermen even to-day come from Gujarat side in season and carry on fishing operations on Jafrabad coast. As it is Jafrabad (one of the important fishing centres of Kathiawar) forms the part of the Janjira State. This State grants yearly lease to the boats coming over to Jafrabad coast for fishing purposes. The figures for some years—of the revenues

from 'the tax on fisheries' to the Janjira State, Jafrabad's quota in this revenue, and, the number of boats that came to Jafrabad for fishing purposes—are given below :—

Year	Total receipts from 'tax on fisheries' to the Janjira State	Jafrabad's quota in this revenue to the State	Number of boats that came to Jafrabad for fishing
1930–31	Rs. 5,467	Rs. 4,107	81
1931–32	Rs. 3,651	Rs. 3,102	63
1932–33	Rs., 5035	Rs. 3,210	65
1933–34	Rs. 4,264	Rs. 3,212	67
1934–35	Rs. 3,128	Rs. 3,284	70
1935–36	Rs. 5,653	Rs. 3,625	79

The Janjira State Administration Reports also mention that 'a large number of boats comes every year from the western coast of the Bombay Presidency and carries on fishing operations on the coast of Jafrabad till the end of January.' It is clear that the greater percentage of income to the State under the head 'Tax on Fisheries' accrues from the fishing industry at Jafrabad. No further information about the fishing industry of Jafrabad is available. But on the questionnaire issued for this purpose some information is received from other parts of Kathiawar which gives some idea as to the economic condition of the fishermen of the province. Most important fishing centres in Kathiawar at present are Veraval, Mangrol, Porbandar, Div (Portuguese), Jamnagar, Madhawar and Jafrabad. At present there is very little fishing industry within the Bhavnagar and Morvi State territories.

As regards the fishing industry at Porbandar the following information is received. There are about 150 fishermen at Porbandar proper and about 35 others in the Porbandar State territory (about 20 at Navibandar and others at Miyani). The fishermen of Porbandar have to pay nominal tax to the State. They use small 'hodis'

Rs. 15-25 worth and prepare their own nets. There are at Porbandar proper 15 big 'hodis' worth Rs. 150 to 300 and about 50 small 'hodis' Rs. 15-25 worth (which are known as 'ek-lakadis'). Fishermen themselves are known as 'Lodhis' or 'Panigaras' and they do fishing from October to May (from the 5th day of Bhadrapad's bright half, to Bhim Agiaras'). They are addicted to drinking and it is reported that on an average they are indebted to the extent to Rs. 250 to Rs. 300/- per head. When their season is over they often go to the creek for fishing.

Similar report is received from Mangrol where there are about 200 to 225 fishermen engaged in this industry. Fishermen at Porbandar and at Mangrol sell their stock to the local merchants, who export them to outside places. In this connection Mangrol appears to be a better centre than Porbandar, as far as the exports of fish is concerned. Information as to what extent they lose by way of middlemen's profit etc. is not available. But complaints of their being under the thumb of these traders are received from various quarters. Most well-known fish being caught by the fishermen at Porbandar and Mangrol are 'Datar,' 'Vinchhida,' 'Dhamil,' 'Magra,' 'Palva,' 'Radiyo,' 'Surmai,' 'Dhangro,' 'Chhapro,' 'Chhapri,' 'Chaski,' Pomfret,' etc.; by far the most important species being 'Pomfret,' 'Palva' and 'Ghol.' Even though fishing is not developed in Morvi State territory, it is reported that the 'Khetar' caught by these 'Lodhis' are prized much. When the European Officers visit the State 'Khetars' are required, and at times the officers of the State send them by parcel to their Continental friends. As for the fishing in the Gulf of Cutch, the Official Report* in 1884 observed that 'fish are chiefly caught in stone enclosures built on the muddy or sandy shore. After the tide has ebbed the fish are left stranded, or in small

* Vide Bombay Government Gazetteer, Vol. VIII: Kathiawar, p. 106.

pools within the enclosures, where they are easily taken by hand nets. Larger fish are caught in bush or thorn enclosures made further out not far above low-water mark. These enclosures are principally made of baval branches staked firmly in the sand and secured by stones. In these thorn enclosures very large saw-fish and sting-ray, and occasionally dugong Halicor indicus are caught. Sharks of all kinds are common. Pomfret are caught in the thorn enclosures, but rarely enter the stone ones. Smaller fish, such as the 'rous' and 'bhoi' are caught in the stone enclosures. Another very valuable fish is the 'gol machhi' from which isinglass is made. It is caught principally from boats, but it is also found in the thorn enclosures. The local names of the chief fish caught in the stone enclosures are seri, baria, gordia, kaku, kachki, sarvar, and khetar and, in the thorn enclosures, surmai, girial, kurli, gol, kolmi, musi, chichan, samra, hovati, chhuri, malar, pranjri, jhanjhani, dai and dantio. Oysters—both pearl and common oysters—are found in large quantities.

Several kinds of sharks or magras are also caught. One of the most valuable fishes is the gol, a species of siluroid. The swim-bladder is dried and largely exported for the manufacture of 'isinglass.' (It is reported that these swim-bladders are known among the fishermen as 'potas' and they realise nominal value by selling them to the local merchants, while at times they are thrown away by them as useless material.) 'Oil is made from the dugong, walrus, saw-fish, and skate. Shields are made of walrus skin, and the fishermen make shoes of the skins of the skate and saw-fish which they wear when fishing on the oyster-covered rocks. The shark fins are cut and dried and sold to Nawanagar traders. The fishermen dry three kinds of fish, prawn, the whitebait or 'kur' and the 'kolmi' another small fish. None of these are salted, and the prawn is boiled before it is dried. Other fish are salted and sold by the fishermen in the neighbour-

ing towns and villages. Traders from different parts buy them ready-salted on the spot. The Ran fishes are of inferior quality and are sold either on the spot or close by. They are smaller than the gulf fishes. The principal kinds are bhingaru, kathia, dol, murakho, jarko, popri, sonia, pala, seti, khumla, chori and kandhia. The trade is in the hands of the middlemen in the form of local traders who export them outside. To what extent these traders are taking undue advantage of their position needs to be carefully investigated.

Everywhere there is useless wastage of marine wealth and this has got to be immediately stopped by the authorities concerned. Mr. James Hornell's report for Okhamandal bears ample testimony to this remark.* He says, "approximately two-thirds of every catch was of immature and undersized fish, of sizes far below what any country with organised fishery regulations would permit to be caught or offered for sale. The waste entailed is enormous. Instead of sizeable fish being on sale in the markets, giving good remuneration to the fishermen and satisfaction to the consuming public, complaint is constant of scarcity of fish and of the poor quality of the little that is offered. The fishermen in turn complain of the difficulty they have to earn a livelihood."

He again proceeds "this lamentable state of the industry can be remedied only by prescribing a minimum size of mesh in all nets sufficiently large to permit the escape of the majority of immature fishes, particularly mullets." But "to impose a limitation, prior to the time when this restriction is enforced in all the west coast estuaries and creeks, would be to hamper the Baroda fishermen without any compensatory results. I recommend therefore that representations be made to Bombay Government

* Vide Report on the Marine Fisheries of the Baroda State in 1930 by Mr. James Hornell, F. L. S.

pointing out that under present conditions, enormous quantities of the young of valuable food fishes are destroyed owing to the mesh of the nets used both in Bombay and Baroda rivers being too much small, with the inevitable consequence that there is a scarcity of large fish of these species, grey mullet in particular; that if a larger mesh be enjoined on the fishermen, the average size of the fish caught will be increased greatly, even in the course of the first year, so rapid is the growth of these estuarine fishes in India, with the resultant great benefit to the whole fishing industry and fish consuming public.

Fishing in rivers and creeks is in a different category to fishing in the open sea; the quantities of fry in rivers is strictly limited and whenever fishing is intensive with small meshed nets, such a large amount of fry and young is destroyed that the residue is too limited in numbers to permit of the growth to adult size of the quantity which the rivers are naturally fitted to support.

The value of the basketful of young mullets numbering many hundreds and perhaps thousands, is trivial compared with the weight which would be given if even one-tenth of the same number were enabled to reach the adult size. The fishermen sell a goodly inheritence for less than the biblical mess of potage."

A decade since the report is made, has nearly passed, it seems neither Bombay Government nor other States have paid any heed to the advice rendered by one of the eminent authorities on the subject. When the situation for the operation of fishing is so deplorable and the condition of the fishermen far from satisfactory, when no steps to improve their economic lot are taken by the States concerned, it is but natural that attention is not given at all for developing the by-products of this industry.

11.—MISCELLANEOUS

Among miscellaneous small industries may be noted the Jail Industries. In almost all the jails carpet weaving, tape making, and cane work are being taught to the convicts. The enamel work carried on at various places in Kathiawar also must be taken into account. And lastly there are the furniture making works, and village and town carpenters, and blacksmiths. In an agricultural province like Kathiawar, making of modern carts and ploughs deserves to be specially mentioned. Neither the village potters nor the shoe makers, oil crushing 'ghani' owners and cobblers should be neglected. The tailors have also their place in the new industrial regeneration as they are the first to adopt the use of the modern machine.

12.—SPECIALITIES OF SOME OF THE STATES

Under this head a brief outline of the existing handicrafts for which the various States are well-known is attempted.

Jamnagar. Bandhani or Knot Printing is carried on at nearly all the chief towns of Kathiawar but the best work is executed at Jamnagar. The red powders known as "Kanku" and "Gulal" are also made in large quantities. The Mogherel Oil" or "Fulel Oil", the scented "Agarbaties" and the various fragrant essences are but the few of the specialities of Jamnagar. The latest and perhaps the only one of its kind in the whole of the province is the Jarian Works Factory.

Bhavnagar. In Bhavnagar State we are informed that hand-weaving shows signs of revival and that the gold-laced Pachhedis, silk-bordered Dhotars, and thick covering sheets of cotton known as chofals produced by the weavers of Kundla fetch better prices. The carpets and bed covers dyed in variegated colours produced by the Khatries of Sihor, Umrala and Vartej are more in demand. The pretty

wooden and ivory toys made in Mahuva are very popular and the skill of the Sihor Copper-smiths is admirable. Sihor is also known for its bellmetal industry.

Gondal. The Khatries and Bhavsars of Gondal are well-known all over Kathiawar for their dye work and Bandhanis. Gondal is also famous for its embroidery on silk and cotton cloth in gold, silver and silk thread. Dhoraji is famous for its cots, cradles and toys.

Morvi. Copper and brass utensils of Morvi have attained a name for themselves in all the parts of Kathiawar. "Lotas" or small copper and brass pots are the specialities.

Limbdi. Limbdi is well-known for its snuff throughout the province. Nut crackers form the other articles which betray the workmanship of the Limbdi's black-smiths.

Muli. The Dangri cloth made by the Dheds in the villages is used in the manufacture of leather saddles. Muli's mochis were once famous for their skill in the preparation of native horse trappings.

Kundla. Kundla within Bhavnagar was once famous for horse trappings. The trappings made at Kundla were considered the most attractive and those made at Muli the most lasting.

Dhrangadhra. A superior quality of snuff is prepared in this State and finds a ready market outside and is consequently exported in large quantities.

Barvala. It is reported that deer skin tanning is done to a very limited extent at Barvala and Kundal (in Dhandhuka Taluka).

III.—AGRICULTURAL OR PASTORAL INDUSTRIES

1.—GHEE

The only industry which is closely connected with agriculture in Kathiawar and which has also assumed greater

proportion year after year is the Ghee or Clarified Butter Industry. Cattle breeding on a large scale as a special industry cannot be developed, as a greater portion of the populace is vegetarian. Whatever close attention is paid to the breeding of better cattle is done only in relation to the development of this Ghee Industry. Every State whether small or large has turned its attention towards developing this industry as it can be easily achieved in view of the preponderance of agriculture and the availability of large grass lands for fodder purposes. Big cities like Bombay have to depend for their supply of pure ghee on other provinces, and, the greater the zeal and earnestness with which this Industry is pushed on, the greater is the chance of its being developed into one of the staple industries of Kathiawar. It is a matter of great satisfaction that the States concerned have taken steps to assure the consumer that the products of their States represent pure and unadulterated ghee. The problem of adulteration has assumed such vast proportions that the Municipal authorities have to strain their every nerve to cope up with it.

In trade it is generally acknowledged that a good name is always to be reckoned as a valuable asset. Kathiawar Ghee has earned for it a name and it now rests with the States concerned to see that no stigma attaches to the reputation of Kathiawar. Laboratories must be established and certificates from the State Laboratories should be attached to the tins. The exporting State should give guarantee to the importers that the ghee imported is genuine Kathiawar Ghee.

Though no figures are available as regards the total production of Ghee and neither can it be ascertained as to how much is consumed within the province, we can certainly say with confidence that during the last decade many new firms have come into existence which solely do the business of ghee exports. This is a very healthy sign showing the

increasing trade in Kathiawar Ghee and it assures us about its bright future.

The most famous ghee exporting house is that of Messrs. Bhanji Lowji of Porbandar. Then there are the Jamnagar State Guaranteed Ghee Exports and the Junagadh State Guaranteed Ghee Exports. Ghee is also sent outside in large quantities from Vankaner, Than, Dhari, Khambha and a host of other places from the Gir Districts.*

2.—HONEY

Another industry which is altogether neglected in the province is the honey industry. It is very difficult to procure from its bazaars pure and unadulterated honey. In Kathiawar this industry is mostly in the hands of the lower castes, the 'Vagharis', the 'Ods', the 'Kolis' etc. Honey is obtained by these people from the mountains of Sihor, Palitana, the Chotila, the Barda and the Girnar where the groves of trees induce the bees to prepare the bee-hives.

The 'Vaghris,' the 'Khojas' and the 'Kolis' of Vankaner, Jasdan, Porbandar, Junagadh, Bilkha, Talala, and other places, who obtain annual lease (Ijaro) to collect honey from within their States territories, are the illiterate people who know nothing about bee-culture. They sell honey at a ridiculous rate of 4 lbs. a rupee at places like Jasdan, Bilkha etc., and the purity of their honey is often questioned.

CONCLUSION

In surveying the existing industries of Kathiawar a feeling of diffidence is bound to arise within the heart of a research worker. It may arise not so much from his incapacity,

* *N.B.*—For generations in Kathiawar, Jafrabad is well-known for its buffalo breed. As such if the State begins to evince interest in the dairy products of this place as a ghee exporting centre, and also perhaps for cheese, butter and casein-making it might attain first-rate importance in the province. Possibilities in this direction should be investigated by the State.

as from the lack of co-ordinated materials. The paucity of statistical data has already been emphasised and what needs greater emphasis than that, is the need of the arrangement of statistics on a scientific basis. Added to this, at times, these States prefer isolationist policy when approached for soliciting the information that is required purely for the academic purposes. It being so, if, against such heavy odds a survey is attempted, it is bound to be imperfect and inadequate. This is not intended as an 'apologia' but as an indicator of immense difficulties which a research worker has to encounter in his humble attempt.

It will be rather unjudicious to draw conclusions from the insufficient materials. Not only will it attract the unwary and tempt him to over-estimate certain industries at the cost of under-estimating the others, but it will also lead him to conclusions which may be far from representing the correct situation.

It is, therefore, proposed here to note the tendencies only, without committing ourselves as to the preferability of a particular industry over that of the others.

Two tendencies must be noted namely, (*a*) the existence of a variety of industrial undertakings and (*b*) the adaptability of the populace towards the industrial pursuits.

So far as the former is concerned we have again to remember that the number of big industrial concerns are not what they ought to be in view of the vastness of the area and the availability of the raw materials.

There are hardly a score of factories within the whole province which employ more than 100 men.

Whatever industrial concerns are there, most of them are too small to be ranked with the present industrial concerns.

* "Joint Stock Principle" we are told, "is not current in great part of the province as the capital is shy of local enterprise." In the absence of necessary requisite capital it is but natural that many more large scale industries could not be established.

As regards the adaptability of the population to new industrial ideas, it is a matter of rather great pride that the province can boast of so many industrial concerns engaged in a great variety of industrial pursuits.

The very existence of these industries presupposes a mind that is neither obstinate nor adamant but is receptive and adaptable to every move of economic regeneration.

If this is harnessed and utilised together with the help of the capital—which feels shy to-day—the industrial advancement of Kathiawar will then be a matter of years rather than decades.

---

* Refer to Gondal State Administration Report for the year 1925-26 p. 38.

CHAPTER VII

TRANSPORTS

The development of modern science has resulted in many new discoveries and inventions whose effects can be roughly classified as tending to create new and faster means of production as well as distribution.

The use of steam and electricity as sources of motive power has revolutionised the whole aspect of Production and Distribution. New methods of production came into existence and coupled with the rapid means of transport and communication, were able to change the nature and character of trade. International trade came to the fore and gradually the world emerged as a living organism wherein the slightest shock at the remotest corner was instantaneously reflected in all the distant lands. Trade received momentum and the pace was greatly accelerated by the growth of rapid means of communications. The Telegraph, the Telephone and the Radio opened up a new era in the history of communications and if to-day the volume of World's Trade is infinitely greater than what it was a hundred years ago, it is largely due to the facilities afforded to it by highly organised systems of transport and communication. The problem of development of trade and industry is thus closely bound up with that of transport. In the absence of adequate transport facilities it is impossible for an industry to thrive or for trade to receive any encouragement. The use of modern mechanical devices in large scale production, assumes both the existence of a demand whether at home or abroad, and the existence of a highly developed transport system which can enable it to market its products. In short trade and industry follow the transport facilities.

SCHEME

In surveying the present industrial growth in Kathiawar with special reference to transport facilities, it is

necessary to divide the survey according to the part played by :

1 Roads
2 Railways
3 Ports
4 and by other means of transport.

The rise and growth of industries in Kathiawar is only recent and we are too near to judge the part played therein by the transport facilities. Again the industries that have come into existence during the last decade or two, can be counted on the tips of the fingers. However it is hoped that a historical background of the development of the means of transport will enable us to judge the part played by them in the present industrial growth of the province.

1. PART PLAYED BY THE ROADS

In olden times the main trade route in Kathiawar followed the coast from Ghoga to Somnath in the south-west and thence to Dwarka in the north-west. The earlier land routes were those connecting the peninsula with the mainland. One such route was via Jhinjhuada and Patdi to Wadhwan, while the other lay via Viramgam to Wadhwan. During the days of the Vallabhi Empire routes through Dholka and Dhandhuka to Wadhwan and Vallabhi were in use. It also appears that there was a route joining Vallabhi to Junagadh and Vanthali. But as most of this road passed through forests and thinly populated areas, trade followed the sea route. It is interesting to note that from the earliest times Wadhwan, Dholka, Dhandhuka, Ghoga, Somnath, Junagadh and Dwarka, are situated on the main trade routes. There is ample historical evidence to confirm that almost the whole of the province of Kathiawar was once under the sway of the Vallabhi Rulers. A set of copper plates dated Samvat 714 of Vikramaditya bearing the name of a new King called Jayikdeva who is styled as the Adhi-

pati of the "Sourastra Mandala" is kept in the Watson Museum at Rajkot. It commemorates the gift of Dhinki—situated in Okhamandal to a Brahmin named Ishwara. Dr. Bühler considers this King Jayikdeva as a powerful vassal of Vallabhi. Another plate found at Maliya shows that the rule of the Vallabhis extended as far as Junagadh and Vanthali. The most populous portion of the province during those days was the Bhal Country, the Dholka, Dhandhuka and Ghoga sub-divisions, and the Wadhwan and the neighbouring districts, and whatever industries were there, they were mainly settled within these districts.

Later on the Solankis of Anhilwad—probably Sidhraj Jaysingh constructed a military road from Wadhwan to Junagadh via Sayla, Dhandhalpur, Chobari, Anandpur, Bhadla, Sardhar, Gondal, Virpur and Jetpur. For a very long period trade followed this route. From historical records of this period, it appears that Kathiawar was well-known even in those days for its cloth of various patterns and ivory bangles.

In Mohamedan times, especially under the Imperial Viceroys, the interior of the province became populous, routes increased, and a direct road from Wadhwan to Dwarka via Nawanagar and Khambhalia was constructed. It is just possible that Nawanagar arts and crafts might have received a greater fillip by the opening up of this route. The luxuries of the Imperial Viceroys and the Mohamedan Thandars of Sorath accorded great encouragement to the brocade and Jari works. This brocade work was carried on both at Nawanagar and Junagadh.

The old route from Rajkot to Wadhwan passed by Sanosra, Ghiawad, Mahika, Than, Umarada and Muli; and before the Railways were extended to Wadhwan, the route to Ahmedabad from Wadhwan passed by Talsana, Shapur, Sanand and Sarkhej.

As time passed on, Dholera and Ghoga became the chief ports of Kathiawar and during that period the routes to Dholera from Wadhwan and other places in Jhalawad were by Limbdi and Dhandhuka. From Halar and Kathiawar to Dholera the route passed via Vinchhia, Paliad, Ranpur and Dhandhuka. The trade route to Ghoga from Kathiawar and Gohilwad lay through Jalalpur, Dharuka, Ghanghli and Vartej. Before the Bhavnagar and Gondal Railways were opened, the trade from Ahmedabad to Gohilwad passed by Dholka, Koth, Hadala, Dhandhuka, Barvala, Vala and Sihor to Palitana. The old trade route from Nawanagar to Gujarat and Malwa passed by Dhrol, Tankara, Morvi, Halavad, Dhrangadhra and Viramgam.

These were the principal routes in existence before 1865. What industries were helped in their growth by the facilities afforded by these routes it is difficult to assert, but one thing is practically certain that these routes provided ample opportunities to the traders to dispose of their merchandise in any part of the province.

Trade during those days was carried on partly in carts and partly on pack bullocks and asses. Besides the cartmen and the carriers, there were the pedlars who carried packs on their own backs or on bullocks and sold the articles to the people of the neighbouring villages. The volume of trade effected by these cartmen, carriers and pedlars increased with the opening up of new routes and this helped and encouraged the handicrafts and industries that were then existing.

Between 1865 and 1880 nearly 550 miles of new roads were constructed. Of these 330 miles were of first class bridged and metalled roads while 224 miles were of second class gravelled roads. Appendix "A" at the end of this Chapter, gives the details of new roads constructed between 1865 and 1880 in Kathiawar. It might be that these

roads were planned with an ultimate view of railway construction along them or they might have been undertaken with a view to effect immediate despatch of military forces to any corner within the province but one thing stands out quite clear that by 1880, the interiors of Kathiawar were joined with each other by an immense network of roads. Even places in the remotest corners became accessible and volume of trade carried on by these cartmen, carriers and pedlars increased with the opening up of these new routes. Villages and towns situated on the junction of two or more roads began to develop and assumed the important role of distributing centres.

2. PART PLAYED BY THE RAILWAYS

The first Railways that were constructed in the province were the Bhavnagar and Gondal Railways. The main line from Bhavnagar to Wadhwan was declared open on 18th December, 1880 by Sir James Fergusson and with it began a new era of railway construction within the peninsula. On 21st January, 1881 the other line from Dhola to Dhoraji was also opened. In 1888 Junagadh State constructed a line 16 miles long from Jetalsar to Junagadh while in 1889 the line from Junagadh to Veraval Docks a distance of 51.30 miles was opened for traffic.

Morvi State did not lag behind her sister States, and by 1894 it constructed 94½ miles of railway lines of which the line from Wadhwan to Morvi, a distance of 68½ miles was opened in 1887 and from Vankaner Junction to Rajkot a distance of 25¼ miles was declared open in 1890. The said line was carried beyond the river Aji in 1894. The Rajkot Jetalsar railway constructed by the States of Gondal, Junagadh, Rajkot and Jetpur in the shares of 6 : 6 : 2 and 2 was opened in 1893, while in the year 1897 the State of Nawanagar constructed the railway from Nawanagar to Rajkot, a distance of 54.22 miles. On the basis of an agreement arrived at between the States of Porbandar and

Gondal in 1887, the railway between Dhoraji and Porbandar was opened in 1890. Thus by the end of the 19th century because of the State enterprise, all the important trade centres were connected with the railway lines.

As a result of the introduction of railways in the province, trade diverted towards the places on the railway lines. When the Bhavnager and Gondal Railways were constructed, Bhavnagar began to develop as a great centre of distribution. Cotton from distant places like Junagadh, Nawanagar, Nadiad, Petlad, Anand, Borsad, Disa, Cambay, Limbdi, Wadhwan and Lakhtar bagan to be brought to Bhavnagar. Sugar, Molasses, grain and clarified butter were brought from Delhi, Agra, Lucknow, Cawnpore, Jaipur, Benares, Hathras and Amritsar by railways. Of the outward traffic, trade in timber increased manifolds. Timber was sent to Dhoraji, Gondal, Junagadh and other places in the West; to Vankaner, Morvi, Dhrangadhra, Wadhwan, Ranpur, Chuda, Sayla and to other places in the North; and to such distant places even as Viramgam, Mesana, Bhandup, Palanpur, Disa and Patan. Grain in large quantities was sent to Halar, Sorath and Jhalawad.

The Official Gazetteers* point out, that between 1866 and 1882 several attempts at opening up of Ginning Factories were made, some of which had to close down for various reasons. Factories situated in the interior experienced great difficulties as it was difficult for them to send cleaned cotton to the pressing factories without much inconvenience. In 1870–71, a Ginning Factory and a Cotton Press were opened at Dhoraji. Both the factories experienced hard times, but as a result of the opening up of the Bhavnagar Gondal Railways, Dhoraji became the terminus and the local cotton dealers began to extend their patronage to these factories. Thus the Railways saved these industrial concerns from ruin. After the opening up of the

*Vide Bombay Presidency Gazetteer Vol. VIII, P. 250.

Bhavnagar Gondal Railways a ginning factory was started at Lathi in 1880 and it was hoped that similar factories would be established in the cotton centres in the interior of the province along the line of the railways.

The Railways thus paved the way for a new era of industrial development. The interior of the province came nearer and nearer every day to the rest of the world and the raw produce of Kathiawar began to appear in the markets outside the province. How industrial growth was fostered by the introduction of the Railways in Kathiawar can be better illustrated by the existence of nearly one hundred and fifty ginning factories in all the parts of the province as against some ten or twelve situated at some major ports or near some railway stations like Wadhwan prior to the introduction of the railways. It is not intended to enter into the details as to what particular industries owe their existence exclusively to the railways as in the complexities of modern economic tendencies, it is difficult to assert and assign a definite object as the prime cause and reason for particular phenomenon. At the most we can say that the railways imparted an active push towards the growth of these industries in the province which were best suited both as regards raw materials and labour but had been neglected till then because of the want of better transport facilities.

It is not intended to enter here into the history of railway management in Kathiawar, but it must be borne in mind that after the dissolution of Bhavnagar, Gondal, Junagadh and Porbandar State Railways Union in 1910–11 (commonly known as B. G. J. P. Union) every State began to develop its own railways according to the plan best suited to the needs of the territories under its respective jurisdiction. Fortunately for these States no hindrances of material character came in their way and as a result of their efforts to-day we find a veritable net-work of railways in the peninsula.

Kathiawar compares very favourably with other countries and British India as regards its mileage of railways as will be seen from the following statement :

RAILWAYS MILEAGE*

Open per 100 sq. miles of territory.

Belgium	396	New Zealand	30	United States of America	70
Germany	196	Union of South Africa	24	Japan	32
United Kingdom	195	India	20	Canada	11
France	130	Argentina	19	Kathiawar	47

Appendix "B" at the end of this chapter, gives the details about the existing Railways in Kathiawar together witht heir opening dates. With the gradual extension of the railways in the interior, a new tendency was visible in the agricultural undertakings of the province. Cultivation of commercial crops began to spread. Oil seeds of almost all kinds began to be extensively cultivated with the result that Kathiawar developed an enormous trade in raw materials. Oil Mills and Oil expellers were started at prominent places on the railway line; thus the railways were instrumental in giving that industry a footing within the province. Cotton Mills were started in the heart of the cotton districts while Pressing Factories were started at places which were within easy reach of the railways. Thus with the gradual increase of trade in Kathiawar, new branch lines were constructed which gave suitable places in the interior, an opportunity of developing their industrial propensities.

The World War gave an impetus and many new concerns were started at different places within the province. This tendency of gradual industrial growth became markedly visible at Nawanagar, Bhavnagar and Morvi as these States began to develop their ports.

* Figures taken from K. V. Iyer's book on Indian Railways.

3. PART PLAYED BY THE PORTS

Kathiawar with a coastline of about 500 miles abounds in ports. From early times, the places on the coastline were the first to come in touch with the outside world and trade was carried on mainly between these places along the coastline. The interior of the peninsula was covered with dense forest and was sparsely populated. There were no good roads but only cart tracks. The military roads under the supervision of the Solankis of Gujarat and the Imperial Viceroys of Delhi were the first main roads along which trade followed for a considerable period of time. Since the ports were the first to come under the influence of the outside world, a variety of handicrafts and small industries began to establish themselves there. Thus from the very beginning ports were the principal centres of trade and industry.

After 1917, Land Customs Cordon along the Viramgam-Dhandhuka line was removed and the Kathiawar maritime States were included in the British India Sea Customs Union. As a result, the policy of 'let alone' or 'laissez faire' was abandoned and each and every maritime State became port-conscious. Enormous expenditure was incurred by them for modernising their ports. All the maritime States of Kathiawar have tried and utilised their resources towards the attainment of a single goal *viz.* the development and commercialisation of their ports. As a result, the Kathiawar ports have been able to snatch a substantial slice of foreign trade from the British Ports of Bombay and Karachi. We are not going to weigh in this chapter the pros and cons of the Maritime States' case against the re-imposition of the Viramgam Cordon, but here we shall content ourselves with the discussion of the part played by the ports in the industrial development of Kathiawar. For this we have simply to see the new industries started at Jamnagar after the development of Port Bedi, or, to compare the existing industrial

activities of Bhavnagar with those of a few years back. Appendix "C" at the end of this chapter, gives a very good idea of the varied nature of industries existing at Bhavnagar in 1933–34.

Port Okha, Port Navalakhi and Porbandar have also contributed their mite towards the establishment of large-scale industries in Kathiawar. The existence of a gigantic concern like the Okha Salt Works, which is on the point of being developed into one of the best Alkali Works of India, is largely due to the nearness of Port Okha and the facilities provided by it towards exporting its salt to Bengal. The Okha Cement Works of Dwarka also owes its success to the better export facilities provided by Port Okha. The development of Port Navalakhi has helped the growth of Lavanpur Salt Works, the Pottery Works and the Glass Works; while Porbandar was selected as a suitable place for starting the first Cement Factory in India. The coming into existence of the Maharana Spinning and Weaving Mills, the Nadir Salt Works, and the Western India Glass Works at Porbandar was largely due to its geographical position as a good port.

It is not intended to overlook other considerations or raw materials and labour supply but it is not out of place to reiterate here that like the railways the development of ports also gave impetus to the growth of those industries which could not be established in the absence of proper port facilities.

4. PART PLAYED BY OTHER MEANS OF TRANSPORT

In Kathiawar due to the existence of a number of different jurisdictions there does not exist any province-wide bus service. The field of operation for the motor buses and motor lorries is limited to local territories. Moreover some of the States open up out-agencies within their territories with an ultimate view to convert them into regular lines.

These being mainly traffic agencies, it is very difficult to ascertain and gauge the extent to which they contribute their quota towards the industrial growth of the province. But it will not be out of place to say that these means of communications together with the tramways facilitate the movements of goods from one place to another and serve the tracts which are devoid of railway lines and to that extent they also contribute their mite in the growth of the volume of trade in the province.

CONCLUSION

The above is a humble attempt to survey the important role that transport facilities have played at various stages of industrial development in Kathiawar.

It reveals that in the earlier days before the province became subject to the suzerainty of Delhi, and the Imperial Viceroys governed the province, the main trade route was along the coast. Those were the days when Ghogha, Somnath and Dwarka were flourishing centres of trade. In the accounts of the Mohamedan invasion of Somnath, we find realistic descriptions of Arts and Crafts which were then existing and for which Kathiawar had attained unrivalled fame. The Mohamedan Subas brought with them the luxuries of the Moghal Court and Kathiawar handicrafts began to display æsthetic tastes. The roads constructed primarily for military purposes were utilised by the traders and merchants, and the Vanjaras carried the Kathiawar manufacture as far as Marwar and Mewar. The Official Reports inform us that between 1760 and 1810, Bhavnagar had an extensive land trade with Pali, Jodhpur, Sirohi, Udaipur, Jaipur, Ujjain, Ratlam, Indore, Burhanpur, Penth, Ahmedabad, Danta, Patan, Radhanpur, Palanpur, Vadnagar, Vishalnagar and Sidhpur, while it also possessed an extensive sea trade with Karachi and Calicut, Maskat, Basrah, Mokha, Jidda, Zanzibar, Mauritius, Mozambique and with Ceylon, Singapore, Penang and China. Those were the hey-days of Kathiawar handicrafts and manufacture.

The introduction of railways within the province brought with it the ginning and pressing factories and the spinning and weaving mills. A new phase of industrial development began with the introduction of steam machine, but its results were not visualised in those days. The hand-gin and the screw-press which gave employment to a pretty large number could not compete with the machine both as regards the output and the finish. As a result all those who worked upon them were rendered unemployed. The Textile Mill became a source of serious competition to the handloom weaver and he was forcibly dislodged from his vocation. The railways thus were not an unmitigated boon.

It is not intended to criticise unnecessarily the introduction of the modern system of transport facilities. On the other hand, it has conferred many advantages upon the province. The wide spread net-work of railways coupled with the existence of modernised and commercialised ports gave an altogether new orientation to the trade and industry of Kathiawar. Kathiawar no longer depended upon Bombay or Karachi for the supply of foreign articles. The new ports while affording ample facilities for indulging extensively in trade with foreign countries, opened up new channels for exporting the merchandise and manufactures from within the province. A co-ordination of the ports and railways paved the way for a steady rise in the total trade of Kathiawar and at the same time provided better facilities for marketing the products of the Kathiawar industries. The increasing trade of Kathiawar 'Ghee' is an instance in this direction.

Can it be then asserted that in view of these facilities Kathiawar has been industrialised to the core ? It is rather the other way. No doubt these transport facilities have helped the growth of industrial establishments in Kathiawar but it is an accepted fact that even now Kathiawar exports consist mainly of raw materials like cotton and oil seeds and

only a few large scale industries exist within the province. The problem of utilising these raw materials within the province is urgent, looking to the predominance of agricultural occupation and hence pressure on land in Kathiawar. The States concerned will serve their subjects in a better way if they take up in all earnestness detailed investigations into the industrial possibilities of the raw exports from within their respective areas. Such a step is not only overdue but it will result in an increase of wealth and general happiness of their subjects.

APPENDIX A

Appendix giving the details of new roads constructed between 1865 and 1880 in Kathiawar

From	To	Length in miles
	*** First Class Roads**	
Rajkot	Wadhwan	65
Rajkot	Junagadh via Gondal, Virpur, Jetpur	58
Tankara	Morvi	24
Kandorna	Porbandar	13
Mahuva	Kundla	35
Mahuva	Bhadrod	3
Bhavnagar	Chavand	52
Bhavnagar	Bhandaria	13
Bhavnagar	Sidsar	3
Bhavnagar	Ghoga	9
Songad	Palitana	13
Pipla	Noghanvadar	8
Wadhwan	Limbdi	12
Wadhwan	Dhrangadhra	12
Jetpur	Dhoraji	8
Dhoraji	Junagadh	4½
	***Second Class Roads**	
Rajkot	Chavand	53
Rajkot	Nawanagar	52
Morvi	Vavania	24
Jetpur	Dhoraji	4
Gondal	Derdi	6
Dhoraji	Upleta	3½
Dhoraji	Navibandar	11½

* Vide Gazetteer of the Bombay Presidency Volume VIII, Page 220-221

APPENDIX B

Appendix giving the details of Railways in Kathiawar together with their opening dates.

I —BHAVNAGAR STATE RAILWAYS

			Date of opening
a.	Bhavnagar to Wadhwan	105.11 Miles	1880
b.	Dhola to Dhasa	15.33 „	1881
c.	Sihor to Palitana	16.92 „	1910
d.	Dhasa to Kundla	35.80 „	
	(i) Dhasa to Lilia Mota		1911
	(ii) Lilia Mota to Kundla		1912
e.	Botad to Jasdan	33.47 miles	
	(i) Botad to Vichhia		1913
	(ii) Vichhia to Jasdan		1913
f.	Kundla to Mahuva	47.42 miles	
	(i) Sawarkundla to Ghadhakda		1921
	(ii) Ghadhkda to Rajula Road		1922
	(iii) Rajula Road to Mahuva		1922
g.	Botad to Dhandhuka	29.94 miles	
	(i) Botad to Tagdi		1922
	(ii) Tagdi to Dhandhuka		1922
h.	Dunger to Port Albert Victor	7.66 miles	1928
i.	Rajula Road to Rajula Village & Quarries	5·84 miles	1927
j.	Ningala to Gadhada	9·52 miles	1929
	Total	307.01 miles	

A. TRAMWAYS (Steam)

Bhavnagar-Talaja 33.11 miles

N.B. This tramway is extended from Talaja to Mahuva a piece of about 37 miles and is declared open for traffic in March, 1938.

B. Wadhwan-Sayla

17.11 miles is worked by Bhavnagar State Railway under agreement with Wadhwan and Sayla States.

APPENDIX B.—*(Contd).*

II. JUNAGADH STATE RAILWAYS

MAIN LINES

			Date of opening
a.	Jetalsar to Junagadh	16 miles	1888
b.	Junagadh to Veraval Docks	51.30 miles	1889
c.	Veraval to Talala	14.70 miles	1918
d.	Talala to Jambur	4.86 „	1920
e.	Jambur to Prachi Road	8.00 „	1923

BRANCHES

1.	Shahpur Kutiana Branch (not proceeded beyond Saradiya)		
	Shahpur to Manavadar	15.86 miles	1910
	Manavadar to Bantwa	3.45 „	1910
	Bantwa to Saradiya	7.00 „	1915
2.	Junagadh to Visavadar Branch		
	Junagadh to Bilkha	13.64 miles	1912
	Bilkha to Visavadar	12.92 miles	1913
3.	Visavadar to Dhari	19.49 miles	1932
4.	Prachi Road to Jamwala	7.05 „	1934
5.	Jamwala to Delwada	24.22 „	1935
6.	Veraval to Savni realignment	0.68 „	1936
	Total	199.17 miles	

A. 6 annas' share in Jetalsar-Rajkot Railway.

B. In addition, the section of 18.62 miles from Sasan Gir to Visavadar is still under construction.

III. GONDAL STATE RAILWAYS

a.	Dhasa Dhoraji	76 miles	1881
b.	Dhoraji to Jamjodhpur	32 miles	
	Total	108 miles	

A. Gondal has six annas' share in Jetalsar Rajkot line.

N.B. Sidsar to Patan 7.85 miles sanctioned but not constructed.

APPENDIX B.—(*Contd*).

IV. JAMNAGAR STATE RAILWAYS

a.	Rajkot to Nawanagar	54.22 miles	1897
b.	Jamanagar to Khambhalia	33.56 „	1922
c.	Khambhalia to Kuranga	32.36 „	1922

A. With effect from 4th April 1923 Jamnagar to Kuranga lines and Okhamandal Railways were amalgamated and are at present known as the Jamnagar & Dwarka Railways.

B. N.B. The Railway construction between Khambhalia to Salaya has been recently undertaken by the Nawanagar State with a view to facilitate the development of the Port (*The Times of India* 18th February, 1938).

V. MORVI STATE RAILWAYS

Wadhwan to Morvi	68.5 miles	1887
Wankaner Junction to Rajkot	25¼ miles	1890
Across the Aji River		1894
Total	94.5 miles	

BRANCH

1.	Than to Chotila	12.56 miles	1926

A. TRAMWAYS

94 miles of tramways are constructed by the State within its territories but they are not Railways.

VI. BARODA STATE RAILWAYS

a.	Khijadia Dhari Railway	37.22 miles	
	Khijadia to Gawadka	16.39 miles	1913
	Gawadka to Chalala	9.14 miles	1914
	Chalala to Dhari	11-69 „	1916

At present this line is managed by the Gondal Railway.

b. Kuranga to Adatra 37.03 miles (November, 1922)

On 1st April, 1923 this line was handed over to Jamnagar State Railway for working.

APPENDIX B.—*(Contd).*

VII. JETALSAR RAJKOT RAILWAY

a. Jetalsar-Rajkot 46.21 miles opened in 1893

The shares of Junagadh, Gondal, Rajkot and Jetpur are in the porportion of 6 : 6 : 2 : 2 in a rupee in the working of this line. This railway is at present worked by Gondal State Railway. Jungadh applied but the Railway Board in 1926–27 decided to extend the period of Gondal management for a further period of 10 years.

VIII. PORBANDAR STATE RAILWAYS

(1935–36 Report).

a. Agreement between Gondal and Porbandar in 1887.
Dhoraji-Porbandar line constructed in 1890.

Tribunal awarded to Porbandar from Porbandar to Jamjodhpur-section of 36-04 miles.

Hence since 1924 Porbandar has taken over the management of this line.

b.	Porbandar to Stone Quarries at Ranavav	3.70 miles
c.	Porbandar Docks	1.55 miles
	Total	41.29 miles

IX. DHRANGADHRA STATE RAILWAYS

a.	Wadhwan to Dhrangadhra	21 miles	1898
	Dhrangadhra to Halavad	20 „	1914
	Dhrangadhra Quarry siding	2.56 „	

Till October 1919 this line was worked by the Bhavnagar State Railway but since then it is worked by the B. B. & C. I. Railway.

b. Kuda Extension 10.5 miles

APPENDIX C

Appendix giving the list of Industrial Concerns in the City of Bhavnagar in 1933–34

Name of Industry	Number
Printing Presses	14
Soap Factories	8
Flour Mills	41
Cotton Thread Machines	3
Steel Trunk Preparing Concerns	2
Gold Thread	1
Oil Mills	6
Wood Furniture Shops	10
Iron	1
Khadi making Concerns	5
Ginning Factories	4
Presses	4
Soda Water Concerns	3
Ice Factories	3
Saw Mills	7
Sugar Candy preparing concerns	3
Revadi	9
Carved Wooden Box preparators	—
Iron Scales Preparators...	—
Toys Preparators	—
Brass and Copper utensils preparing concerns ...	1
Mills	2
Chemical Works	1
Tin plate Colouring works	1
Confectionery	1
Match Factory	1
Electric Battery Cell Preparators	1
Cement Tiles Factory	1
Tin Factory	1
Wool Condories	—

CHAPTER VIII

NEED FOR A TRANSPORT CO-ORDINATION

GENERAL

History of human civilization gives us no correct point of time as regards the origin of the transport system. The desire for curiosity in the primitive man might have led him to move to unknown regions and with that movement we identify the origin of the transport system. The desire for curiosity might have been followed by the primitive instinct of acquisitiveness which at a later stage manifested itself in the desire to conquer. In those earlier periods it would have been far more easier to transport the human cargo than to move goods and commodities along a great distance. Every step in the direction of the finding out of better means of transport for men and materials was a step forward in the march of civilization. It is not within the purview of this chapter to go into the question of the origin and growth of the transport system. It is enough for our purpose to note that as a result of the scientific inventions and discoveries revolutionary changes in the modes of transport and communications have taken place and even in a small province like Kathiawar the motor buses and the railways have replaced to a greater extent the primitive carts and the caravans.

The importance and aid of transport to industry and trade though appear to be identical, it is intrinsically different in either case. In the case of industry, the transport facilities help to bring the raw materials or help to find out the markets for finished goods. But for the existence of the modern transport facilities, nobody would have thought of starting Textile Mills in a country where not a pound of cotton was grown. The rail roads, the steamers, and the motor lorries helped these industries and many

others to be established and developed in places some thousands of miles away from the sources of raw materials.

In commerce, on the other hand, its place is of essentially different nature. To the industry transport plays the role of an effective stimulant, while commerce would be impossible without transport facilities. "Transport, in a word, makes commerce. It is the very life-blood of exchange and therefore, of commerce."

DIFFERENT KINDS OF TRANSPORT FACILITIES

In dealing with the different systems of transport facilities available in Kathiawar, we have to remember that, it is predominantly an agricultural province, and that, nearly half of the population resides in villages with population below 1000. The farmer's cart is still an important transport facility for carrying his produce to his village or to the market in the neighbouring town. In considering, therefore, the systems of transport whereby goods are carried from one place to the other within the province we cannot ignore the existence of this old system. Thus, we have got within the province :—

(i) Carts,
(ii) Ferries,
(iii) Railways,
(iv) Motor Buses and Motor Lorries, and
(v) Native Country Crafts,

which help the trade and industry of the province. We shall survey their respective fields of operations in the following pages.

(*i*) *Carts*

Before the advent of the Railways in Kathiawar, the bullock carts formed the main agency for the transport of passengers as well as goods. Horse carriages were also utilised but they were used on urgent occasions. But most of the traffic was carried on by the bullock carts. This may be due to the pre-eminence of agriculture in the province

or may be accounted by the absence of any other transport facility and even to-day in parts of the province not penetrated by the railways, bullock carts still retain their position as the indispensable agents of transport. Though they have lost much of their former eminence in the sphere of passenger traffic, they still hold their own as load carrying agency as will be seen from the following statement :—

Year	State	No. of riding carts	No. of load carrying carts
1934–35	Bhavnagar... ...	614	20,716
1934–35	Junagadh	11,962	15,139
1935-36	Porbandar	14	6,811
1934–35	Wadhwan	32	2,181
1933–34	Gondal	7,774	1,993
1933–34	Morvi	3,350	2,093
1934–35*	Rajkot	311	2,380
	Total ...	24,057	51,313

Thus only within the territories of seven States there are twenty–four thousand riding carts and fifty–one thousand load carrying carts.

What is then the importance of these carts to the trade and commerce of Kathiawar ? We have here to recognise that the carts are playing a subordinate part in the transport system of Kathiawar. They ply principally between the villages and their nearest railway stations or between the villages and the principal nearest markets, where the farmers can profitably dispose of their produce. Between places not directly connected with railways the carts also serve as passenger carrying agencies. The village traders also use the carts as a medium for bringing their merchandise from the towns.

Their sphere of activities is thus limited. In the internal trade of the province they may be serving their part in

* Samvat year 1991.

as much as they help to bring the produce of the villagers to the nearest town or to the railway station, but so far as the transport over a long distance is concerned they have been replaced to a greater extent by the existing railways. The tendency in this direction is marked. This can be easily explained when it is realised that the railways owning States of Kathiawar are mainly interested in the increase of their railway revenues. Hence the cartmen operating in the territories of these States severely complain about the unfair competition of the railways. Complaints similar to those of Dhola Cartmen are heard from different places in Kathiawar. It is reported that, the Bhavnagar State Railway Authorities, to divert cart traffic (especially in cotton) from Dhola to Bhavnagar, often lay down rates cheaper than can be quoted by cartmen during dry season (winter and summer). As soon as the monsoon sets in and these carts cannot operate the railway rates are increased. The same is the case with the working of the railways of other States in Kathiawar. Though charges thus lowered or enhanced remain in confirmity with the minimum and maximum limits prescribed by the Railway Board, they definitely hard hit the cart traffic and narrow down the sphere of their operation to a considerable extent. Under the circumstances it is but natural that carts will play less important role in future in the transport system of Kathiawar. The carts being generally the property of individual owners, a comprehensive system of co-ordination embracing all the owners at once becomes an impossibility and if attempted, is bound to result in the futility. Their slow speed and limited carrying capacity are the two other factors which must go a long way against their inclusion in such a system of co-ordination.

(*ii*) *Ferries*

During the fair season, there are very few streams in Kathiawar which are not fordable between any two points

of ordinary travel; but during the rainy season when the rivers are in flood, the traffic has to wait till the floods fall away. Inspite of the existence of a number of rivers large and small there are no two points between which the ferries ply regularly. Though in monsoon the ferries in the Bhadar ply upto Kutiana from its mouth, in other seasons the ferry traffic becomes limited. Owing to the introduction of the Railways the importance of the ferries has dwindled and only a negligible portion of local trade or traffic is carried on through their medium. We can safely ignore their existence in our scheme of co-ordination of the transport facilities.

Besides the rivers, the ferries also ply in the creeks and small sea-inlets, where the daily ebb and flow makes it impossible to cross even at low water. Thus in the Vartu Creek between Miani and the village of Gandhavi the ferry boats ply regularly throughout the year for carrying the pilgrims to and from the shrine of Shri Harshad Mataji.

(*iii*) *Railways*

The part played by the railways in the industrial development of Kathiawar we had an occasion to note in the previous chapter. Here we shall analyse their working in all the aspects concerning the trade and industry of the province. A detailed survey of the rise and growth of the railways we have already undertaken and we shall confine ourselves in this chapter to their sphere of activities as regards the traffic both in men and materials.

(*a*) *Length*

Though the first railway construction works were started in 1880 it was not until after 1910 that the States indulged in an hectic construction of the railways within their respective territories. Present total length of the railways

in the whole of Kathiawar will be seen from the following statement :—

State	*Total Mileage*
Bhavnagar	307.01
Junagadh	198.49
Gondal	108.00
Jamnagar	120.14
Morvi	107.06
Baroda { Khijadia	37.22
Baroda { Dhari	...
Baroda { Okhamandal	37.03
Jetalsar-Rajkot	46.21
Porbandar	41.29
Dhrangadhra	51.50
Total ...	1,053,95

If we analyse the railways constructed in or after 1910 we realise that out of a total length of 1,053.95 miles, 500.99 miles of Railway lines were constructed during the said period. The statement below gives the figures for individual States :—

State	Total Mileage	Lines constructed in or after 1910
Bhavnagar	307.01	186.57
Junagadh	198.49	131.19
Jamnagar	120.14	65.92
Morvi	107.06	12.56
Baroda	74.25	74.25
Dhrangadhra	51.50	30.50

The above statement brings out one salient feature of

the Railways construction, namely, that after 1910 the railways construction in the maritime States of Kathiawar *i.e.* Bhavnagar, Junagadh, Jamnagar and Baroda, had been more pronounced.

This drives us to the discussion of another question closely related to the construction of the railways, namely what was the motive underlying this sudden undertaking of huge construction programmes? Before we attempt to answer the query it would be advisable to analyse the figures of the new railways constructed in or after the year 1910 a little further. The following table will help us to find out or guess the underlying object.—

State	Mileage constructed in or after 1910	Mileage constructed after 1917
Bhavnagar	186.57	100.38
Junagadh	131.19	78.32
Jamnagar	65.92	65.92
Baroda	74.25	37.03
Total ...	457.93	281.65

Thus in the case of these four maritime States nearly two-thirds of the total mileage constructed in or after 1910 was constructed after 1917, the year in which the Land Customs Cordon along the Viramgam-Dhandhuka line was removed and the Kathiawar maritime States were included into the British India Sea Customs Union. The object underlying was clearly the development of their respective ports. A further discussion of this we shall take up in the following sub-section.

(*b*) *Management*

With a little more than a thousand miles of railways within the province, it is saddening to note that there exist as many as six different managements. This multiplicity of managements has its origin in the individualistic tendencies of the States of Kathiawar. Upto 1910 there was an effective union of the major railways of the province and the combination was styled as the B.G.J.P. Railways Union of the Bhavnagar-Gondal-Junagadh-Porbandar Railways Union. So long as the union was there, it worked for their common interests, with a result that the complaints that are usually received now-a-days as regards the hindrances afforded by the various States were totally absent. But after the disintegration of the B.G.J.P. Railways Union in 1910, each member State turned its sole attention towards the needs of its own territories to the detriment of the interests of the province as a whole. The railways being the private property of the States were considered as a source of revenue and this consideration is the only one to which the States seem to have adhered. Though the maritime States might have been actuated by other considerations of commerce and industry, the return on the total outlay of capital even in their case does not lead one to infer that the revenue considerations have been subjected to the higher interests of trade and commerce. The large earnings of the Kathiawar Railways have been the subject of complaint on various occasions. The Chairman of the Reception Committee of the Second Kathiawar Economic and Commerce Conference, Rao Saheb Chhotalal Morarji Kothari, bitterly complained of the phenomenon and declared that whereas in other parts of the world 2 or 3 percent net return on the railway capital outlay has been considered satisfactory, the Kathiawar Railways earn a comparatively much higher return. He was not

wrong in his latter assertion as will be seen from the following statement :—

Year	State	Net Return
1935–36	Navanagar	7.79
1934–35	Bhavnagar	7.00
1934–35	Junagadh	5.24
1935–36	Porbandar	5.45
1933–34	Gondal	7.34
1933–34	Morvi	7.22

But this is not all if we remember that in 1933–34 the return on the Jetalsar-Rajkot Railway was 14.28 percent, while the same was 17.34 in the year 1934–35.

When the Railways are under the control of the States and the higher revenues from their capital outlay is the only goal towards which their efforts are directed, the higher income from the Railways take the form of an additional taxation. The competent critic has aptly observed that "when revenue considerations influence and determine railroad policy so as to frame charges that could have no possible relation to the service rendered, they must be condemned as bad politics and worse finance". In this connection we can certainly quote Mr. G. D. H. Cole with profit. In his book on "The future of Local Government", Mr. Cole writes, "there has always been, amongst the advocates of the extension of public ownership in the sphere of industries and services, a strong objection to the conduct of such services by public authorities on a revenue producing basis. Industries and services conducted by public authorities it has been urged, ought to serve the public at cost price or less."

(*c*) *Capital Expenditure*

The discussion of the net revenue from railways naturally leads to the discussion of their total capital outlay. Though the figures for all the States are not available, the following will give us some idea. Figures mentioned in the following statement are taken from the latest possible available Administration Reports :—

Year	State	Total Capital outlay on Railways	
			Rs.
1935-36	Nawanagar	Approximate	85,00,000
1935-36	Porbandar	Approximate	28,39,138
1934-35	Bhavnagar	Approximate	2,40,79,424
1934-35	Junagadh	Approximate	1,45,52,820
1933-34	Gondal	Approximate	1,08,16,297
1933-34	Morvi	Approximate	82,85,897
1933-34	Baroda { Khijadia / Dhari	Approximate	20,32,212
1933-34	Baroda-Okhamandal	Approximate	40,76,407
		Total	7,51,82,195

Figures for the Jetalsar-Rajkot and the Dhrangadhra State Railways are not available. We can at least infer those and confidently say that the total capital expenditure on Railways within the province is not less than Rs. 8 Crores. But a pity is that such gigantic capital investment suffers from a lack of organisation and is subjected to an unhealthy rivalry between the various Railways owning States.

(d) Existing conditions

People of Kathiawar still cherish the memories of those days when the greater portion of the Railways management was under a unified control of a single body that catered for the needs of the whole province without in any way weilding its power exclusively for the benefit of a particular territory. The B. G. J. P. Railways Union rendered meritorious services to the people of the province. But with its dissolution in 1910 the petty individualistic tendencies of the States asserted themselves. Each looked to its own revenues and the loss of a co-ordinated management resulted in the increase of working expenses. The existence of different jurisdictions gave rise to petty squabbles, and disorder closely followed the disintegration in its wake.

At present even though there has been an apparent increase in the total strength of mileage within the province, the interests of the whole of the peninsula have never been the primary consideration in the moulding of their railway policy by the various States. Each tries to develop the traffic on its own lines and prides itself on the impediments that it is able to put forth in the paths of the other railways. Even recently the Gondal Railways increased their terminal charges and their passenger fares. Because of this an emergent meeting of the conference of the Kathiawar Railways Traffic and Audit Officers was summoned at Rajkot on 29th May 1937. Strong representations were made to the Railway Board and as a result of the pressure brought upon it, the increased terminal charge was cancelled.

Here is then an instance of the arbitrary manner in which a Railway authority exercises its power. It is really regrettable that such an abominal phase of the Railway working has no immediate or early chance of being removed. The President of the Conference of the Kathiawar Railways Traffic and Audit Officers in his opening address observed: "Rate War is inevitable but if it is possible to find

a common formula that may suit individual Railways for fixation of rating policy, it may help matters considerably and save the revenue from being sacrificed."

The above passage contains a frank confession of the existing state of affairs. Not only does it recognise the inevitability of rate war due mainly because of the petty internal jealousies and unhealthy rivalry among the railways owning States, but it also exhibits a concern to save the revenue from being sacrificed. On these two tendencies we have already harped upon in the foregoing pages and it is gratifying to learn that even shrewed officials like Rai Saheb Girdharlalbhai D. Mehta have to acknowledge their existence. At a later stage Rai Saheb Mehta refers to, the "attacks levelled at the Railways in Kathiawar with regard to inattention to the public, and want of amenities or facilities for the travelling public as compared with the larger Railways in India." And though his position as a responsible officer of a State might have led him to assert that "the criticism of the public generally is not founded on facts," yet he cannot escape recognising the existence of those grievances. He proceeds "I must admit here our weaknesses in several respects and would assure the travelling public that we are trying to improve conditions as much as possible with due regard to the local conditions."

If the criticism by the public is not founded on facts, where was the need of an assurance from the President? Is it not suggested that his zeal to assure the public betrays the weakness of his emphatic denial?

(*e*) *Freight Rates*

The inevitability of the rate war leads us to the discussion of the railway freight rates charged by the different railways in Kathiawar. The rates fixed are in accordance with the Indian Railways Conference Association Goods Tariff and General Rules. There are exceptions to those rates according to the local conditions. All the goods

and commodities are divided into ten main subdivisions and a graded rate is fixed for them. There are also maximum and minimum rates for each class. We shall not enter into a detailed discussion of these freight problems, but, we can note the views of the Acworth Committee in this connection. They state in their report that, "fixing the maximum and minimum rates does nothing to protect the trader from what is known as undue preference i.e. charging in one place or on one class of traffic rates unreasonably disproportionate to those charged elsewhere or to other competing traders." Thus, though a railway administration is not free to transfer a commodity from a higher class to a lower class, they have the option to quote any rate they like within the limits set.

The effect of this option is that under the lure of "undue preference" every State tries to attract the traffic to its own railways and free movement of commodities as between the States themselves is hampered under heavy terminal charges or other restrictions. Various instances lead one to believe that the rate war is continuously carried on by different railways in Kathiawar in order to divert traffic from the normal route to their own lines :

1. It is reported that Palitana merchants at present import sugar *via* Bedi Port, that is from a distance of about 234 miles, and not *via* Bhavnagar Port which is only about 30 miles away from it.

2. Nawagadh is a station on Jetalsar-Rajkot Railway and normal route for its traffic is *via* Wadhwan and Rajkot. But, for Jetpur, a station on Gondal Railway nearer to Nawagadh, the normal route is *via* Wadhwan, Dhola and Dhasa. Yet often goods booked for this station, from the B. B. & C. I. Railway Stations outside Kathiawar, move *via* Wadhwan and Rajkot.

3. For any station from even Dhoraji to Porbandar (both inclusive) the legitimate route for the goods booked from the B. B. and C. I. Railway stations outside Kathiawar is *via* Wadhwan, Dhola and Dhasa, but often the traffic moves *via* Wadhwan and Rajkot. Instances of this type can be multiplied like anything.

In normal course if there had been one management, traffic in and out of Kathiawar would have moved according to the routing arrangement laid down by the Railway Board. After the split of the B. G. J. P. Railways Union in 1910 the Railway Board did intervene in the affairs of the Kathiawar Railways and it stated the normal route through which traffic to and from different places in Kathiawar should move to the B. B. and C. I. Railway Stations outside Kathiawar. Appendix "A" at the end of this chapter, gives the details about this routing arrangement. According to this arrangement traffic to and from Porbandar Dock should move to the stations on the B. B. and C. I. Railways outside Kathiawar, *via* Dhasa, Dhola and Wadhwan. Similarly traffic to and from Verawal Dock should move to the stations on the B. B. and C. I. Railway outside Kathiawar, *via* Rajkot and Wadhwan. It is reported that in the days of the B. G. J. P. Railways Union, traffic was moving to all the stations in and out of Kathiawar at reasonable rates and terminal charges and *via* legitimate route. But with the split of the Union the way in which rate war is carried on is certainly deplorable. Even the Railway Board by prescribing the normal routes for routing of goods traffic has not succeeded in checking this evil.

An early solution of the existing state of affairs of Railways within the province is at once a necessity and that too an indispensable one. A unification of the Railways management and authorities will not only be in the interests of the province as a whole but by giving fillip to the trade and

commerce will tend to be conducive to the best interests of the States concerned.

(*iv*) *Motor Buses and Motor Lorries*

As in the other parts of India, Motor Traffic has also come to stay in Kathiawar. The railways in the province are faced with a similar problem of competition from this kind of traffic and in the absence of a unitary control the solution seems still far off. In the interests of the development of trade and industry in the interior it is absolutely essential that motor buses and motor lorries should have a free access to any part of the province. Though Kathiawar comparatively possesses a higher railway mileage, they have failed to encircle a major portion of the interior. There is enough room for motor traffic which in co-ordination with the railways can best serve the interests of trade and industry.

It is unfortunate that at present due to the existence of tariff barriers the motor traffic undergoes a sort of blocking at every frontier. Above all there is an insinuation against the various railway authorities that in their own selfish interests the States have imposed heavy license fees upon motor buses and lorries. And, even the payment of these fees does not entitle the buses to ply everywhere in the province. Every State refuses to recognise the license granted by other States and this is a handicap under which the motor traffic is suffering, and consequently, the province is left without the adequate services of an additional means of transport which can easily act as an adjunct to the railways.

At present, therefore, the field of operation of these means of transport is limited to local territories. It is hoped that in future under a system of co-ordination a due weightage will be given to them to the greater benefit of the province.

(v) *Country Crafts*

Since the bulk of the ocean traffic is carried on by large ocean going steamers and other small steamships, only a small portion of Kathiawar's trade is carried on by the country crafts. And this is true only in the case of Kathiawar's trade with the places outside the province, but, so far as the volume of trade carried on from one port to the other on the coast of Kathiawar is concerned, we can definitely say that, it is a negligible one, and that any scheme of co-ordination that may be devised in future can easily ignore their existence.

NEED FOR A CO-ORDINATION

Our analysis of the existing means of transport available in the province of Kathiawar leads us to certain definite conclusions which cannot be avoided. It convinces us as to the desirability of a unified control in the case of railways and motor traffic. These two are considered all along the world as the only means of swift land transport, and in their harmonious relations, therefore, lies the welfare of the community.

In Kathiawar, motor traffic has been the innocent victim of the selfishness of the railway authorities, and, different political frontiers. The problem in Kathiawar as regards the motor traffic is, therefore, the problem of allowing them a free hand in their operations. Whatever scheme of co-ordination may be thought of, it must ensure this free movement in the province to the motor traffic. As regards the railways the history of the B. G. J. P. Railways Union is an outstanding example of the successful working of the Railways under a unitary control. The importance of a single control has already been emphasised in the foregoing pages. And without undergoing the trouble of needless repetition we can reiterate our faith in a common railway union, and its benevolent effects on the trade and industry of the province.

Various schemes have been devised by publicists as well as politicians, by economists as well as laymen. The latest one from Mr. Jamnadas Mehta though it may not claim for itself the exclusive infallibility, it is one that should readily commend itself to the authorities concerned.

Mr. Mehta is of opinion that "it would be most advantageous to all of them (Princes) if they set up a single Railway Board for all the systems with a uniform transportation policy which will serve to develop all of them."

As regards the motor traffic he suggests that, "a common authority should also be established so that the main roads in Kathiawar will be constructed and maintained under supervision of that Authority.....The Motor vehicles should be licensed by this common Authority and the licenses should be good for the whole of Kathiawar.....The income derived from the license fees, and tolls if any, should be used, first of all, for the expenses of this Central Authority and the balance should be distributed among the States according to the mileage of roads belonging to each State. Each State should be made responsible either directly or through this Road Board for the maintenance and the up-keep of the roads within its territory". According to Mr. Mehta "whether there is a single Board for Railways, Ports and Roads, or whether there be a separate Authority for each of them, is a matter of secondary importance. What is essential is the uniformity of policy."

CONCLUSION

A survey of the existing systems of transport in Kathiawar attempted in this chapter has brought forth certain salient features which can be summarised as follows, *viz* :—

1. That the carts though they have lost their former premier position as a means of transport, they hold their own and are now used in carrying the farmers' produce

from the village to the neighbouring railway station or to the nearest town.

As between the villages unconnected with railway lines the cart is still an effective means of transport.

2. That over and above the carts there are other systems of transport like ferries, railways, motor buses and lorries and the country crafts.

3. That the country crafts and the ferries generally apportion as among themselves very negligible portion of the total traffic of Kathiawar both in men and materials.

4. That although the motor buses have come to stay as a modern means of transport, they are handicapped in as much as the tariff barriers erected by the States in the interior prevent them from undertaking the province wide operations.

The selfishness of the railway authorities have resulted in the levy of heavy license fees, and the non-recognition of such license by other States has tended to give them a limited field for their operations.

5. That the railways in Kathiawar, though only a little more than 1000 miles, are under as many as six different managements which results in each one pulling in its own direction.

6. That as the result of the individualistic tendencies of the railway owning States the interests of the province as a whole are sacrificed to their selfish considerations of revenues :—

(*a*) That Railways not only compete with their sister railways to draw more traffic in goods on their lines, but, to increase the revenues of the State they serve, they are allowed to compete in an unrestricted manner with the carts and motor buses operating within their State's boundaries.

(*b*) That in their pre-occupation to promote traffic in goods, conveniences of the passenger traffic are generally overlooked.

(*c*) That to the maritime States their Railways appear to be the means of developing their port trade.

(*d*) That in their zeal to develop the volume of port trade neither care is taken to stop export of raw materials that can be utilised for industrial purposes within their own territories, nor attention is paid to discourage the imports of foreign manufactured goods that directly compete with the infant industries of the province.

7. And, lastly, that in the interests of the trade and industry of Kathiawar a uniform policy and co-ordination of the means of transport is the urgent need of the hour.

APPENDIX A*

Appendix giving "Routing of Goods Traffic between stations on the B. B. & C. I. Railway and stations on the Kathiawar Railways" :—

(a) Goods traffic between stations on the B. B. & C. I. Railway and *via* as detailed below and stations on the (1) Bhavnagar State, (2) Morvi, (3) Jamnagar and Dwarka, (4) Gondal, (5) Porbandar State, (6) Junagadh State and (7) G. B. S. (K. D. Ry.) Railways must be booked and routed as follows :—

**Vide* B. B. & C. I. Ry. Goods Tariff Part I. Chapter XV, Articles 17 and 16. Pages 497-98.

Between	And	Must be routed	Alternative Route	Remarks
Stations on the B. B. & C. I. Ry. and *via.*	Stations on the Bhavnagar State Railway.	*Via* Wadhwan or *via* Dhandhuka *whichever is cheaper.*	.....	.....
do.	Stations on the Morvi Railway.	*Via* Wadhwan	.....:	.....
do.	Stations on the Jamnagar and Dwarka Railway.	*Via* Wadhwan and Rajkot.	.....	.....
Stations enumerated in Note A below.	Stations Lathi to Porbandar on Gondal and Porbandar State Railways & Machiala to Jetalvad on the G. B. S. (K. D.) and J. S. Railways.	*Via* Dhandhuka and Dhasa.	1. *Via* Wadhwan & Dhasa. 2. *Via* Wadhwan & Rajkot.	N. B. Traffic must not be booked by the alternative route *unless senders specially select them in writing* in which case full classified rates should be charged over all the Railways concerned and the Invoices & Railway Receipts endorsed "*Dearer route selected by senders.*"
Stations enumerated in Note B below.	do. do.	*Via* Wadhwan and Dhasa or via Dhandhuka and Dhasa *whichever is cheaper.*	*Via* Wadhwan and Rajkot.	
Stations enumerated in Notes A & B below.	Stations on Junagadh State Railway (except Jetalsar, Jetalvad & Bhader) & stations Rajkot Junction to Navagadh on Gondal Railway.	*Via* Wadhwan and Rajkot.	1. *Via* Wadhwan & Dhasa. 2. *Via* Dhandhuka and Dhasa.	

Note A:—Ahmedabad and stations South of Ahmedabad Stations on Anand-Godhra Section. Stations on Baroda-Godhra Section. Stations Godhra to Rawanjna Dungar. Stations on Nagda-Ujjain Section. Stations Hamirgarh to Khandwa on the Meter Gauge. Stations on Ahmedabad Prantij. Piplod

Devgad Baria State, Guzerat, Petlad Cambay, Broach Jambusar, Rajpipla State, Tapti Valley and Gaikwar's Baroda State Railways. *Via* Dadar, *via* Amalner, *via* Khandwa, *via* Ujjain, *via* Kotah and *via* Chitorgarh.

Note B:—Stations on the Meter-gauge above Sabarmati including Branch Lines. Stations on the Meter-gauge above Hamirgarh. Stations on the Broad-gauge above Rawanjna Dungar. Stations Ambli Road to Kharaghoda and those on Wadhwan-Viramgam Mehsana Length. *Via* Agra East Bank, *via* Agra Cantt., *via* Bhatinda, *via* Cawnpore (Anwarganj), *via* Cawnpore Central Goods Shed, *via* Delhi Serai Rohilla, *via* Farukhabad, *via* Fazilka, *via* Hathras Road, *via* Hissar, *via* Idgah (Agra), *via* Kasganj, *via* Kot-Kapura, *via* Kuchaman Road, *via* Marwar Railway Junction and *via* Muttra Jn.

(*b*) Goods traffic to or from stations on the Dhrangadhra Railway from or to stations Vadia Devli to Porbandar Docks on the Gondal and Porbandar State Railways should be booked and forwarded *via* Wadhwan and Rajkot Junction (Morvi Railway Route).

Routing of Traffic between stations on the Dhrangadhra Railway, Wadhwan-Viramgam Section and *via* Wadhwan and Khodiar, Ahmedabad, Asarva, Sabarmati etc. :—Traffic between stations on the Dhrangadhra Ry., Wadhwan-Viramgam Section and *via* Wadhwan and Khodiar, Ahmedabad, Asarva, Sabarmati, stations Sabarmati to Dhandhuka on A.D. Ry. and stations on A. P. Railway should be routed *via* Viramgam (Broad-Gauge) and not *via* Viramgam, Katosan Road and Kalol (G. M. Ry.), by the Meter-gauge route.

CHAPTER IX

REPURCUSSIONS OF POLITICAL CONDITIONS ON THE INDUSTRIAL ADVANCEMENT

RISE AND GROWTH OF LAND CUSTOMS

GENERAL

The World to-day has witnessed a new orientation of State's policy towards industry. States which were hitherto apathetic towards the development of industries within their territories and which staunchly followed the 'laissez faire' policy as enunciated by orthodox economists have begun to exhibit their concern for industries under one pretext or the other. A movement, as it were, is afloat all over the World which is calculated to increase the State's interference in matters of industrial policy. Private enterprise has received a definite check and a movement towards nationalisation is visible both under Democracies and Dictatorships.

But with Kathiawar States the case is quite different. They are mere feudatory States with no sovereign power to pursue their industrial and tariff policies according to their own sweet will and choice. Their existence is largely due to the protection afforded to them by the British Government and in exchange for that their hands have been fettered down with treaties and engagements with the Paramount Power. On a strict observance of these depends their existence and from these they derive their so-called autonomous powers. To understand their correct position and to appreciate the present state of affairs in Kathiawar, it is essential that a political survey of the origin and growth of their rights and privileges should be undertaken. It will help us in estimating the part played by them both in the development as well as in the retardation of industries within the province.

"The Social and Political system of Kathiawar is described as a system of sanguinary boundary disputes, murders, robbery, abduction, arson and self-outlawry. Upwards of two hundred persons are said to have voluntarily made themselves outlaws and to subsist professedly by depredations. Although about eighty of the petty States which existed in 1807 have been absorbed in other States, yet, from the constant sub-divisions of possessions by inheritance the number of jurisdictions have risen to four hundred and eighteen and in the majority of these the jurisdiction claimed is over two villages, one village, and often over a fraction of a village". In these words Mr. (afterwards Sir) C. U. Aitchison described the political conditions of Kathiawar in 1864. This chaotic state of affairs, largely being the result of the evergrowing parcelling of the States' territories in confirmity with the practice and usages of inheritance and succession was instrumental in creating petty States, with independent jurisdictions which never ceased for indulging in unnecessary disputes of boundary lines for asserting the limits of their so called "suzereignty". The consequences of such disputes can only be disastrous both to the States concerned and the population within their territories.

A SHORT SKETCH OF THE POLITICAL HISTORY

The Political history of Kathiawar, after the sixth and seventh centuries of Christ, presents the spectacle of a succession of various races of Rajputs and Kathis invading and settling themselves within the province. The Valas, the Chudasamas of Junagadh, the Jethwas of Porbandar the Jhalas of Dhrangadhra, and Viramgam, the Rathods of Vadhel and Vaja, the Gohils of Bhavnagar, Palitana and Lathi, and finally, the Jadejas of Halar and Machhu-Kantha enter the province one by one, and establish themselves as sovereign lords of some parts of the country, by the might of their swords. Among the Kathis, the Khumans, the Khachars

and the Valas, though pressed on all sides by the expansionist policies of the Rajput chiefs were still able to hold their territories in the central portions of the peninsula. The existence of a number of independent jurisdictions, at a time when the sword was considered as the prime source and fountain head of all rights, led to the maintenance of proportionately large standing armies by the various chiefs. We may not enter into a detailed history of the various political events that led to the establishment of a Mohamedan Suba at Junagadh after its conquest by Muhmed Begda, or, of the internal dissensions and strifes among the local chiefs during the period ending with the Battle of Buchar Mori near Dhrol in 1591 A D. which finally sealed the fate of Kathiawar as an independent political unit. Tribute was exacted from the Jam and all the Zamindars of Sorath, and together with Sorath the entire coast line was annexed to the Imperial domain. From this day Sorath became a Khalsa Sarkar or crown domain under an Imperial Viceroy.

The death of Aurangzeb in 1707 A. D. dealt a severe blow to the central power. The Chiefs of Jamnagar, Chhaya and Sihor regained their lost powers and territories from the weak Foujdars; and the various Mohamedan Thanas assumed independence. Finally in 1748, Sher Khan Babi the deputy Foujdar established an independent rule at Junagadh. The conquest of Ahmedabad by the Marathas in 1753 A. D. severed the peninsula from the connections of Dehli, and made it subject to a regular tribute to the Marathas. In the very last years of the eighteenth century and in the early nineteenth century, the efforts of Shivram Gardi, Babaji Apaji and Vithalrao Devaji revived the Gaikwar power in the peninsula, and in 1807-08 was effected the celebrated permanent settlement of the tribute of the Kathiawar Chieftains by Col. Walker in conjunction with the Gaikwar authorities.

NATURE OF COL. WALKER'S SETTLEMENT.

A short retrospective sketch of the political history as given above is intended to give a clear picture of the conditions prevalent in Kathiawar at the time of Col. Walker's Settlements. The whole peninsula was subject to yearly raids of Mulkgiree armies of Gaikwar and the Paishwa and the country was ravaged, and plundered, and exactions of tributes enforced sometimes with cruelty and barbarity. "The idea of an union among the Chieftains of Kathiawar for the protection of their own rights, against foreign usurpation or invasion," writes Col. Walker in his report of the 15th May 1808, "seems never to have been conceived practicable—they have individually resisted and have been separately reduced and the exactions from a neighbouring principality appear to have been considered by the Bhomias as a fortunate reduction of the power of a formidable rival." (Vide Para 164). And even though the armies of the Marathas were not strong enough to reduce the fortresses of the province, they had this invaluable advantage of internal dissensions and petty rivalry among their opponents.

The nature of the settlements cannot better be summarised than in the words of their author which are reproduced here from his said Report of the 15th May 1808.

"The objects of these engagements are simple. They guarantee to the Gaikwar Government the perpetual payment of the tribute which has been determined under our mediation. The Chieftains of the country are bound to to refrain from depredation, and those mutual aggressions and acts of violence which formerly kept the country in a state of warfare and devastation." (Vide Para 250).

"The petty States on the Sea Coast are also bound to relinquish piracy and have given up the right to wrecks that may happen within their jurisdiction."

"In return for these concessions we have guaranteed their country from oppression and relieved it from the inju-

ries it sustained from the annual circuit of the Mulkgiree Army." (Vide Para 253).

According to Mr. Aitchison, the settlements made in 1807 were based upon the state of things existing at the time, and this is the period to which all enquiries in disputes regarding landed possessions or hereditary rights in Kathiawar, are limited.

ORIGIN OF THE BRITISH SUPREMACY IN KATHIAWAR.

It is somewhat curious that in all these engagements the rights of the Paishwa in Kathiawar were overlooked. Though the Gaikwar was entitled to the Major portion of the Kathiawar revenues not in his own right but in his capacity of farmer for the Paishwa, yet the engagements concluded were drawn up solely in the name of Gaikwar. The Paishwa's consent to the settlement of his revenues in perpetuity was never asked, nor was he ever informed of what had been done till 1814 after the Gaikwar's lease had expired. A dispute arose between the Paishwa and the Gaikwar which resulted in the murder of Gungadhar Shastree. A new Draft Agreement was handed over to the Paishwa by the British Resident at Poona, but the Paishwa did not accept this, and sent his own Draft Agreement. These discussions with the Paishwa were ended with the Treaty of 1817, by the 7th Article of which he ceded to the British all his rights in Kathiawar. And by the Treaty of the 3rd of April 1820 made "in order that the Gaikwar Government shall receive without trouble and with facility the amount of tribute due to it from the provinces of Kathiawar and Maheekanta", His Highness Sayajee Rao Gaikwar Sena Khas Kheyl Shumsher Bahadoor arranged with the British Government that he "shall not send his troops into the districts belonging to zamindars of both the above provinces without the consent of the Company's Government," and that the Company's Government engaged that, "the tribute including Khurajaat, as fixed by the settlements

of Samvat 1814 A. D. 1807 and 1808 and of Samvat 1868, A. D. 1811 and 1812, shall be paid by the Zamindars to the Gaikwar Government free of expense."

Thus the supreme authority in Kathiawar became vested in the Company's Government alone, firstly, in its own share acquired under the Treaty of 1817 and secondly in the Gaikwar's share by virtue of the Treaty of 1820.

CONDITION OF THE KATHIAWAR STATES AFTER 1820.

After 1809, the province was visited by famines many times and they coupled with other causes injured the prosperity of the province to a very great extent. The exactions of tributes though they were permanently settled were beyond the means of the States. The internal strifes and court intrigues had not totally subsided, with the result that, many states were on the verge of bankruptcy. An idea of the state of affairs can be easily had from the following passages taken from *The Princes of India*: *Historical Sketch*, published in 1833 by one Mr. J. Clunes.

"Government were necessitated to place the administration (re. Junagadh State) in the hands of a farmer, Govindji Jhalla in 1823. The land revenue are farmed to this person for ten lakhs and a half of Kories (including his own salary of 75,000) out of which the Nawab receives 2,40,000 Kories for his maintenance, and the remainder is set apart for the payment of his Sebundy and creditors."

"The Navanagar country is at present farmed, on account of the debts of the Jam to the late Soonderjee Sewajee for 17,25,000 Kories annually. Out of which the Jam receives three lakhs for his maintenance, and the rest goes to pay his tribute and creditors. There are upwards of three hundred villages in his Taluka included in Soonderjee's Farm, which is now held by his son Soonderjee Dewjee."

As regards the political state of affairs, Mr. J. Clunes informs us that "Chiefs are free to exercise authority on

their own lands, and are exempted from the British Courts of Law."

POSITION OF THE STATES AFTER 1858

The Government of India Act, 1858, took over the Government from the East India Company, and all territories in possession of, or under the Government of the East India Company, passed to the Crown by virtue of the Act of Parliament.

A controversy was for sometime raised on the pronouncement of Kathiawar as foreign territory by the Secretary of State. Sir Bartle Frere, the then Governor of Bombay, strongly opposed this view of the Secretary of State and in an exceedingly able minute stated that if Kathiawar was not a part of the Bombay Presidency, it was certainly annexed to the Bombay Presidency, and liable to all laws to which the Presidency at large was liable. To put it in his own words "if the British Crown is not soverign and does not claim the allegiance of the inhabitants of Kathiawar as its subjects, who is soverign and to whom is allegiance due? Clearly not the Gaikwar, for he has transferred his rights to us; Clearly not to any one of the Chiefs for as among themselves they admit no superior. The soverign power of making war and peace, and of compelling allegiance under penalty of treason, must reside somewhere: If not in the British Crown, where does it reside?" In his contention he was ably supported by the other members of the Council. The Hon'ble Mr. J. D. Inverarity in his minute dated 19th May 1863 emphatically stated that as Kathiawar was under the general Government of the late East India Company, it was transferred for the Government to the British Crown in 1858. The Government of India forwarded these minutes 'for, the ultimate decision to Her Majesty's Government ..... would perhaps deem a reference to the Law Officers of the Crown

advisable'. The matter however, was not referred to them and the administration was carried on arbitrarily.

Meanwhile Col. Keatinge, the then Political Agent in Kathiawar introduced many far-reaching reforms in 1866. The Chiefs were arranged into seven classes with authority varying from power of life and death and unlimited civil jurisdiction, to fifteen days' imprisonment and Rupees twentyfive fine with no civil powers.

At first altogether 224 States were formed out of which 212 States were newly created. The principle followed, in assigning a particular class to a particular Chief, was the number of villages he possessed, his income, and, his status. There still remained about 206 individuals whose sovereignty extended to a fractional portion of a village, and, to whom it was difficult to assign any class. These were placed under the direct administration of political officers. In the course of time, out of these 212 newly created States, some disappeared due to the disastrous results of the inheritance laws, while some whose rulers were thoroughly incompetent were annexed and incorporated into the Agency Areas.

As for the law and system of Government followed in the territories under the direct administration of the Political Agency, no settled procedure was adopted in the beginning, and in course of time doubts arose as to the power of the Political Agent, the Bombay Government and the Government of India, to make laws and regulations for Kathiawar. Since, however, the issue of the Order-in-Council by Majesty-in-Council in 1902 the Governor General-in-Council is empowered to delegate all powers conferred upon him by this order to any officer of the British Government and practically, all his powers are delegated to the Agent to the Governor General in Kathiawar.

NATURE OF STATES' RIGHTS AND OBLIGATIONS

Lord Lytton in his despatch to the Secretary of State for India prior to the rendition of Mysore in 1882, wrote:—

"The British Government now undertakes the duty of

protecting all native States in India from external enemies and of preserving internal order by measures necessary for securing the people from misgovernment and for supporting the lawful authority of the Ruler. So, also, the powers of the British Government to prescribe the forms of Administration and to insist that its advice be adopted are the necessary correlatives of the admitted responsibilities of the British Government for the internal peace of the whole Empire and general welfare of the people."

Here is then a definite enunciation of a policy which if it recognised the autonomy of the States, was, at the same time, quite assertive of the extent to which it was liable of the interference on the part of the British Government.

Lord Salisbury was rather more emphatic in declaring the obligations of the State when he stated that 'the third cardinal principle of the whole system (Government of India) namely the denial of any right divine to govern wrongly has been established by course taken by the Government on many occasions and notably in the trial and deposition of the Gaikwar of Baroda. Thus if the autonomy of the States is guaranteed, and they are given full fledged liberty to govern within their territories without any restrictions, it has been at the same time enjoined upon them, that they possess no divine right to govern wrongly. They have been definitely saddled with the obligation of maintaining good Government within their territories, and in case of their failure to discharge their obligation, they shall have no protection either from their so called treaty rights, or, from their position as the heads of the States claiming their imaginary prerogatives. In the outspoken words of Lord Curzon "He (Indian Prince) must justify and not abuse the authority committed to him. He must be the servant as well as the master of his people. He must learn that his revenues were not secured to him

for his own selfish gratification, but for the good of his subjects; that his internal administration is only exempt from corruption in proportion as it is honest, and that his gadi is not intended to a divan of indulgence, but the stern seat of duty. His figure should not be merely on the polo ground or on the race course or in the European hotel. His real work, his princely duty, lies among his own people." Here is then a crucial test by which the government of the Princes ought to be judged. We can simply, say at this state, that the behaviour of the Princes with a few honourable exceptions show quite the opposite tendencies which have given rise to a veritable mine of criticism and stormy protests from all the parts of India; from the persons hankering after cheap publicity, to the sober and well balanced thinkers like the Right Hon'ble Shastri.

NATURE OF THE GOVERNMENT CARRIED ON BY THE STATES IN KATHIAWAR

At the time of the taking over the charge of the Government, from the East India Company's management, the autonomy of the States was guaranteed and they were left free to administer their territories free from any outside interference. Their rights and treaties were to be respected and they were acknowledged to be the masters of their own territories, subject only to the supremacy of the Paramount Power and its inherent right to interfere in cases of utter mismanagement and untenable irresponsibility. In the course of time, there arose many occasions which necessitated the active interference of the Paramount Power, into the day to day administration of some of the States. The steps taken at the time of those contingencies by the Paramount Power were later on respected as the sanctified usages which developed into a "Case-Law" on the subject of the relations of the States with the Paramount Power. We shall not enter into detailed discussion of this topic at this stage,

but, only note, that subject to the Sovereignty and supremacy of the Paramount Power, the States were allowed to govern their territories in a manner best suited to themselves. This granting of autonomous power was definitely accompanied by the cardinal principle, always upheld by the Paramount Power, which denied to the Princes, 'any right divine to govern wrongly'. We shall presently see how far this obligation is discharged by the States of Kathiawar.

The result of the autonomous powers granted to them, and clearly expressed 'in the proceedings which followed the Mutiny during the Viceroyalty of Lord Canning and emphatically affirmed by Acts and Proclamations of the Government' was that, the Governments of the States developed a sort of irresponsible autocracy, in which the powers and privileges rested in the whims and caprices of a single individual, who by the way was fortunate enough to be accepted as the ruler by the Paramount Power, and, who was neither responsible nor amenable to the wishes of the people whom he happened to govern. This resulted in unbounded and abnormal extravagance on the part of the princes with a consequence that the poor subjects had to bear an increasing burden of the administrative expenditure, the details of which they could neither ask, nor discuss. With a view to cloak their despotic governments with vestiges of responsible administration some of the States like Rajkot, Palitana and Bhavnagar have instituted 'Praja Pratinidhi Sabhas' or Legislative Assemblies. But these assemblies are nothing but a sham mockery of the so-called process of democratising the Administrative machinery. The executive is as irresponsible as it was before with a saving grace of being the Executive of an outwardly responsible government.

An analysis of the particulars of expenditure incurred by the various States of Kathiawar, will reveal to us, in true perspective, the salient features thereof, which will enable us to judge for ourselves the extent to which nation

building activities have been neglected. It is proposed here to discuss only a single item namely Education and to compare the amount spent after it by the various States, with those expended for their own and their family maintenance. The following statement will give us some information on the point :—

Year	State	Education	Rajkutumb, Darbar or palace
1934–35	Bhavnagar	5,68,292	4,56,824
1934–35*	Rajkot	1,19,657	2,60,575
1933–34	Gondal	1,47,472	2,73,132
1934–35	Wadhwan	36,999	1,20,344
1935–36	Porbandar	1,37,088	4,91,437
1934–35	Junagadh	3,42,896	8,16,608
1935–36	Muli	12,030	21,600

*Samvat year 1991.

A perusal of the above statement convinces us of the extent to which the comforts of a single individual and his family are looked after, to the general detriment of the subjects of the State. This rotten state of affairs does not stop here. Under the head of Miscellaneous expenditures are included large sums of money the details of which never see the light of the day. It is absolutely an annoying state of affairs which calls for an immediate overhauling of the whole system of accounts. The statement below will give us an idea of the huge expenditure which is shrouded under the mystery of being Miscellaneous :—

Year	State	Miscellaneous Expenditure	Total Revenue
1935–36	Porbandar	26,45,684	57,29,671
1934–35	Junagadh	10,35,049	83,13,795

If the miscellaneous expenditure of the Porbandar State amounted to nearly fifty per cent of the total revenues of the State, that of Junagadh had shown an increase of eight lacs over the previous year. This tendency of guarding the details of expenditure in utmost secrecy, is liable to arouse in the minds of the subjects a feeling of grave suspicion and discontent, and hence, it is in the interest of both the Princes and the subjects to give up this invidious practice of mysterious expenditures.

As a result of the wide autocratic powers and the growing extravagance of the Princes some new sources of revenues had to be discovered to meet the growing demands on the State's treasuries. Old taxes were increased and new ones were levied. We shall not enter into a discussion of all of them, but we shall certainly analyse the evil effects of the pernicious system of inter-state tariffs which has become of late the target of severe criticism from the press as well as the public platform, and which is absolutely disastrous in its consequences of hampering the free movements of commodities from one part of the province to the other.

ORIGIN AND NATURE OF INTER-STATE TARIFFS

The right to levy taxes on the people within the territory was a natural corollary of the grant and confirmation of the autonomous power on the States by the Paramount Power. From times immemorial the right to levy duties on goods passing through and from the territories was considered as a privilege and a semblance of authority by the States. This right of the Kathiawar Princes was not interfered by the Imperial Viceroys of Delhi during the period of Mohamedan Supremacy over the province, or by the Marathas, as they were mainly interested in the exactions of the monetary tributes from the Native Chiefs. The regular payment of the tributes and the abstention from depredations and ravages into the adjoining territories secured to the Kathiawar Chiefs a free and internal

management of their territories. The British Government also refrained from depriving the Princes and the States of this right.

Of late the exercise of this right by the States of Kathiawar has led to the growth of a very regrettable feature of Kathiawar's economic life, namely, the erection of higher and higher tariff walls within the province, which effectively prevent the free flow and interchange of the goods and commodities within the interiors of the province. A closer scrutiny of the rates charged by the various States reveals two distinct characteristics by which the States can be safely grouped into the maritime States, and the States of the interior. There is a large gulf of difference among the rates charged by them, and there is also a difference in the view point on which those rates are based. The States in the interior which have no outlets except through the territories of the adjoining States, are very careful in framing the schedule of the customs rates. Their only consideration is centred round revenue purposes, and, no prohibitive rates can they charge without undergoing the risk of severe retaliation. The rates they charge are only nominal and if in some cases they charge a slightly higher rate, it is with a view either to protect the industries within their territories, or, with a view to collect revenues by means of indirect taxation. In no case do they enter upon a policy of imposing prohibitive rates on the imports or exports of commodities, in and from, within their territories. A perusal of the schedules of the Local Customs duties in operation in the States of Lathi, Jasdan, Palitana, etc., clearly demonstrates the character of the duties levied by them. While these and other smaller States levy nominal customs duties, some States like Gondal and Patdi do not charge anything at all. Other States like Vankaner and Malia, charge nominal and *ad valorem* duties varying from 4 to $7\frac{1}{2}$ pies per Rupee. If certain items like cows, oxen and buffaloes are subject to prohibitive export duties, it is because they are invaluable to the States

in as much as they form the assets of the farmers within their territories.

In the case of the maritime States, the consideration that has primarily prevailed, or the principle on which the local customs duties on both the imports and exports are calculated, is the attraction of the trade of the interior towards their own respective ports. All the maritime States have expended large sums of money in developing their ports and it is but natural that they should be keen in seeing that their efforts are not wasted. But the unfortunate result of the individualistic policies adopted by the States, is that, each State stands for itself, and tries to pull in opposite direction : Each wants to profit at the expense of the rest with the result that total stoppage or prohibition duties of the goods from the other States have become the order of the day. This cannot be calculated to create a feeling of responsive co-operation, among the States of Kathiawar, which is so essential at the present juncture of its political evolution. On the other hand, the ill wind that blows does good to nobody, and a spectacle of the States indulging in economic warfares with each other, becomes a matter of natural consequence. This is visible in the over anxiety and enthusiasm displayed by the States towards the speedy development of their ports. A somewhat detailed analysis of the local Customs Duty Schedules of Jamnagar and Junagadh States will reveal the various steps taken by them towards maintaining and increasing the trade of their ports.

LOCAL CUSTOMS TARIFF

(*i*) *Nawanagar State*

The Local Customs Tariff is applied to all goods imported into the territories of the Nawanagar State from British India and Indian States, and to the exports therefrom, to these territories either by land or sea. It is also made applicable to all the imports and exports of the States,

effected by the system of through booking of the B. S. N. Co., and the Jamnagar & Dwarka Railways. On the imports of the foreign goods and commodities direct, as well as, by way of transhipment, exbond and drawback claim, from the Indian ports, the Imperial Tariff rates are charged. On the exports to the foreign countries also the British Export Tariff rates are charged.

A glance at the Schedule makes it quite clear that in the case of the imports within the Nawanagar State *via* land, the rates are comparatively higher than those levied on the imports *via* Sea. In effect it comes to the diversion and concentration of the import trade at the ports only. In some cases abnormally high rates are charged as in the case of peppermint where 50 per cent import duty is charged with a view to afford protection to the industry within the State's territories. (Vide item 39A Local Customs Tariff—Nawanagar State.)

As regards the exports every care is taken to see that exports to the foreign countries *via* the ports of the States are encouraged. In some cases like the groundnuts and Ghee, exports *via* land are subject to the previous sanction of the Maharaja Saheb or the Chief Customs Officer. While the exports of groundnuts to the British Indian as well as the Cutch Ports are subject to an export duty of Rs. 3-2-0 per 100 rupees of the value, their exports to foreign countries are exempted from any such duty. (Vide items 3. C and 3 e. of Export Tariff). This is taken as an instance of the inner working of the Local Customs Duties.

But while these steps are expected to divert the import and export trade of the State towards the ports within its own territories, enough care and anxiety is displayed by the authorities to attract the import and export trade of the adjoining States. Every facility is afforded for the said purpose, and encouragement of every sort is given. Thus we find that, no export duties are levied on goods and

commodities from Rajkot State or other territories beyond Rajkot, if they are exported from Port Bedi to British India (except Cutch), or foreign ports. (Vide Rule 2 on page 19 of the Local Customs Tariff—Nawanagar State).

(*ii*) *Junagadh State*

Imports of Sugar Candy, Matches and Foreign Cigarettes into the territories *via* land or sea are totally prohibited, except in the case of direct imports from the foreign countries; or imports from the British Indian Ports, and ports with treaty rights, by transhipment or exbond. Over and above these imports from the above noted territories, some other articles on which the British Indian Tariff or Excise Duties have already been paid and also the articles manufactured from the foreign raw materials on which such duties have been paid, that is, items like Deshi Sugar, Indian Cigarettes etc. are allowed to be imported from British India both by land and sea. However, their imports from non-Junagadh territories are totally prohibited. Other commodities whether foreign or Indian if imported from British Indian Ports or British territories are subjected to nominal duties, while the same are penalised under heavy duties if imported from the non-Junagadh ports or non-Junagadh territories.

EFFECT OF THESE LOCAL CUSTOMS TARIFFS

These Local Customs Duties imposed by the maritime States as we have already noted, are based upon the only consideration of the development of their respective ports. Apart from bad feelings and strained relations that this policy engenders among the various States, these duties have led to quite a unique state of affairs which might not have perhaps been visualised by their authors.

As a result of the existence of these duties not only the industrial development within the province in non-maritime States is put a great handicap, but also, these duties tend to

encourage the imports of those commodities into large quantities from foreign countries which otherwise can be easily procured from the other parts of India, and which are specially protected by the Government of India. One illustration of each of these two tendencies will suffice to illucidate the point.

There is a Tin Factory at Jamnagar which has a productive capacity of turning out 3200 tins per day. But as the tins manufactured there are subject to a heavy duty of 30 per cent by other States like Junagadh etc., the production is at present limited to three to four hundred tins per day. Had this factory been situated at Viramgam the States could not have charged such prohibitive rates against its products.

This is a living example of the disastrous effect which these Inter-State Tariffs have in choking the rising industrial activities within the province. Because the Tin Factory happens to be situated within the territories of a brother Prince, its products are prohibited under the weight of unduly heavy import duties. These petty jealousies deserve to be immediately removed if a closer co-operation between the maritime States for their mutual benefit is deemed by them to be peremptory.

As an instance of the other tendency we may note the encouragement given to the increasing imports of foreign sugar by the maritime States. Imports of Indian sugar within the Junagadh State from non-Junagadh ports and territories are totally prohibited. Only the imports from British Indian Ports and British Territories are allowed. In 1935 these imports were subject to a 30 per cent duty, which was subsequently raised to 50 per cent in May 1937. This tendency is noticed with grave concern by Mr. Jamnadas Mehta, the President of the Second Kathiawar Economic and Commerce Conference where he states in his Presidential Address :

"I hear that in some States the prices of Swadeshi Sugar are higher than those foreign imported sugar, in spite of the heavy protective tariff to which the imports of foreign sugar are subjected to since 1932. This can only be the result of the Indian Sugar being the subject of a higher tariff than the imported sugar. It would be a pity if the Indian Princes attached more importance to revenue than to the promotion of Swadeshi Industry and I would earnestly appeal to the Princes to abandon this unpatriotic attitude towards Swadeshi Sugar".

We wish Mr. Mehta's appeal may not fall on deaf ears.

NEED FOR A CUSTOMS UNION

An organisation or an institution deserves to be respected and obeyed so long as it remains capable of granting beneficial results to the society as a whole, or to a greater portion thereof. Its whole existence is based on the continuation of these benevolent activities, and this is generally taken as a criterion in the case of all the public institutions and organisations whether they be social, political or economic. In the discussion of the practical limits to this theoretical assertion of a general principle we shall not enter, but under no circumstances will it be possible for us to justify the existence of this most pervert of economic institutions which effectively strangles the industrial development of Kathiawar. This selfish mode of increasing the revenues of the State, without in any way caring for its disastrous consequences, is displayed in its utter nakedness in the Local Customs Tariffs of the maritime States. The framers of these tariffs exhibit little concern for the province as a whole; their avowed aim being the increase in the revenues of their masters under the cloak of protecting their ports. Time and again this system of Inter-State Tariffs has been condemned by the public men of all shades of opinion and often it has been made a living topic of press agitation. But like God's the

ways of the Advisers of the various States, are inscrutable and they seem to be very little disturbed about their policy. Their position and the keen sense of their duties and responsibilities entitle them, as if a right to turn a deaf ear to these protests and condemnations. Their only concern is the increasing income of the Princes to whom they happen to serve.

These economic barriers, in the way of the industrial development and free movements of goods and commodities within the province, should be immediately removed or restricted in their operations. Like problems under similar conditions, have been faced elsewhere in the world, and successful emergence out of the chaotic conditions has been duly achieved. The German Customs Union or, the 'Zollverein' is an outstanding example of the successful attempts that were made by the various German States for arriving at a definite solution of the entangled state of tariff affairs. If these States accomplished a common object for their mutual benefit, it can as well be achieved by the States of Kathiawar. What is needed is 'a little surrender by each State of its *"amore propre"* 'and it 'is not too heavy a price to pay for the immense economic possibilities that lie through united endeavour.'*

In order to guage the feeling of the general public as well as the responsible officers of the various States, a query as to the possibility of a Customs Union of all the States of Kathiawar, was specially inserted in the general questionnaire that was issued for gathering the firsthand information; but it is really regrettable to note that nearly all the replies hitherto received are unanimous in answering this query in a definite "no". Even the Dewans and the Acting Dewans of some of the prominent States also have answered the query in the same negative vein. Under these circumstances the only solution lies in hoping for the

* Vide Mr. Jamnadas Mehta's speech at the Second Kathiawar Economic and Commerce Conference. P. 7.

better relationship to prevail among the various States in the near future. This is a heritage of the existing political conditions of Kathiawar and tends to be ruinous in its repurcussions on the Industrial development of the peninsula.

CONCLUSION

In the everchanging world of ours the sanctity that was attached to the institution of Kingship has come to be discarded by the present generation with all the impudence at its command. As a result of the existence of various conflicting ideologies, we find the world to-day divided into two main camps of Dictators and Democrats. The world to-day has learnt to respect the old institutions with only the requisite respect that they command under the present circumstances of the world conditions. It is not at all suggested that the authorities of the Kathiawar States should be treated with manifest disrespect and contemptuous behaviour. But it is certainly intended to convey that it is in their sole interests to move with the time and take their subjects into confidence in matters of administration. It was never proposed in the foregoing discussions to impeach the States for their extravagance, or their lack of responsibility. Only the salient features of the existing political conditions have been noted. A historical survey and the analysis of the governments of the States reveal:—

(i) that the autonomous powers of the States are granted and confirmed by the Paramount Power subject to its inherent right of supervision and interference;

(ii) that the autonomy was limited in as much as 'the right divine to govern wrongly' was denied to the States;

(iii) that larger sums of money were spent after the Palace or Darbar expenditures, than was the case with such important nation building activities like Education;

(iv) that as a result of the autonomous powers conferred upon them, the Princes had developed extravagant habits and irresponsible attitude;

(v) that with their growing extravagance, new sources of taxes had got to be invented;

(vi) that this fact coupled with the desire of the maritime States to develop their ports led to a widespread system of Inter-State Tariffs;

(vii) that these Inter-State Tariffs were a great handicap in the way of the industrial development of the province;

(viii) and that in the larger interests of the province as a whole, their early removal or replacement, by a Customs Union of all the Kathiawar States, is an urgent necessity.

These are the conclusions which have been forced upon us by the discussion of the existing political conditions in Kathiawar. The problem of a Customs Union, though acknowledged to be a tough one, has got to be tackled, in a spirit of mutual give and take, and hearty co-operation, if industrial development of Kathiawar is to be a matter of practical achievement.

CHAPTER X

REPURCUSSIONS OF POLITICAL CONDITIONS ON THE INDUSTIRAL ADVANCEMENT

(Continued)

RISE AND GROWTH OF SEA CUSTOMS

GENERAL

The growing importance of the tariffs as a protective measure capable of affording sufficient shelter to the industrial development has been recognised all over the world. The free trade principles of Adam Smith were formulated under the peculiar conditions of England in his days, and, universal application irrespective of other considerations were never conceded to them. Even their recognition in the country of their origin became feasible only after the industries had been established pretty long and not before. The character of the trade England had utterly changed under the beneficial effects of the Navigations Laws and British Protectionist Tariffs. By 1846 England was exporting industrial manufactures and importing raw materials from abroad. There was no other country sufficiently industrialised at that time that could compete with her. It was, therefore, in her sole interests to be zealous in the advocacy of the free exchange of commodities and goods.

We shall not enter into a chronological history of the fiscal policy adopted by the British Government in its application to India from time to time, neither do we intend to analyse the circumstances that led to a gradual change in their tariff policy. We shall confine ourselves to the pointing out of the main characteristics of their fiscal policy and their repurcussions on the industries of Kathiawar. In doing this we shall have the occasion to note the various steps taken and measures adopted by the British Government both in England and in India which were calculated

to reduce India to the position of a colony for the supply of raw materials and absorption of the manufactured goods. We shall presently see, how this was accomplished.

On the other hand, a discussion of the Viramgam Cordon will require a historical retrospect of the relations of the Kathiawar's States with the Paramount Power, and their treaty or other rights analysed in the light of the interpretation usually put on them by the Political Department of the Government of India. It will also include the Cordon's practical effects on the trade and industry of Kathiawar.

TARIFF POLICY OF THE BRITISH GOVERNMENT

As a result of the Industrial Revolution, and the use of the steam as a source of motive power, England was producing manufactured goods in large quantities. The immediate problem that faced the industry in England was that of finding out the suitable markets for their manufactures. America had become independent and the European markets were closed to them by the Berlin Decrees of Napoleon. India was the only country that was left to them to be utilised as dumping ground for their manufactures. But India itself exported finished goods in large quantities to England and other European Countries. Indian manufactures competed with enormous success with the machine made goods of England and, in spite of the advantage of the new and cheap methods of production English manufactures were not in a position to hold their own against the Indian products. A great hue and cry was raised and, behind the higher walls of heavy and prohibitive import duties, Indian manufactures were denied the right of free entry into England. Had these prohibitive duties were not imposed as Mr. Wilson observed, "the Mills of Paisley and Manchester would have been stopped in their outset and could scarcely have been again set in motion, even by the power of steam. They were created by the sacrifice of the Indian Manufacture." "Had India been independent,"

observes Mr. Wilson, "she would have retaliated, would have imposed prohibitive duties upon British goods, and would thus have preserved her own productive industry from annihilation".

But this right of self defence was denied to her. Thus while the English market was closed to the Indian manufacturers, the English merchants were allowed a free play in the Indian Market. The result was that India was reduced from a state of manufacturing to that of an agricultural country. Under the garb of improving the Indian civilization by the freedom of trade, British manufactures were pushed into the country with greater and greater zeal which brought about a speedy decay of the Indian industries. The ruin of Indian trade and industry at the hands of the British is one of the saddest episodes of the human history which depicts the wrongs meted out to the Indian merchant and industrialist in their true colour. India, which was reduced to a dependency of England by the beginning of the nineteenth century, was ruthlessly exploited for commercial purposes. By 1846 free trade became the avowed policy of England, but as a critic observes, "the free trade leanings.....asserted themselves when English industry had already become too strong to be hurt by a 5 p. c. or 10 p. c. difference ; and when they were too late to do any good to the decaying industry of India."

DECAY OF KATHIAWAR'S INDUSTRIES

The province of Kathiawar was not left alone by the unchecked and unhampered flow of the imported goods. By 1808 Col. Walker was able to effect his celebrated settlements with the then ruling Princes of Kathiawar and the British penetration of the province was an accomplished fact. The Treaty of Bassein transferred the rights of the Paishwa to the Hon'ble East India Company, and by a Treaty in 1820 with the Gaikwar by which he bound himself "not to send his troops without the consent of the Company's

Government and not to prefer any claims against the Zamindars except through the arbitration of the Company's Government," supremacy of the British within Kathiawar came to be established. The industries and handicrafts of the province shared the same fate as was the case with the Industries in other parts of India. The imports of the cheap machine made goods from the foreign countries particularly England ousted from the markets the indigenous local products with a result that the Indian manufacturers had to close their establishments. We have sufficient evidence of the extent to which the havoc was wrought upon the local industries. Even the Official Historians (Government Gazetters) have to record this process of industrial decline. Thus we are told that in 1838 six iron foundries were in regular work, and two or three more were occasionally used. We are also informed that "iron ore abounds throughout the northern portion of the peninsula as ferric oxide and in other forms, but owing to the absence of coal, the scarcity of wood, and the *cheapness of European iron*, the ore does not pay the cost of working". Inspite of the abundance of the ore, the foundries had to close down. We can understand the mentality of the Officers who are prone to find out a veritable complexity of causes, and would not admit the direct cause in a simple and straight-forward manner.

However, in connection with another industry, they candidly admit that the Nawanagar manufacture of Bandhani Cloth was at once extinguished, and supplanted by the article of European manufacture.

We also get some glimpses, of the disastrous effects that this unfair inflow of foreign manufactures had on the ancient art of handweaving within Kathiawar, in the statement contained in Official Reports that 'the competition of European and Bombay machine made cloth has destroyed the old handloom weaving at Veraval.'

This then was the benefit that the province reaped from the connection of the British Government. Products of

large scale concerns employing machine power, were recklessly thrown in the market, without any hindrance or restriction, to crush the small industries and village handicrafts of Kathiawar. The political state of affairs, (the internal jealousies and petty feuds), called upon for the intervention of a third power, which resulted in the absolute weakening of some of the Paramount Powers of these States. Hence, no State was powerful enough to raise even a sort of mild protest against the indiscriminate fiscal policy pursued by the Government of the East India Company. The natural consequences of this state of affairs we have noted above.

FREE TRADE

Nobody can deny the immense advantages that the freedom of trade is likely to bring to the various nations of the world. But before they embark upon the policy of free movements of goods and commodities, it is absolutely essential that they should have reached the same stage of economic development. Otherwise in the words of Friedrich List.

"Under a system of perfectly free competition with more advanced manufacturing nations, a nation which is less advanced than those, although well fitted for manufacture, can never attain to a perfectly developed manufacturing power of its own, nor to perfect national independence, without protective duties".

Free Trade Policy may work well with equally developed peoples, but, as between two unequally developed nations, it would mean a dissipation of resources and exploitation of the less developed by the more developed, especially so, if the latter controls the fiscal policies of the former. Free Trade Policy was thrust upon India by England solely in her own interests. Even some of the English writers like Rev. Holland say "England's prosperity, and India's as a means to that, has in practice been the ruling consideration." India could

not expect better treatment than this at the hands of the people, who had come to regard India as a sacred 'trust' in their hands, but who were never accountable to the *cestuique trust*, for their deeds of commissions and ommissions. It was aptly remarked by Mr. Yule, in connection with the lack of concern exhibited by the British Government for India's welfare that "the 650 odd members had thrown the trust back upon the hands of the Providence, to be looked after as Providence itself thinks best."

ORIGIN AND GROWTH OF INDIAN CUSTOMS REVENUE

Once a blind allegiance to the principles of Free Trade Policy was given by the Government of India, their next concern was to see that the principles they preached were effectively put into practice. They needed a prophet to pronounce the beneficial effects of free trade to the whole of the Indian Empire and they just happened to possess such a man in Mr. Samule Laing, their Finance Member. In his Budget Statement for the year 1861 he openly stated: " and lastly, I confess that in the present state of things in Lancashire (trade depression owing to the Civil War) I should be very unwilling to postpone for a single day any benefit that they may get from the reduction (import duties on cotton goods and other manufactures)." This gentleman's concern for Indian Industries was so great that he wanted to absolve them "from the fatal boon of a temporary and precarious protection". From this date begins the identification of the interests of the Government of India with those of Lancashire. It is not proposed to enter into the discussion of the subsequent stages of tariff changes, but, it must be borne in mind, that customs were looked upon by the Government of India as a flexible source of revenue to the State for a pretty long period. They had assiduously abstained from using them as effective measures for protecting the Indian industries. Appendix "A" to this chapter shows the stationary character of the income from this source, from 1861 to 1874.

The succession of Deficit Budgets and the strains to which the finances of the State were put by the Great War, compelled the Government of India to turn to customs for meeting the increasing expenditures. The special War Contribution of £100 millions necessitated further taxation and in view of this contribution His Majesty's Government gave consent to the raising of Import Duty on Cotton Goods to 7½%. The grant of the Fiscal Autonomy, the appointment of the Indian Fiscal Commission, its recommendation of the principle of Discriminating Protection with Imperial Preference, the Ottawa Agreement and the appointment of a permanent Tariff Board—these are too many to merit a detailed discussion in this place. We can only note this much, that to-day India's right, to protect her nascent industries, has been tacitly recognised, and that Customs Revenues occupy a position as important as that of Land Revenue.

INDIAN STATES AND CUSTOMS REVENUES

Of late there had appeared among the Indian States a tendency to clamour for a share in the Indian Customs Revenues. They had submitted even a Memorandum to the Indian Fiscal Commission, wherein they demanded a share from the Indian Customs Revenues. But their case was left in abeyance both by the Indian Government and the Fiscal Commission. Their claim was based mainly on the grounds that when the agreements for abolition of transit duties were made, Indian Government had pleaded specially for a free intercourse of goods and commodities within the interior. They were led to believe that the abolition would bring greater movement of inter-provincial trade and a consequent prosperity to the States. It was also given to understand that free trade both within the interior and with other nations was an object to which all efforts of Government of India were directed. All States have had to abolish transit duties in their dominions to the clear

benefit of British Indian Trade, and to a demonstrable and progressive prejudice to their own revenues. Nevertheless at present the Government of India have taken to a protectionist policy which make them charge customs duties. According to some economists in so far as these duties fall on the goods destined for or consumed in the Indian States, they amount virtually to transit duties.

Here is then a case wherein the Indian States have claimed some sort of compensation for themselves. We may not discuss this at length at this place, as it has not direct bearing on the discussion of our theme. But this question of customs duties is not only a matter of discussions and deliberations between the Indian States in the other parts of India and the Government of India, but it also occupies a prominent place, and is a subject of very lengthy correspondence between the States of Kathiawar and the Government of India. The topic is centred round the re-imposition of the customs cordon across the Viramgam-Dhandhuka Land Customs Line, and the absolute right of the maritime States to the customs duties collected at their respective ports.

VIRAMGAM CORDON AND ITS NATURE

The Customs Cordon along the Viramgam-Dhandhuka Line is reimposed in order to protect the Trade of Ports in British India from being diverted to other centres along the coast of Kathiawar by dubious means adopted by the various maritime States of Kathiawar. It is primarily intended to check the ever-increasing inflow of merchandise to the British India from the subsidised ports of Kathiawar. It was in existence before, but in 1917 A. D. it was removed on the condition that the maritime States of Kathiawar were to charge the foreign imports through their ports at the British Indian Rates of Tariffs. This naturally led to the growth of trade of the Kathiawar ports, and sagacious Princes like the late

Jam Saheb Maharaja Shree Ranjit Singhji, turned their attention towards the modernisation and the development of the ports within their territories.

During the course of time, the Kathiawar ports were able to divert a substantial portion of the trade of British Indian ports like Bombay and Karachi, with a consequent result that the Government of India were faced with a heavy fall in customs receipts. It is needless to analyse the various accusations that are levelled against the maritime States in connection with the steps taken by them for the attraction of trade to their ports. Under one plea or the other the Cordon was reimposed in 1927 A.D. The Disadvantages and the hardships caused by it to the passenger traffic are too many to be enumerated here. Even Lord Irwin, the then Viceroy of India, in a speech at a State banquet held at Rajkot on 22nd November 1927 declared:

"I, of course, share the regret felt by all of you that it has recently been found necessary to reimpose a custom line at Viramgam. Such a line must, I recognise in some ways be an inconvenience.....the circumstances which have led to the measure have been involved and difficult, and, I and my Government have to guard the interests of British India, while doing justice to the best of our judgment, to the legitimate claims of the maritime States".

This then is the position and even the Viceroy has to recognise its existence as an inconvenience. The principles involved in the reimposition have been stated by Lord Irwin as, firstly, "to guard the interests of British India", and secondly, "to do justice to the legitimate claims of the maritime States". Before we proceed to weigh the various contentions of the Indian Government as well as the maritime States, it is absolutely essential that a thorough analysis of the political relations subsisting between the parties should be undertaken. This will include a short sketch of the origin of the rise and growth of British power

within the Kathiawar territories, relations of the States with the British Government after 1858 A. D., and, a discussion of the rights of the Paramount Power and its relations with the States.

ORIGIN OF THE RISE AND GROWTH OF THE BRITISH POWER IN KATHIAWAR

The effective penetration of the province began in 1807–08, when the celebrated Walker Settlement was arrived at by Colonel Walker and arrangements were made with the Ruling Chiefs of Kathiawar for settling in perpetuity the annual amount of the Mulkgiree tributes payable by them to the Gaikwar authorities. Though the Gaikwar was a mere farmer of the Kathiawar tributes for a period of ten years, and was entitled to levy the amounts only on behalf of the Paishwa, settlements were effected in perpetuity by Colonel Walker in conjunction with the Gaikwar authorities. Subsequent events need not be gone into details as the same have already been covered in the previous pages. We only note that by the Treaty of Bassein in 1817 A. D. the Paishwa transferred all his rights in Kathiawar Territories to the Government of the Hon'ble East India Company. As regards the Gaikwar's rights within the Province, the same were transferred to the Hon'ble Company in 1820 A. D. Thus by the end of 1820 A. D. the power of the Hon'ble East India Company was supreme in the province of Kathiawar. It possessed the right of interference in the day to-day administration of the various States belonging to the Kathiawar Chiefs. Many occasions had arisen when that right was effectively exercised.

Let us pause here for a moment in order to determine the tariff relations of the Hon'ble East India Company with the Kathiawar States. We have sufficient material both in the Treaties and Sanads to show that the right over the customs revenues was never asked for, neither was it ascertained nor exercised. States were left free to exercise this right and no

encroachment was ever thought of by the Hon'ble East India Company except in extraordinary cases for satisfying the monetary losses involved in military operations or for the purpose of the collection of the usual Mulkgiree tribute. Thus in the case of Porbandar, Rana Sirtanjee and Kooer Hallajee agreed to cede to the Hon'ble Company one half of the customs revenues of the port of Porbandar, with a full participation in all its rights.

A Deed dated 26th February, 1812, executed by the Sircar of Rao Shree Ananda Rao Gaikwar, in favour of Jam Jasajee of Nawanagar, informs us "The Sircar have taken the Port of Suryah in the Nagar Taluka entire, and free from all other demands, in consequence of your unbecoming conduct."

Here then are the instances, which clearly demonstrate the circumstances under which the rights over the ports were usually snatched away from the Kathiawar Chiefs. Just as the Gaikwar, the Company, as the successor of Paishwa's rights, was primarily concerned with the Mulkgiree tributes from Kathiawar Princes. Subject to the regular payments of the tributes, the States were allowed full autonomy within their territories. Their rights to levy customs duties were never interfered with.

It is unfortunate that a great majority of the Kathiawar States have no direct commercial treaties with either the Government of the Hon'ble East India Company or with the Government of India. As has been observed by Sir William Lee-Warner: "The union of the whole empire has been consolidated in recent years by numerous engagements with the Chiefs for the removal of injurious restrictions on trade...But these reforms of the fiscal system are effected by agreement, and are not introduced by the assertion of the Imperial authority except where the British Government acquired from the Paishwa special rights in the matter, or where circumstances have called for exceptional intervention."

The Paishwa never exercised his rights over the customs or transit duties within the province of Kathiawar, neither was it exercised by the Gaikwar. All the States within the province had full autonomous power to levy such duties on all goods entering their territories except those which were specially exempted from the operation of such duties. The Gaikwar also possessed such fiscal power as will be seen from the following passage from his Yad No. 460 dated 14th May, 1856.

"Taking this into consideration, we write that this business (railway) should cause no loss to our revenue in the customs etc., as stated in our Yad of 29th February, No. 232, and we beg to receive a reply to this effect."

RELATION OF THE BRITISH GOVERNMENT WITH THE STATES AFTER 1858 A. D.

After the mutiny of 1857, the government of India, was taken away from the hands of the East India Company and was vested in the British Parliament acting through a Secretary of State. The Proclamation of Queen Victoria stated: "We hereby announce to the Native Princes of India that all Treaties and Engagements made with them by or under the authority of the Hon'ble East India Company are, by us accepted, and will be scrupulously maintained; and we look for the like observance on their part."

This gave to the States an assurance that beyond the province of the Treaties and Engagements, no further restrictions would be placed or their rights and privileges by the British Government. In other words, the Proclamation confirmed the rights that the Indian Princes were enjoying during the regime of the Hon'ble East India Company, whether they were directly determined by the existence of the Treaties Engagements and Sanads, or, indirectly as in the case of majority of the Kathiawar States by conventions. The basic principles determining the relations of the Paramount Power with the States were stated by Lord Salisbury

as, firstly, the maintenance of the supremacy of the Paramount Power, secondly, the preservation of the autonomy of the feudatory States, and, thirdly the denial of any right divine to govern wrongly. Thus while full autonomous powers were granted to the Indian Princes, the divine right to govern wrongly was denied to them.

In 1863 a question arose as to whether the Kathiawar was British or foreign territory. This we have already discussed and shall again discuss it in all its implications at a later stage. For the moment it suffices for us to note that in 1866, classification of the States of Kathiawar was effected by Colonel Keatinge.

Assurances similar to those contained in the proclamation of Queen Victoria were renewed on several occasions. Thus in the Imperial Message of 1908, we find the following:

"The rights and privileges of the Feudatory Princes and Ruling Chiefs have been respected, preserved and guarded; and the loyalty of their allegiance has been unswerving."

King George V, at the Delhi Coronation Darbar, took the opportunity of renewing the assurances which were given by his revered predecessors. In his Proclamation of 1919, he took the occasion again to assure the Princes of India of his 'determination ever to maintain unimpaired their privileges, rights and dignities.' How far the Treaties, Engagements and Sanads have been scrupulously observed, will form a subject of analysis in the following lines.

PARAMOUNT POWER AND ITS RELATIONS WITH THE STATES

We already observed the solemn manner in which the rights and privileges of the Princes were duly assured by a succession of proclamations and announcements. And in spite of the assurance given by Queen Victoria that Treaties and Engagements would be scrupulously maintain-

ed, it is a matter of common knowledge that new modes of interpretation have come to exist. Thus we find eminent authors like William Lee-Warner stating that, "The Judgments of the British Government upon issues raised with the Native States test the Treaties by the touch-stone of practical application." These judgments became "the established usage' and the source of rights, even if there were no tacit agreement. Even the report of the Harcourt Butler Committee says the "Treaties are of continuing and binding force as between the States which made them and the Crown." But even the Committee has to admit that 'usage has shaped and developed the relationship,' and usage and sufference 'have been a constant factor in the interpretation of these Treaties, Engagements and Sanads.' It also adopts a dictum of Professor Westlake that "in the Indian Constitution, an acknowledged supreme will decides every question which arises."

We have to view the pros and cons of the rights and privileges of the various States of Kathiawar in the light of Imperial assurances and political usages.

VIRAMGAM CORDON FROM THE POINT OF VIEW OF THE GOVERNMENT OF INDIA

In the foregoing pages we had an occasion to note the real causes underlying the reimposition of the Viramgam Cordon. As stated by Lord Irwin, it was intended 'to guard the interests of British India.' We also noted that the development of the Kathiawar ports had resulted in the diversion of a substantial portion of the foreign trade from the British ports of Bombay and Karachi to the Kathiawar ports. The Government of India were consequently faced with a serious loss of the customs revenue.

Among the objections of the Government of India might be stated the system of heavy rebates usually given to the importers by the various maritime States of Kathiawar.

Their case for reimposition may be briefly stated as follows :—

1. Except Bhavnagar no port of Kathiawar was ever accorded the rights and privileges of a British Port.
2. Though ostensibly charging the goods and commodities according to the British Indian tariffs, the maritime States of Kathiawar were engaged in giving rebate to the importers. Thus the British Government contended that the development of the Kathiawar ports was achieved by unfair means.
3. That as a result of these unscrupulous methods the Government of India were deprived of their legitimate customs revenue.
4. And that the Government had spent enormous sums on the development of their major ports.

On a closer scrutiny, the objections of the Government of India appear to contain no particularly serious elements, that cannot be met with reasonable arguments. If the question of the Paramountcy be left aside the States have acted perfectly within the limits of their autonomous powers. Even though the Kathiawar States except Bhavnagar possess no separate commercial treaties with the Government of India, at least they are presumed to possess the same sort of political as well as fiscal powers that they used to exercise under the Paishwas. The continuance and acceptance of these very rights have been assured on more than one occasion by the Paramount Power. In the light of these rights if their conduct is to be impeached, they certainly deserve to be honourably acquitted. Their absolute rights over their ports or the free entries of goods into British territory from their States are the rights which they have secured from the Paramount Power both by specific

provisions under treaties or by their long and continued exercise. Again, according to some prominent authorities the legal position of Kathiawar, in its relations with the Paramount Power, is that Kathiawar is entitled to be recognised as British Territory. On this point, we have lready noted before, the views of Sir Bartle Frere and the other members of his Council.

If this be the case, Kathiawar ports need not be unnecessarily penalised. No excuses should be set forth for checking their rise or strangling their trade and commerce. As regards the rebates and other measures, if they are considered as unfair, steps can be easily devised for putting an end to them at the earliest possible opportunity. But they must not be used as the .basis of justification for the reimposition of the Customs Cordon. And, as for other two reasons, the loss of revenue to British India and the falling trade of the major ports, they can be equally met with similar arguments from the other side. The maritime States of Kathiawar have also spent enormous sums for developing their ports and moreover, the Paramount Power cannot claim to show its concern exclusively for the British India when it must be remembered that, at a time, when the customs revenues were negligible, the tributes from the States were the principal source of income that filled the coffers of the Government of India. Moreover, the help rendered by the States both at the time of the Mutiny and the Great War deserves to be specially considered in this connection. Their rights and privileges have been won at a very great expense and when assured so many times in solemn proclamations of the Visible Heads of the British Empire, they certainly deserve to be 'scrupulously maintained'. Their Treaties, Engagements and Usages should not be treated contemptuously, and under the ostensible plea of guarding the interests of British India, they should not be compelled to scarifice their hard won rights.

This reimposition, then, cannot be justified on any other grounds than that of Paramountcy. But then the development of their ports by the Kathiawar States is not such a contingency, or, 'the exercise of the right divine to govern wrongly,' that the intervention of the Paramount Power is at once peremptory and indispensable. Loss of revenue to the Government of India is not such an eventuality as was visualised by Lord Salisbury for an immediate intervention when he stated his famous cardinal principles of British Rule in India.

This is not intended as an apologia on behalf of the maritime States of Kathiawar. Its only purpose is to offer a critical analysis of the actual state of affairs in the light of the obligations subsisting on both sides.

VIRAMGAM CORDON FROM THE POINT OF VIEW OF THE MARITIME STATES OF KATHIAWAR

Though it will not be feasible here to enter into a thorough analysis of the Maritime States' case against the Viramgam Cordon, we shall note their main objections and survey them in the light of the recommendations of the Davidson Committee. The States had put forth a very strong plea at the time of the Abu Conference, but as no definite solution of the whole impasse between them and the Government of India was arrived at, Government had to resort to the reimposition of the Customs Cordon.

Apart from the questions of treaties and obligations, there are other considerations which must be taken into account in dealing with the contentions of the maritime States. So long as the Viramgam Customs Cordon was in operation, no Kathiawar State, except perhaps Bhavnagar, had taken the development of its port in hand. It was only after the protectionist policy of the Government of India became more pronounced and the Kathiawar ports were admitted into the British Indian Customs Union in 1917, that the States turned their attention towards developing

their ports. They relied on the announcement of the Government of India in 1917 that "The Government have no desire whatever to restrict the natural expansion of the States' ports." At the time when the Customs Cordon was reimposed in 1927, Port Bedi, as well as Port Okha were also the ports sufficiently developed to compete with the modernised ports of Bombay and Karachi.

The maritime States' contentions are that their own ports, being situated on the coastline of Kathiawar and directly connected with a meterguage railway lines, are in a position to cater for a very great part of Northern and Central India markets. Secondly, the labour being cheap and other charges of landing and lighterage being very nominal, the foreign trade from those parts of India is naturally attracted towards their ports. Thirdly, by keeping low the establishment charges and other expenditures the States are in a position to supply to the British Indian Consumer goods at a comparatively cheaper rate. Fourthly, on the assumption of the continuation of higher revenues from their ports, they have undertaken huge works of public utility, which perforce they shall have to give up to the detriment of their subjects, if the trade of their ports is given a definite check. Over and above these, there are other contentions such as the sinking of enormous sums of money in the development of their ports, the loss of employment to a very large section of their subjects, the increasing burden of taxation that their subjects shall have to face for making up the loss of customs revenues to their States etc., etc.

The Davidson Committee had the occasion to examine the case of the maritime States of Kathiawar and their rights over the Customs revenues received at their ports. They have to admit in their report that "the importance of many of them, to the present Government of India as to the future Federal Government, lies in the fact that they are in rail

connection with other wide and populous centres for whose trade they can and do compete."

The Committee were directed "to express an opinion as to what compensation it would be worth while for the Federal Government to offer in return for the relinquishment of the special privileges which each State now enjoys, or such modification thereof as may appear to the Committee to be an essential preliminary to Federation." The Committee examined all the facts that were laid before them in this connection and wrote "we are of opinion that we can neither safely nor usefully make an estimate of the amount of compensation which it would be worth the while of the Federal Government to offer to the States in return for the relinquishments of customs rights, assuming that they were willing to relinquish them."

Here then the rights of the States were absolutely recognised. The contingency of compensation to be paid was based on the assumption that the States 'were willing to relinquish' their rights over the customs revenues collected at their ports. Nevertheless the Committee were of the opinion that 'there are certain directions' in which their comment 'may be of service'. They proceeded that, "an arrangement whereby the maritime States were at least enabled to retain in their own hands the value of the duties on goods imported through their ports for consumption by their own subjects even though it would involve some slight diminution of Federal revenues, might well be accepted in a federal scheme embracing so many diverse elements."

Their recommendation was taken as the basis of the individual agreements which the Government of India subsequently arrived with the States. The States are allowed to retain the customs revenues, on goods consumed within their terriotories and out of the customs dues collected at their ports on goods passing beyond Viramgam into the British territories, they are allowed to retain a specific sum which is

fixed by the Government of India. The States regard this fixing as an act of injustice done to them but there it stands and the question of the controversy appears for the moment to be sealed for ever.

CASE OF THE BHAVNAGAR PORT

No discussion of the tariff policy of the British Government and the Viramgam Cordon will be complete without noting the peculiar position that the port of Bhavnagar occupies in its relations with the Government of India. The port enjoys certain privileges and treaty rights which the other ports of Kathiawar do not. Thus the agreement dated the 22nd day of December eighteen and hundred and sixty between "Her Majesty's Government the Thakoor of Bhavnagar, Juswuntsingjee Bhowsingjee" expressly provides in Article 9 that "Government agree to admit Bhavnagar to the full benefits of a British Port so far as the Thakoor may desire."

The Political Department of the Government of India has been able to rope in the other States into agreements which cannot be described as equitable, but because Bhavnagar has refused to swallow the bait her trade has been put under severe restrictions. There can be no justification for such high-handedness, and the sanctity of treaty rights requires that they would be, in the words of Her Majesty Queen Victoria, "scrupulously maintained". In the present days, when the other nations are indulging in the violation of the treaty rights, it does not befit the Government of India to follow in their wake. The British Democracy has been respected all over the world as the champion of the treaty rights, and, the sanctity with which the Englishman regards his obligation, is almost proverbial. In the words of an English author "It is not easy now to commend the disregard of Treaties to Englishmen. Few things stirred public feeling in England more at the outset of the Great War than the brief words exchanged between Herr Von

Bethmann-Hollweg and Sir Edward Goschen. "Do you mean to say that you are going to make war for a scrap of paper ?". "Unfortunately Sir, that scrap of paper contains our signature as well as yours." The view in Britain was that "we fought not only in support of our Allies, and for our national safety, but for the sanctity of Treaties."

The scrap of paper on which on the 22nd day of December eighteen hundred and sixty, the hands and seals of the representatives of Her Majesty's Government on behalf of Her Majesty, and, the Thakoor of Bhavnagar were set, deserves to be respected with all the sanctity ; and no other consideration of extraneous circumstances need prevail in order to tear it off.

EFFECTS OF VIRAMGAM CORDON ON THE INDUSTRIAL DEVELOPMENT OF KATHIAWAR

Apart from the question of political considerations and treaty rights the existence of Viramgam Cordon cannot be justified on the grounds of economic principles also. The growth of trade and commerce requires that there will be no checks and hindrances on the movements of goods and commodities in the interior; and the greater the number of outlets available for the Country's trade, the better for it. The Kathiawar ports afford every facility and encouragement to trade and commerce, and the obstacles that the Viramgam Cordon entails in their way cannot be upheld on economic considerations. As regards the Cordon's repurcussions on the industrial development of the province, the same have been ruinous and detrimental to the interests of the States concerned. Every State has full rights and liberty to strive for an industrial development within its territories and its efforts in this direction should not be allowed to be frustrated by the operation of such outside factors like the Customs Cordon. The point can be illustrated a bit further by pointing out the concrete instances in which the industrial development is retarded in Kathiawar.

At present only the local produce and manufactures are allowed unhampered to pass into British territories across Viramgam–Dhandhuka Land Customs Line. But in the case of the manufactures, the raw material utilised should be one which is available within the province. The Hindustan Rubber Works at Bhavnagar were started at a time when imports into British India through Bhavnagar were allowed free and were not subject to the operation of the Land Customs Line. The products of this factory were allowed a free market within the British territories. As a result of the subsequent estrangement between the Government of India and the Bhavnagar authorities, the Customs Cordon was made applicable to the imports through Bhavnagar territories. Therefore, this factory which utilised the foreign raw material for its manufactures, was penalised and it had perforce to close down.

This is only an instance which demonstrates the ruinous economic consequences of the Viramgam Cordon. The restriction placed on the industries which utilise the foreign raw materials is both unjust and unsound, and under no circumstances can be upheld. Even the Lancashire utilises cotton grown elsewhere for its manufactures. Why should then such inequitous restrictions be placed on the industries of Kathiawar? The sooner they are removed the better for Kathiawar and its industrial future.

CONCLUSION

A review of the tariff policy of the British Government attempted in the foregoing pages has revealed certain characteristics and conclusions which ought to be noted. The industrial development of England was accomplished under the shelter afforded by the higher tariff walls imposed specially against the competition of the Indian manufactures. While English industries and manufactures were thus heavily protected, doors were thrown open in India for

the imports of the foreign and English machine made goods. As a result the Indian Industries began to decline and the industries of Kathiawar also did not escape a similar fate. From 1846 England became a free trade nation and this was adopted as an avowed policy best suited for India also. The year 1861 marked an open identification of the policy of the Government of India with the Lancashire trade interests and, as a result, the fiscal policy of the Government of India was based on considerations other than Indian. Customs were never thought as a flexible source of revenue and it was only after the Great War that the importance of customs revenues was recognised. And lastly, the right of India to protect her infant industries and the fiscal autonomy were only established after 1919.

As regards the Kathiawar States, the Hon'ble Company acquired the rights to the tributes from Paishwa in 1817 and in 1820 the Gaikwar also ceded his rights. The States were autonomous, subject to the payment of the tribute; and their autonomous powers, other rights and privileges, were first assured by Queen Victoria in her famous Proclamation. In spite of the assurances from the Sovereigns, the rights of the States are subject to a process of interpretation and 'case-law' and their treaties, sanads and engagements are to be tested on 'the touchstone of practical application'. With the growing importance of the Customs Revenues the imports through the States became subject to the Customs Cordon in spite of their protests, and it was only in 1917 that the maritime States of Kathiawar were included in the British India Customs Union. And in spite of an assurance to the contrary, alarmed at the development of the Kathiawar ports, and the consequent falling of trade of the major British ports of Bombay and Karachi, the Government of India reimposed the Customs Cordon in 1927. At that time only the State of Bhavnagar was exempted but even that too is brought within the purview of the Customs Cordon.

The tariff policy thus brings out two salient features, first that at a time when England adopted free trade, it was applied to India irrespective of the stage for her economic development. Kathiawar's industries were also ruined by such an irresponsible policy. And secondly, when Government of India adopted the policy of protecting her infant industries, Kathiawar's industrial development was retarded by the imposition of such pernicious measures as the Customs Cordon. In doing this, scant respect was paid to the rights, privileges and treaties with the States by the Government of India. The penalisation of Bhavnagar port is a serious blot on the British Statesmanship and their regard for the sanctity and inviolability of the treaty rights. Its early restoration to its former position as a British Port is a step which need not be delayed in the interests of the British prestige.

As for the Viramgam Customs Cordon sufficient has been said and its immediate removal is an urgent matter of economic expediency.

APPENDIX A

Appendix showing the stationary character of the income from the Customs Revenue to the Government of India from 1861 to 1874.

CUSTOMS REVENUE IN MILLION £.

Year.	Gross revenue.	Net Revenue.
1856	2.1	.....
1861	2.8	2.5
1862	2.4	2.2
1863	2.3	2.1
1864	2.2	1.9
1865	2.2	1.9
1866	2.0	1.7
1867	2.5	2.3
1868	2.6	2.4
1869	2.4	2.1
1870	2.6	2.3
1871	2.5	2.3
1872	2.6	2.4
1873	2.6	2.3
1874	2.6	2.4
Average	2.4	2.2

* N. B. Vide 'Our Fiscal Policy' by C. N. Vakil, p. 8

CHAPTER XI

VILLAGE INDUSTRIES:

SCHEMES FOR THEIR DEVELOPMENT

GENERAL

A. Reaction to the Achievements of Machine Age in the West

The Great War brought with it a sense of disillusionment and perplexion among the social philosophers of the West as regards the achievements of the machine age and its contribution towards the welfare of the society. It clearly demonstrated that below the humanising effects of the scientific discoveries...on which the humanity congratulated itself—was lying dormant that primitive barbarism which was 'ready to be roused into active savagery at the first beat of the drum.' Dr. Austin Freeman in his "Social Decay and Regeneration" analysed the effects of the machine age in all the spheres of human activities. From the consideration of public health and politics to division of labour and unemployment his thesis is an indictment of the machine age.[1] He suggests a "voluntary segregation, of the fit," a society of men and women who would determine to lead healthy lives under natural conditions, free from the tyranny of mechanism, and supplying each other's modest needs by hand labour. Dr. Inge is even more

1. "Mechanism by its reaction on man and his environment is antagonistic to human welfare. It has destroyed industry and replaced it by mere labour; it has degraded and vulgarised the works of man; it has destroyed social unity and replaced it by social disintegration and class antagonism to an extent which directly threatens civilization; it has injuriously affected the structural type of society by developing its organisation at the expense of the individual; it has endowed the inferior man with political power which he employs to the common disadvantage by creating political institutions of a socially destructive type; and finally by its reactions on the activities of war it constitutes an agent for the wholesale physical destruction of man and his works and the extinction of human culture." (*Vide* "Social Decay and Regeneration" by Dr. Austin Freeman).

emphatic in his condemnation.[1] Though he does not agree with Dr. Freeman in the policy of breaking up the machines, he suggests that for a 'return to more natural and healthy type of civilization', the remedy may be partly in our own hands.[2]

Thus the demand towards simplicity of life is neither peculiar nor particular to India alone. As a reaction to the achievements of the machine age, the western thinkers have also come to agree with the view expressed in the saying of Diogenes that a man's wealth may be estimated in terms of the things which he can do without. They have also come to think that "civilization is in danger of becoming a systematic and sustained outrage against nature." The remedy according to the post-war school of social philosophers in the West lies in the practice of eugenics and simplicity of life.

B. Problem of Feeding the Masses in India

In India, on the other hand, the demand for a revival of cottage industries and handicrafts is directly concerned

1. "The visible tokens of the triumphant machine are our horrible factory towns with their forests of tall chimneys; their unending rows of mean houses, peopled by crowds of dingy workers; and the poll of black smoke above their heads which pours down a shower of soot through the twice breathed air, and devastates the country for miles beyond the radius of the town itself. If those philosophers are right who hold that beauty is an attribute of the Diety, and that ugliness of every kind is displeasing in His sight, our modern civilization is a blatant blasphemy." (*Vide* "The Dilemma of Civilization" from the *Outspoken Essays* by the Very Rev. W. R. Inge).

2. "We are now suffering from standardized minds as well as standardized commodities ... ...
We ought to accustom ourselves to think of the conditions under which everything that we buy is produced. We should then take much more pleasure in a hand made article, with some indviduality in it, than in a standardized product of a great factory, which speaks of nothing but soulless and irksome labour." ... ...
"If for example, we choose to clothe ourselves in homespuns which would last half a life-time instead of in cheap machine made garments which wear out in two or three years, one old industry might be revived." (*Vide* "The Dilemma of Civilization" from the *Outspoken Essays* by the Very Rev. W. R. Inge).

with the question of bread. Due to the free trade policy of the Government and a lack of national bias in the currency and fiscal policies pursued by it, the economic interests of India were sacrificed and whole and sole considerations on which these were based were purely anti-Indian. The result of the early associations of the British was that a large number of artisans had to forego their own professions and had to fall back on land for their maintenance. The erst-while artisans of India perforce had to handle the plough. Pauperism followed the ruralisation in its wake and the result was a destitute mass of surging humanity in the most pitiable of plights.

The immediate problem, therefore, that faces the Indian leaders is that of giving bread to these teeming millions of their countrymen. Industrialisation cannot be effected over-night and neither can it absorb all the surplus population. Estimates of the per capita income demonstrate the utter poverty of the masses and several estimates go to the length of asserting that in India there is a great bulk of the popu-lation that hardly secures even a single meal per day. Giving of bread to these hungry millions and devising ways and means of earning the same is the task that Mahatma Gandhiji undertook to attempt in his cult of Khaddar.

We may not enter into the history of the rise and growth of the Khaddar movement, but we can certainly note that with Gandhiji the use of Khaddar is a step towards the service of the Daridra Narayans of India. To him it is a faith, a religion. If Dean Inge hopes for a 'new birth of religious and spiritual life which may remould society', Mahatma Gandhiji hopes to remould the whole economic structure of India and the revival of the village industries through Khaddar.

NEED FOR A REVIVAL OF THE VILLAGE INDUSTRIES

Professor Radhakamal Mukerjee in the concluding chapter of his book "The Foundation of Indian Economics"

observes, "to regard our economic structure as either mediaeval or obsolete would be a gross and inexcusable blunder. Our economic structure is as 'modern' as that of the West, and it will pursue a line of evolution not towards the so called 'modern' or Western Industrialism but towards a fuller and more determinate Indian Industrial order".

Here is then expressed a pious hope against the blind adoption of the Western Economic Order. The importation of foreign economic and industrial ideas without in any way suited to the conditions and environments of Indian Society has resulted in the disruption and dislocation of the social forces. An economic order based on Indian conditions is therefore a necessity. In the village uplift movement, we, therefore, see the recognition of the fundamental aspect of Indian economic conditions *viz.*, that India is a land of villages and any move calculated to ameliorate the conditions of the masses must necessarily embrace the villages. Moreover, if the village is to be restored to its national place as an economic unit of India, it is necessary that a revival of the village industries and handicrafts should take place. With this goal in view, the All India Spinners' Association and the All India Village Industries Association came into existence.

SCHEME OF ARRANGEMENT FOLLOWED BY THE ALL INDIA VILLAGE INDUSTRIES ASSOCIATION

Since the problem of clothing is tackled by the All India Spinners' Association, the All India Village Industries Association has divided the rest of the industries except agriculture and clothing into two divisions :—

(*a*) Industries which affect the whole country because the products are in universal demand ;

and, (*b*) cottage industries which provide curios and luxury articles.

Under the first group are mentioned occupations which are closely connected with the production of food from

raw materials, such as flour-grinding, de-husking of paddy, oil pressing, gur-making, etc., etc. Other industries which provide universal subsidiary occupation to the agriculturists are bee keeping, sericulture, lac cultivation, etc. Then there are other industries which touch definite communities but at the same time are spread over the whole country, such as tanning, paper-making, rope-making, basket-making pottery, bricks, tiles, carpentry, black-smithy, etc., etc. These may be called the main village industries.

Under the second group are included those articles, the demand for which may not be so universal but which are in use every day, such as, soap-making, printing, dyeing, works of art, metal industries, etc., etc.

As for the methods of work adopted by the All India Village Industries Association, we shall refer to the same at a later stage. At present we shall only note that as far as practicable, the policy of the Association is to attempt "to convert raw materials into finished products before they leave the locality in which the raw material is found."

VILLAGE INDUSTRIES OF KATHIAWAR

It should here be borne in mind that conditions in Kathiawar are not different from those prevailing in other parts of India. Kathiawar is essentially a land of villages. Discussion of the population problem in Kathiawar reveals that in Kathiawar while there are only 61 towns, the number of villages is 4,564; and out of this nearly $\frac{2}{3}$ are those possessing a population below 500. Any one familiar with the conditions in the villages of Kathiawar will easily testify to the poverty of the village population. Not only are their wants limited but even for supplying these they have to toil hard. A great part of their time, after farming season is over, is wasted in gossipping and idleness, and, if this be utilised in some side occupations, there is certainly every possibility for the amelioration of

their condition. The revival of village industries proper must, therefore, aim at giving them some sort of occupation compatible with the means at their command. Such industries "as require little or no capital, need simple equipment, are easy in technique and the manufacture of which find a ready market" should be recommended. We shall first examine the existing economic conditions of the principal village industries of Kathiawar one by one. However, before proceeding to study the conditions of the village industries of Kathiawar, we have to point out that no literature whatsoever is available on the subject matter. Under the circumstances, this being the pioneer attempt, to have a proper insight into the working of these industries, necessary facilities as well as resources are required. Handicapped in both ways, we have only been able to study the recent tendencies in some of the important village industries of Kathiawar and the rest are enumerated in a short compass. However our main purpose is, to bring home to our readers the importance of these industries to the rural economy of this province, and, to put before them ways and means of developing these industries.

EXISTING CONDITIONS OF THE VILLAGE INDUSTRIES OF KATHIAWAR

Hand-Spinning and Weaving

Next in importance to food is the question of clothing. Kathiawar was self-sufficient in matters concerning the colthing but at present it exports raw cotton in vast quantities while imports of foreign or Indian Mill made cloth continue unabated. We have pointed out in our article on the Present Industries of Kathiawar that the survey of the handlooms in three States *i.e.*, Gondal, Rajkot and Wadhwan revealed that there was one handloom per square mile of the total area within the territories of these States. The existence of these looms in spite of the keen competition from the mills is mainly due to the special type of cloth

produced by them. It may be that as a rule the machine made cloths do not trench on the handloom workers' special domain. "For the home product, strong and coarse, but genuine and durable, still holds the agricultural market amongst the lower classes." There are many other causes besides but they can be profitably left over for future detailed study. We only note this and try to investigate the possibilities of further expansion and organisation of this industry. We shall in this connection note the progress made by the All India Spinners' Association during the last few years and see whether there is any chance of introduction and expansion of such activities within the province of Kathiawar. The statement below will give an idea of the progress achieved by the All India Spinners' Association :—

Year	Khadi Production	Khadi Sale	No. of Villages covered
	Rs.	Rs.	
1926-27	24,06,370	32,88,794	2,655
1935	32,44,105	46,90,013	6,490
1938	54,99,486	54,98,620	13,265

Viewed in the light of its All India character, the resources at its disposal, and the band of social workers at its service, the achievement of the All India Spinners' Association cannot be taken as encouraging. But the organisation with little government backing of subsidy and thriving practically on the moral support of the genera public could not have achieved more than this. The increase in the number of villages covered by the production activities distinctly show that the activities of the All India Spinners' Association are primarily centred in the villages. The uplift of the village artisans and the affording of requisite opportunities to the needy villagers are the main directions in which the All India Spinners' Association is progressing.

Various estimates have been made about the capacity of this movement to afford relief to the poor masses. The

Gandhi Ashram, Tiruchengodu estimated in 1926–27 as follows :—

Total Production Cost	100%
Wages	54%
Workers' allowance	6%
Other charges	3%
Cost of Raw Materials	37%
	100%

This estimate can be taken as fairly representative and in so far as there is no middleman, a substantial portion goes to the workers. Some of the critics have estimated that the art of hand-weaving may be somewhat paying but "the annual savings are not sufficient to hold out any large inducement to spinning". The case for the charkha according to some economists is simply this that "spinning on charkha is better than doing nothing whatever".[1]

If we base the claim of charkha on the above noted point of view, even in that case there is enough room for the expansion of this movement in Kathiawar. The Kathiawar peasantry's indolence and desultoriness ought to be replaced by some sort of constructive work which would add to their income and go a long way towards the betterment of their lot. Granting that the income from this source is very low, is it not better than no income at all ?

It is calculated that spinning for an hour and a quarter at the speed of 250 yards per hour for the whole year will yield enough yarn for a man's clothing. The items in a man's apparel are :—

	Total Required	Width
4 Shirts	8 yards	50"
3 Dhotars	12 yards	50'
1 Towel	1 yard	50"
2 Caps	1 yard	50"
10	22 yards	50"

1. *Vide* Jathar and Beri: Indian Economics, Vol. I (1937), page 271.

Granted that the Kathiawar farmer is not free for the whole year, it cannot be denied that during at least 5 months he is absolutely without work. If he utilises these five months by working on the charkha only for 3 hours a day, he will be producing enough yarn to make him selfsufficient in matters of his clothing. It is not at all suggested that all the emphasis must be laid on the development of this particular industry but it should at the same time be remembered that in the absence of any other occupation, it is better to occupy oneself in this Charkha Movement rather than wander idly and while away the precious time in gossipping.

In case of hand spinning, it should be noted that spinning is not so paying as is weaving. Hence in the later half of the 19th century, with the rise of the textile industry in India (Kąthiawar including), hand spinning received a severe set back. The Baroda State Department of Commerce, Industries and Labour, in Bulletin No. 33, Weavers' Studies No. 3 Amreli (published in 1932), mention that "until more recent times.....the use of handspun yarn was extensive in this region".[1] This shows that use of handspun yarn was, in its last phase, made by Amreli Weavers in Kathiawar.

However today only by producing special patterns, and by producing rough Khaddar, the handloom weavers are able to eke out some remuneration for themselves. In weaving they are mostly making use of the Mill spun yarn.

During the recent years certain States have realised the necessity of reviving this industry. It requires little capital and provides a subsidiary occupation to the farmer. Realising this, Sjt. Keshavlalbhai Karasanji Oza, B.A., LL.B., the Dewan Saheb of Lathi, evolved a scheme known as the "Udyoga Mandir Scheme of Lathi". The appendix attached hitherto at the end of this chapter gives full details of this

1. *Vide* page 1.

scheme. However, after his transfer to Mansa, it seems little progress is made by the scheme, as our repeated inquiries about the progress remain unanswered. We have further to note the efforts made by His Highness Maharaja Rana Saheb Shri Sir Natwarsinhji Bahadur, K. C. S. I., Maharana Saheb of Porbandar. He has recently passed an act and opened the "Harijan Hit Vardhak Department" with the sole idea of giving encouragement to handloom weavers. Such efforts are none too early. But then, when we find Rulers directly taking interest in the development of the industries, we feel happy to think that the speed will be accelerated by the Officers concerned. However, all attention should be concentrated on the marketing of the products, and hence to facilitate this on the preparation of the attractive patterns. Mill wastage yarn can with better advantage be utilised by the weavers. On the other hand, the State authorities should investigate the possibilities of developing the market of the special patterns in which still they are holding their own. Duties on the imports of yarn should be removed, and on the imports of cotton piece goods—or at least on the imports of rough Khaddar pieces which compete with the local products of the handloom weavers should be enhanced.

These are some of the suggestions we can make from our observations. And it rests with the authorities concerned to carry out detailed investigations into the possibilities of the development of industries in their areas, and, to frame out a policy in keeping with that aim, so that the goal of industrial regeneration can be reached at an early date.

Cattle-Breeding and Ghee Industry

It will be easily realised that the regions in which cattle-breeding is successfully carried out are either predominantly agricultural or inhabited by the nomadic tribes. To a nomad his sole possession or his sole wealth is his cattle and upon it depends his very existence. In the case of the agriculturist, however, cattle-rearing is a necessity for meet-

ing the requirements of his farm and soil. We have already noted that in Kathiawar, out of 31,50,963 population, 12,04,548 persons are returned as earners and working dependants by the 1931 census, and the rest are non-working dependants. Out of these 12,04,548 people, 6,97,641 persons are engaged in the exploitation of animals and vegetation. This means per 1000 workers occupied in industry and trade, 572 are engaged in exploitation of animals and vegetation, that is, out of every 10 workers in Kathiawar, 5 and 6 are engaged in agriculture. Predominance of agriculture is vividly brought home to us by these statistics, and true to this picture, Kathiawar has retained its reputation for its cattle-breed. Buffaloes of Jafrabad, and cows and stud bulls of Gir are the examples in this connection. They have earned India wide repute for this province and it will not be out of place to recall here that when cattle-rearing was actively encouraged by the New Zealand and Australian Governments, tropical bulls and especially the bulls of Gir in Kathiawar were preferred.

However, before stressing the need of cattle-rearing, it would be desirable for us to note whether favourable circumstances for cattle-rearing are existing in the province to-day ? In other countries cattle breeding is taken up to meet the requirements of the land and soil. Land is to be cultivated by the help of the bullock, and the soil to be developed by the manure of cow-dung. Added to this the rearing of cattle is encouraged to meet the requirements of beef and mutton—majority of the population being non-vegetarian. Hence, when the young cattle is slaughtered, very good quantity of fat is available, and various industries like Pickers Manufacturing, preparing of Willow Calf Leather, etc. depend solely upon these hides of the young cattle. From the dead cattle hides and skins industries like Washers Manufacturing, Roller skins preparing, Chrome tanning, making of leather bags, purses, straps, shoes, sandles, etc., are carried on.

In case of Kathiawar, however, cattle-rearing is pursued only to meet the requirements of agriculture. Possibilities of developing industries from the hides and skins of live cattle are remote, as the population is mostly vegetarian. No Chrome Tanning Factory worth naming is existing within the province. Except, therefore, preparing native shoes and champles and meeting the requirements of the agriculturists, most of the raw hides, raw skins, hides and skins tanned and dressed, and, all the bones and horns are exported to outside places. No use whatsoever is made of these bones as a manure or for other purposes, while the art of button making or glue making from the horns of the dead cattle is not known to the province at all. Intestines of the cattle are also not availed of as they do not know how to prepare gutts from them. These gutts are required for Tennis Rackets and for musical instruments like fiddle, violin, etc. All these products are imported from outside places, and even shoe makers import chrome leather to prepare high quality shoes. Ready made leather shoes of Bata and other well-known factories, and, rubber and canvas shoes from Japan also have made inroads to the Kathiawar markets.

Thus, little use is made of dead cattle products within the province, while in the case of live cattle yield, it should also be realised that cattle-breeding has no longer remained a paying thing. Formerly Shepherds, Brahmins, Barots and other people were able to maintain themselves by taking to stock-raising. Cattle was considered to be their 'māl', which means wealth, and it was a source of income to them.

Though butter making, cheese-making, milk-powder or casein preparing are the industries not known to this province, at least sale of milk and ghee remained paying propositions till the end of the 19th century. Milk cannot be exported in raw form to outside places as it cannot be

preserved for a long time. Some finished product of milk which does not get spoiled easily must therefore have a commercial value and it was this ghee industry which served as a boon to the Kathiawar peasantry.

Ghee Industry

Ghee has remained the staple food of the masses in India. Kathiawar Ghee has attained fabulous name in the Indian Markets. For this, however, credit goes to Porbandar. In days gone by, Chotila, Than, Porbandar, Jamnagar and Junagadh were the important ghee exporting centres of Kathiawar. At present, however, the first two, Chotila and Than, have faded into insignificance, while Porbandar, Jamnagar and Junagadh are still holding their own in the Indian and the foreign markets. From the later half of the ninteenth century (and more so by the end of that century) merchants began to resort to malpractices in this trade. They began to mix fat with ghee and to pass it on as pure ghee. However, it was easy to analyse or test it, and hence, the merchants concerned were running the risk of spoiling their repute for ever. They were, therefore, running a dangerous risk of risking their trade name which meant their career. However, after the World War, vegetable ghee, works as a substitute for fat in India. How to analyse this and to guard against such malpractice is a problem to the ordinary customer. Vegetable ghee is prepared from ground nut oil, to serve as a raw material to prepare varnishes, etc. Ground-nut oil is allowed to pass through hydrogination process, and by this process it is rendered tasteless and odourless. When, therefore, any oily substance is mixed with this vegetable ghee (being odourless and tasteless), it catches the smell and to a certain degree the test of the substance so mixed.

Ground-nut oil is sold at Rs. 4 to Rs. 4/8 per 40 lbs. in the market; vegetable ghee at Rs. 11 to Rs. 12 per 40

lbs.; while pure ghee is sold at Rs. 22 to 26 or so. Hence there is a great margin between the price of pure and vegetable ghee which induces the merchant to mix these products and to pass the mixture for genuine ghee. After an undue delay, recently the Government of India took up this problem and they held All India Ghee Conferences in Simla, Bombay and Delhi respectively in the years 1937, 1938 and 1939. As a result of their deliberations, a scheme was evolved for grading and marking of Agricultural Produce of the Government of India, under the Agriculture Produce (Grading and Marking Ghee) Rules, 1938.[1]

These rules have smbsequently been adopted by the Porbandar, Jamnagar and Junagadh State. States guaranteed tins of 40 lbs., 20 lbs., 10 lbs., 7 lbs., 3½ lbs., and of smaller sizes are filled in by merchants and the quality of ghee is graded and marked "Special", "Buffalo", "Cow" and "General", according to the four grades fixed by the Agricultural Marketing Adviser to the Government of India.

By adopting these measures to their credit, it can be said that these States have been able to achieve their desired effects. They have been able to maintain the reputation of Kathiawar Ghee in Bombay and other markets. Figures of exports from Wankaner, Dhari, Khambha, etc., are not available to us. But Rai Saheb Girdharlalbhai D. Mehta, Manager, Jamnagar and Dwarka Railways, the Revenue Commissioner of Porbandar, Sjt. Jagjivandasbhai N. Shah, and the Secretary to the Dewan Saheb, Porbandar, Sjt. V. C. Joshipura, have co-operated in our work and have kindly supplied us the figures of last five years.

---

1. Published under the Government of India Notification NoF. 51 (45) 38G-1, dated the 27th October, 1938.

FIGURES OF GHEE EXPORTS

Year	Porbandar			Jamnagar		Junagadh
	Bombay and other places in India Mds. (40 lbs.)	African Ports Mds. (40 lbs.)	Total Exports Mds. (40 lbs.)	Total Ghee exports from Nawanagar State Ports Mds. (40 lbs.)	Value	
1934-35	44,352	15,040	59,392	17,223	3,62,848	No official information for Junagadh State is available. However, Sjt. Laxmidasbhai, brother of Sjt. Mathuradas Jadavaji, premier exporter of Junagadh, gives total estimate of Exports for 1938-39 of 15000 Mds. (6000 Mds. for Bombay market and 9000 Mds. for Africa.)
1935-36	44,044	8,585	52,629	28,366	6,06,425	
1936-37	50,331	14,851	65,182	18,740	4,45,424	
1937-38	39,663	9,673	49,336	14,370	3,32,192	
1938-39	44,274	16,204	60,478	16,834	3,60,208	

From the above table it will be realised that if Chotila, Than, Wankaner, Dhari, Khambha and other places are taken into consideration, at least Kathiawar is exporting about 1 lac to 1 lac 20 thousand Mds. (40 lbs.) Ghee of total value of about 20 lacs to 25 lacs of Rupees to outside places every year.

However the picture is not so rosy if we reflect a little more on the internal or home market of Kathiawar. The whole market within the province has been spoiled by the inroads of the vegetable ghee. This has given a definite set back to the zeal of the poor peasantry to rear the cattle. To the credit of the Kathiawar States, it can be said that most of them have prohibited the import of vegetable ghee within their respective territories. But whenever they have got in their neighbourhood British villages of Ghogha Mahal, these villages freely import

vegetable ghee, hence illicit inroads of this ghee takes place into the State markets in spite of the vigilance of the State authorities concerned. Malpractices, adulteration and illicit trade in this commodity show increasingly upward trend. The consensus of public opinion—*the demand of the dumb Kathiawar peasantry*—is that all the States should combine and represent their case to the Government of India for applying the Viramgam Dhandhuka Customs Cordon to this product, and to stop its imports in the British villages of Kathiawar. If the Government of India are convinced of the *bona-fides* of the case there is no reason to believe that they would like to hoodwink at their representations. Moreover, recently Bombay Municipality have favoured the Vegetable Ghee Producers by allowing them to mix about 10 p.c. pure ghee with the vegetable ghee. Hence Kathiawar Ghee Market in Bombay is likely to be curtailed and exporters from Kathiawar might have increasingly to depend upon their African Markets. It is high time, therefore, that the States should try to develop their home markets at an early date. As long as this staple product does not become a paying thing, under the circumstances as they exist today in this province, it is very difficult for us to advocate cattle-rearing.

The advocates of cattle-rearing should realise that the cattle wealth is more or less an economic liability to the Kathiawar population. It is high time by now to realise that rural economy deserves greater attention in this province, that peasantry is totally impoverished, highly indebted, and *whenever possible it is leaving the Land.* However this is besides the point. Problems of Agriculture we propose to take up later on, sufficient it is for us to note this here and to pass on to another important village industry related to the cattle wealth of this province.

Tanning Industry

In practically every big village of Kathiawar we find Bhangis' whose main occupation is to remove the dead

cattle from the village area and sell their hides to the Tanners or 'Chamars.' It at times even so happens that the tanner himself takes the lease (by paying 'Bhām' to the State concerned) of removing the dead cattle. Trade in raw hides and skins and tanning the skins and hides are considered low occupations, and hence, they are in the hands of these low castes, who are untouchables, illiterate and poor.

Tanning in Kathiawar is mainly carried on in rural areas and that too on cottage basis, except at few centres like Rajkot where it is carried on to a certain extent on factory basis. Rural cottage industry is not at all organised, and it miserably suffers from the lack of scientific guidance. Village tanneries are mostly large earthen pots ('Kunds') buried in the ground without even a roof over them. In these pots, the proprietor (the 'Chamar') turns out a few hides per month. These pits are generally located on the outskirts of the villages and the water used is often muddy. During summer, in some cases, there is even a dearth of this muddy water. Both these factors have their inevitable effect on the quality of the hides they tan. There are, however, few exceptions where the tanning is done by bag ('zoli') process. The cost of a pit is estimated at Rs. 3 to 4 and the tools required by the tanners ('Kundo', 'Koyto', 'Rampi', 'Chhuri') are simple impliments hardly of Rs. 5 or 7.

Tanning materials are not factory made. Mostly they are collected by the tanners' family members from the village outskirts. Moreover, according to their availability tanning materials differ from place to place. Tanners of Kathiawar use 'Babul' bark, Aval, 'Ānkdā-nū-Dūdh', 'Dūdhēlī-nū-dūdh', salt, etc., and if they want to follow the lime process, then Babul bark, Aval, lime, oil, etc. However it must be pointed out here that first the product is sorted according to quality and the best is exported to Bombay and other places. The hides of somewhat inferior

quality are taken into local use and out of these tanned hides champles, saddles, ropes, etc. are prepared.

Moreover, it is chiefly the hides of buffaloes and cows which are tanned in Kathiawar, while practically all the skins of lambs and goats are exported outside without being tanned. Windfall of hides and skins occur to these people whenever famine conditions prevail in their localities, because under such conditions many buffaloes and cows die out of fodder scarcity.

One of the tanners interviewed could give us some clue as to the cost incurred in tanning the hides. He required 5 maunds of Babul bark, ½ maund of lime and 2½ seers of oil. Including the cost of raw hides, he incurred the total expenditure of Rs. 23, while the whole product was sold at Rs. 32, leaving to him Rs. 9 remuneration. This was his average earning per month. It should be noted that this was the income of 4 persons of the family who helped him for various processes at the tanning pit.

Whole process takes about 15 to 20 days and usually 2 to 3 hides are taken at a time for tanning. The village tanner usually works in co-operation of his family members and he combines with his tanning, agricultural labour wherever he can do so. He thus works in the field at the seasons known as *'Pārvā'*, *'Lanvā'*, *'Nindvā'*, that is, when weeds are to be separated or the harvest is to be reaped or when crowded growth of cereal crop is to be removed, his services are hired as a labourer for which he or his family members obtain annas 2/6 to 3/- per day, his younger ones usually get anna one to annas two per day. However the tanners now prefer working as far as possible as agricultural labourers to engaging themselves in tanning the hides; because the remuneration from this industry is even less than from what they obtain per family by working on the field. Because they obtain field work only for short periods in the agricultural seasons, they seem to have stuck to this

industry. They received more remuneration from this industry before the Great War. Their estimate is that they were getting something like Rs. 20/- to Rs. 22/- per month per family.

The reasons for the lower remuneration are not far to seek. With the increasing use of Chrome Leather for shoe making, purse making, etc., the market for their tanned hides is narrowed in the province. In addition imports of ready made leather shoes from well-known companies like Bata, Flex, etc., and of rubber and canvas shoes from Japan have also further told upon their internal market, with the consequent result that exports of raw hides and skins have got fillip. When this is the case we have already pointed out that there is great necessity for a Chrome Tanning Factory in this province to cater for the demands of the home market.

Moreover, these tanners (even when they realised that bad days were overtaking their industry) could not bring about any improvements in their methods or process (they being ignorant about them) or even in their dealings with their customers as they had no organisation to safeguard their trade interests. They do not know even the use of modern knives and beams in removing the hairs from the hides. The knife costs about Re. 1 to Rs. 1/8 while the beam costs about Rs. 3/- to Rs. 3/8, and they are specially fitted for this process. These village tanners hang the hides over the walls and with their crude knives remove the hairs and in the process these hides receive various scratches at their hands. They therefore fetch less price in the market. In addition the proper proportion of lime, babul bark, etc., they do not care to adhere to, and often they add more salt to these hides to increase their weight in order to fetch more price with the consequent result that the quality suffers.

Such malpractices have resulted in ruining their credit and in lowering the price of the hides tanned by them.

Some organisation is therefore required to set matters right and to safeguard the interests of this industry. Their economic condition is far from satisfactory and hence State authorities shall have to take live interest in developing this industry. Practically each and every State will ultimately benefit by any measure taken in this direction. Champles prepared from these tanned hides are unable to stand in competition with those prepared in factories in price as well as finish. These hides are therefore utilised in preparing 'deshi' shoes or champles to suit the needs of the village folk, that is, to suit the needs of those who have not developed taste for better finish, etc. 'Koshs' or 'Mots' are also prepared from these hides, otherwise these hides are used by the shoemakers for preparing soles of the shoes, boots, etc.

Mention must be made here of the efforts of Sjt. Ratilalbhai Adani, Manager, "Sarvodaya Mandir," Tarvada. Realising the gross ignorance of process as well as utter poverty of this class, Sjt. Adani is trying to work among the tanners, to guide them in the proper use of materials, etc. He has succeeded in at least obtaining Rs. 10,000 from Gandhi Seva Sangh, etc., and has started the classes at Tarvada, Chalala and Dhari to guide these people in bark tanning and chrome tanning (on hand basis). His example proves that in Kathiawar there is no dearth of social workers. They are even prepared to do the humblest work for the social and economic regeneration of the province. What is required is the best use of their services, or in other words, proper facilities guaranteed to them to fulfil their mission.

Oil Pressing

In chapter VI on Industries, we have already noted the widespread growth of oil seeds within the province and their increasing exports. The survey of the oil industry also revealed that the large scale production of oil on machine basis was of a recent origin.

Here it is proposed to survey this industry in its rural aspect.

In the Kathiawar Village Industries and Arts Exhibition held at Rajkot in November, 1937, there was a special room wherein the rural statistics concerning this industry were collected. It was estimated that in addition to the existing ones, 1000 families of Ghanchis can be easily maintained by this industry as there was still scope for 1000 oil Ghanis in Kathiawar. In spite of the existence of oil expellers and oil mills this industry has every possibility of revival provided there is an association which can guarantee the purity of oil turned out from them. It was also pointed out in that conference that to get pure unmixed oil had become such a complicated problem that people were willing to pay even more for pure oil. They were prepared to buy bullock-driven press oil even at a little higher rate than the mill oil, provided the quality was guaranteed.

It is really regrettable to note that the problem of adulteration in oil and ghee has assumed such vast proportions throughout India. Ground nut oil is available usually at Rs. 4/- to Rs. 4/8 per maund (40 seers) while sessamum oil at Rs. 7/- per maund (40 seers). The village merchants have therefore begun to import ground nut oil tins from oil mills (as this is cheaper to them) and to mix til oil with this ground nut oil, and then, to pass it as pure sessamum oil to their customers.

To check this adulteration only possible way seems to be to grant licenses to the Ghanis crushing sessamum and preparing 'til' or sessamum oil. Those ghanis which engage in crushing til seeds should be forbidden to crush other seeds, and especially, ground nuts.

Guaranteed tins should be made available to these ghani owners by the authorities issuing licenses. Moreover strict vigilance should be observed and heavy penalties imposed for contravention of the rules by the association issuing

these licenses, to ensure against malpractices. They should sell their oil to the shops owned or run by this Association or otherwise directly to the customers and not to the local dealers who are likely to resort to mixing. Due to depression it should however be realised that the confectioners as well as those who cannot afford to pay more are sure to use ground nut oil for their daily requirements.

Bee Keeping and Honey Industry

This remains a neglected industry in Kathiawar. The woods and the pastures induce the bees to prepare the bee-hives. When the bee-hives are found hanging over the boughs of the trees, honey obtained from them is called "Gālīū Madh" (other varieties of honey are 'Rānī Madh' prepared by wild bees, and 'Dāngarīū Madh' if honey combs are found in a paddy crop). It is this 'Gālīū Madh' which is found at various places in Kathiawar. In the groves of Sihor, Palitana, the Chotila, the Barda, and the Girnar are found numerous bee-hives and the States concerned give yearly lease (or 'ījārō') to those interested in extracting honey from these honey combs. However the lessees or the 'ījārdārs' are the Vaghris, Kolis, Ods, Khojas and other illiterate people. The method adopted by them to extract honey out of the bee-hives is crude. They press the combs to extract honey and they are quite ignorant of the art of refinning the wax. Moreover the art of bee-keeping or bee-culture is not known to them. Hence unless they are trained in this direction, there is no possibility of developing this industry within the province. At present they are simply the honey collecting agencies, and they resort to all sorts of malpractices. Sometimes they sell honey at a ridiculously low rate of 4 lbs. a rupee, and to obtain pure honey from markets has become a very difficult problem in Kathiawar. At times the physicians of Kathiawar to be assured of genuine quality make their purchases from outside well-known agencies. Hence there is a vast potential market for pure honey in the province itself, while if

guaranteed tins are exported to outside places, they are sure to find ready markets.

However if this industry is to thrive in the province, the States concerned should induce the educated people to take it up. All the literature pertaining to bee-culture should be made available to them. Poineer efforts in this direction have got to be made by the States. Prospective lessees should be trained in the art of bee-keeping by practical demonstrations. For this experimental farms should be immediately opened and expert guidance should be sought.

In order that the educated people be induced to come forward and handle this industry, they should be given a long lease of seven or ten years. Rebate should be given to them on whatever annual increase in honey collection they prove from their account books.

In return of these concessions these lessees should be asked to keep the statistics of bee-hives.

State guaranteed genuine honey tins are sure to find market in Kathiawar, in India and elsewhere, and an organised agency for procuring and exporting guaranteed honey is sure to flourish and be a paying concern.

Basket Making

This is being carried on at random in the villages as well as towns by the low caste people. There is no organisation either for production or for sale. These people are illiterate and as their remuneration is very low, they demand some organisation which can supply them bamboos at cheaper rates. At times they are known as 'bamboo workers' or 'vāns fōdās'. Bamboo being the only raw material required by them some such organisation as demanded by them is urgently required. Moreover they require an expert guide who could show them as to how to prepare various products like attractive flower-pots, huskers, etc. They also com-

plain that their trade in winnowing fans (or country-huskers ='Supda') is hard hit by the imports of ready made iron huskers in the province.

Rope Making

Generally every farmer knows the art of rope-making. In this case he is not dependant for his requirements upon anybody else, as he usually keeps for himself the required quantity of cotton from his produce. From it he prepares ropes required for his agricultural purposes.

However at times he undertakes this work by way of side occupation. In this connection he should be guided as to how to prepare Coir Ropes, 'San' Ropes, 'Bhindi' Ropes, as well as Cotton Ropes by the use of twisting machines which are available in the market at Rs. 20 to 25. This will save his time and energy, and the moment the use of this machine is introduced in the province, there is no doubt that practically the imports of ready made ropes in the province will cease. To that extent the size of this industry will develop and consequently, more hands will find employment in this industry. 'Pātti' making or cotton tape making is also carried on at various places, and 'pāttī-makers' also complain about the marketing difficulties. In this connection, it would not therefore be out of place here to suggest that the States concerned should analyse their imports minutely and should investigate the possibilities of starting various cottage industries like lace making, rope making, tape making, etc., in their respective areas.

Pottery, Bricks and Tiles

There are only two pottery works worth naming in the province. One at Morvi known as Parashuram Pottery Works, and the other at Than which is really speaking, a branch of the above works. The earthenwares required for local use are generally prepared in the villages by the village potters usually known as 'Kumbhars' or at times as 'Prajāpats'.

Increasing use of the brass and copper utensils (even in the villages) has been responsible to some extent for the decreasing demand for the earthenwares. But the demand for earthen utensils has not fallen so much as is the demand for earthen toys. Earthen toys have nearly been replaced by the cheap Japanese toys and a move in this direction is necessary so as to afford to the potter some additional source of income.

Mangalorian Tiles are gradually replacing the indigenous ones and possibilities of manufacturing these tiles within the province should be carefully examined. As for the manufacture of bricks, every encouragement should be given for the erection of the brick-kilns in the villages rather than in the towns.

Over and above these there are a host of other village industries and handicrafts which are more or less practised in the villages of Kathiawar. The village carpenter in his spare time can easily turn out wooden toys, while the village blacksmith can profitably utilise his spare hours in catering for the needs of the town people. The carpenter and the blacksmith both can help in supplying the towns with indigenous furniture.

Apart from these there are cottage industries like Tulsi-Beads making at Bagad, and, Toy-Making at Mahuva, etc., which are unorganised. All these require an organisation to look after their interests. If these cottage industries and the village industries are to expand, their respective working should be co-ordinated and their interests protected from the point of view of production as well as distribution.

SCHEMES TO DEVELOP THE VILLAGE INDUSTRIES IN KATHIAWAR

In order to ensure a healthy revival of the village industries within the province, it is imperative that a practical and all embracing scheme for the development of the

village industries should be worked out. But while judging the various schemes on their own merits, it should not be lost sight of the fact that Kathiawar is a land of about 200 different jurisdictions which sometimes fail to see eye to eye with each other in matters of even common concern. Any plan selected must, therefore, be tested on its merits of being feasible and practicable under the existing circumstances. We shall examine some of them and see how far they fall within the reach of practical economics.

I. Voluntary Association

Under this scheme it is proposed that the people of Kathiawar should form an Association and open its branches at important centres within the province. The Association should help the village industrial workers both in securing the raw material and disposing of the finished products.

This scheme is based on certain presumptions and premises which on a closer examination appear to be non-existent. Firstly, it presumes that the residents of different jurisdictions are enlightened enough to come together and join hands with each other or that they are free to do so and no undue pressure either from the States or other interested parties concerned is likely to be exerted upon them. Secondly, the question of adequate finance is taken for granted. The scheme assumes that the Association will have sufficient financial backing to support and extend its activities. And lastly, that internal jealousies of the States will not come in the way of the Association's province-wide activities.

As regards the enlightened out-look of the people within the province, we had an occasion to comment upon the low literacy ratio of the province. So far as the freedom of movement of their subjects is concerned the autocracy of the Kathiawar States is too well-known to require an extra emphasis. The assumption as regards the financial backing is both lame and untenable when we re-

member that Kathiawar is a poor land. Moreover it has become a hobby with the various States to look upon every activity of their subjects with an eye of suspicion. Even the innocent activities of their subjects are viewed with the gravest concern by the States. Under these circumstances, therefore, voluntary associations of the people of Kathiawar cannot be expected to effect a reorganisation and revival of the village industries.

II. State Activity

Another scheme which presupposes that the States should bestir themselves and undertake upon themselves to onerous task of reviving the village industries cannot better be stated than in the words of Mr. Vaikunthraibhai L. Mehta. At the opening ceremony of the Kathiawar Village Industries and Arts Exhibition, Mr. Mehta formulated his five points and stated that the States—

(i) should give the benefit of scientific experiments,

(ii) should render financial assistance when new modes of production or new instruments were to be introduced,

(iii) should render necessary help in supplying the raw material and disposing of the finished products,

(iv) should arrange for requisite finance for the supply of raw materials or the disposal of the finished goods, and

(v) should make necessary changes in the local system of education and should impart education favourable to rural atmosphere.

If these changes are not within the reach of practical politics by each and every State, Mr. Mehta suggested a creation of a Joint Association of all the States for carrying out this policy in Kathiawar.

The first part of Mr. Mehta's scheme assumes that his scheme falls within the reach of each and every State and that every State in Kathiawar has resources enough and a will to carry out the scheme. Again it also starts with the presumption that every State can command a band of honest and selfless workers with requisite skill and experience needed in the work. Moreover his recommendation as regards the 'creation of a Joint Association of the States' assumes that the States concerned will sink their petty differences and heartily join in the task of reviving the village industries.

All these assumptions are to a certain extent based on wrong premises. As regards the workability of his scheme by each and every State, he himself has doubts in his mind. And as regards the possibility of the "creation of a Joint Association of all the States", our reading and analysis of the various economic evils persisting in Kathiawar leads us to a different conclusion. Had a sense of amity and good will existed on the part of the various States of Kathiawar for the economic interests of the province as a whole, we would have witnessed a joint railway authority or an instantaneous removal of the Inter-State Tariff barriers.

III. Co-operative Methods

The next scheme which is suggested by some persons is based on co-operative methods. According to some economists "a great future lies before our cottage industries if they are carried on by Co-operative Methods".[1] There are three ways in which co-operation can relieve our artisan classes :—

1. Co-operative finance providing the artisans with cheap credit.

2. Co-operation in the purchase of raw materials, tools and appliances used in handicrafts.

1. *Vide* "The Foundations of Indian Economics" by Radhakamal Mukerjee, page 377.

3. Co-operation in the sale of finished goods.

But in Kathiawar, except perhaps at Bhavnagar, and Amreli and Kodinar Districts of Baroda State, co-operative movement is conspicuous by its absence. Again the success of the co-operative movement presupposes certain amount of education and a sense of responsibility. A great bulk of the artisan class in Kathiawar is illiterate and hence conservative. Co-operative methods, therefore, stand the least chance of success under these circumstances.

IV. State-Aided Village Industries Association

None of the above noted schemes by itself is practicable or feasible under the present circumstances. A blending of their respective good features and evolution of a new scheme mainly based on them will to a very great extent satisfy the need and result in a conspicuous success. Our recommendation therefore must contain a happy admixture of all the salient features of the three schemes. Since we rejected the above noted schemes as impracticable under the present circumstances, it is imperative that our own recommendations must be tested on the same touchstone of practical feasibility.

According to our scheme—

(*a*) In each State, people should form a Village Industries Association on the model of the All India Village Industries Association.

(*b*) Like the All India Village Industries Association, these associations should "attempt to convert raw materials into finished products before they leave the locality in which the raw material is found".

(*c*) Like the A. I. V. I. Association, they should keep in mind "the poverty of the masses" and advocate "only such industries as require little or no capital,

need simple equipment, or technique, and the manufacture of which find a ready market".

(*d*) The States should grant financial aids to such associations within their respective territories.

(*e*) Each of these associations should get affiliated to the All India Village Industries Association so that it can have the benefit of expert technical advice and wide and extensive experience of the A. I. V. I. A. at its disposal.

(*f*) Each such association should open small stores or stalls within the territories of the States where the products of the village industries can be made available to the general public.

(*g*) In the alternative, if the people of the various States are not prepared to start such associations within their respective territories, the States should ask the All India Village Industries Association to open their branches and extend their activities within their territories and should help the activities of the A. I. V. I. A. with financial assistance.

Thus we have two alternative recommendations. In one we require people to take initiative, while the other assumes the States to take the initiative. In the former, associations on the model of the All India Village Industries Association are to be started, while the latter requires the extension of the activities of the All India Village Industries Association itself. These are the two alternative suggestions which seem to us at the present juncture quite appropriate and to a very great degree feasible. We shall presently see how far our rocommendations are practical.

In both of our recommendations, we do not throw the burden on any single institution. In the former, the people are to form Associations and the States are to grant finan-

cial aids. In the latter, the All India Village Industries Association is to be approached, and for the purposes of extending its activities, the States are to grant monetary assitance. Thus the burden is distributed in any case between two parties. Again the population being poor, it is futile to expect the starting of such associations without any State assistance. On the other hand, in our scheme, the States are relieved from the burden of bearing the total expenditure and the trouble of detailed administration that such activities entail upon them. In either case, therefore, our recommendation is the best *via media* between the two extremities and offers a practical solution for the revival of village industries which is even workable under the present economic and political conditions of Kathiawar.

A word must be added here as regards our recommendation that these associations should get themselves affiliated to the All India Village Industries Association. Some may doubt the wisdom of such a recommendation and may go to the length of recommending a central association of Kathiawar for the co-ordination of the activities of these associations within the province. But herein similar difficulties as we have noted while discussing the scheme No. 1 shall have to be faced. It is better, therefore, that the activities of such associations should be co-ordinated to an institution which is outside the province and which is respected by all the States alike. Moreover, if the local associations are affiliated to the All India Village Industries Association, the expert technical advice and experience at the command of the latter may be made available with great success.

If, therefore, the population of the various States refuse to be aroused from their slumber, it is the bounden duty of the States concerned to accept the alternative recommendation and request the All India Village Industries Association to extend its work within their respective territories and

guarantee the expenses for the same. These will not be enormous. On the contrary the efforts and work of the band of selfless workers of India-wide experience will soon result in the economic regeneration of the States' subjects, and the expenses incurred in inviting its co-operation will be more than repaid. In this way will lie a surer path for the revival of the village industries and handicrafts of Kathiawar.

CONCLUSION

A survey of the village industries of Kathiawar under the existing circumstances leads us to certain conclusion which may be summarised as follows :—

1. Demand for a revival of village industries and handicrafts and also for simple life is neither peculiar nor particular to India alone.

2. In the West the demand has arisen by way of reaction against the machine age, while in the case of India it is closely connected with the question of bread to the millions of her population.

3. Kathiawar being a land of the villages, its village industries need a development and in the revival of its village industries and handicrafts will lie the solution of many of its rural economy problems.

4. Kathiawar possesses a variety of village industries.

5. Various schemes have already been suggested for their development by the politicians, publicists as well as economists.

6. A scheme suggesting the people of Kathiawar to form an association and open its branches at important centres is not practicable.

7. The States under the present circumstances are not in a position to undertake the responsibility of

reviving the village industries and handicrafts as they will never co-operate with each other. But they may do something of their own accord for their territories.

8. In the absence of strong co-operative movement in the province, the village artisans are not in a position to combine on the co-operative basis or to start a common organisation of their own.

9. Under the existing circumstances, State aided Village Industries Associations are the only practical solution ; or as an alternative, the States concerned should invite the co-operation of the All India Village Industries Association for the revival and development of the village industries within their territories.

APPENDIX GIVING THE SCHEME EVOLVED BY THE UDYOGA MANDIR OF LATHI

"To provide work and labour for those who are in need of empolyment generally and farmers particularly.

Aim and Object.

The farmers and their family members are often in need of work in their extra or leisure time and as they cannot give in whole day's service or labour, they are often required to sit idle and while away their time for want of suitable work for limited time.

It is the chief aim and object of this Institution to give them work to be done at their houses without spending a pie for capital and having no anxiety for finding a market for the articles made or yarn spun.

It is the aim of this Institution to buy cotton and give it to farmers or their families for spinning. When the yarn will be ready it will be taken back by the Institution which will get it woven into webs and finally dispose it of.

Working of the System

The farmers have lands which sometimes do not give such an output as will be sufficient for their whole families and hence either they have to go on incurring debts or go out seeking labour. In these days of acute unemployment, it is very difficult to find out work and His Highness has particularly arranged to give work to such needy families in the first instance.

In order that they may not remain idle, as is human tendency, a rule will be made that if a farmer's family having 40 acres of lands and having more than five or six members, requires State loan, it should send its free members to this Institute for getting work and earning the money required by them or take work from it to their houses; but they will not be given any loan from either the State or the Farmers' Co-operative Bank. Thus they will be saved from unnecessary loans and at the same time spirit of independence and self-help will be created and cultivated.

Besides it is also the aim of this Institution to revive cottage industries to lessen the use of machinery which has taken the bread away from the widows and poor old women of the labour class. The first thing will be to establish a hand grinding department in the Institution and gradually other work will be taken into hand.

The Institution, particularly the Spinning and Weaving Branch, will be affiliated to the All India Charka-Sangh (Rajkot Branch) and the scale of labour charges prescribed by the Sangh will be adhered to. This will be in the interests both of the workers as they will get food charges and the Institute as it will not be wanting a market.

The State further desires to utilize the Khaddar produced by the Institute for the uniforms of police, etc. The State will adopt such ways as will help the Institute to sell its Khaddar at once."

CHAPTER XII

INDUSTRIAL SCOPE

Dean Inge in one of his 'Outspoken Essays' remarks that the accumulated knowledge of mankind and his wonderful discoveries " do not constitute real progress in human nature itself, and that, in the absence of real progress these gains are external, precarious, and liable to be turned to our own destruction, as the new discoveries in Chemistry may easily be." Whether this discontent against scientific discoveries is mainly caused by the appalling and distressing conditions into which humanity was plunged headlong by the Great War, or whether it is caused by the unnatural conditions of life in large towns, it is not easy to say. But one thing is certain that since the Great War has come into existence a school of thought which becomes louder and louder everyday in its criticism and condemnation of the present civilization which it regards as of dubious value. These political thinkers agree that utimately we may have to look forward "to such a change as is imagined by Anatole France at the end of his 'Isle of the Penguins' when after an orgy or revolution and destruction we shall slide back into the quiet rural life of the early modern period."

In India also, under the leadership of Mahatma Gandhiji, there has come into existence a band of political thinkers who regard modern civilization based on machine as artificial and destructive. Their anti-machine feeling arises chiefly from the fact that the use of machine has tended to drive a large number of people out of their natural and professional employment, and has deprived them of their only means of subsistence. This school abhors the use of machine, and it is thoroughly convinced that its use must be checked as much as possible to a necessarily indispensable limit. It also advocates the simple rural life with an enthusiasm of an ardent crusader.

Here is then a school of thought which condemns the use of machine in quite unequivocal terms and we cannot ignore its existence. However, if we decide that the development of industries within Kathiawar and the greater utilization of her natural resources are but the necessary and requisite steps which ought to be taken for ensuring the prosperity of the province, it is unquestionably certain that the use of the modern machine is envisaged in our scheme, and that, in contrast with the followers of the Gandhian Philosophy we favour its introduction and use.

It is difficult to comprehend the idea underlying the condemnation of the machine. It is true that its widespread use has tended to create an anomalous situation wherein instead of being the master of the machine man finds himself a slave and his art and initiative have been mercilessly sacrificed to the stereotyped process of the modern mechanism. It is also equally true that the modern worker is deprived of the opportunities of self expression and that instead of the works of real art and beauty we find to-day the market flooded with the standardised products of modern machinery. But these considerations are not enough in themselves to entitle us to condemn the use of machine. We have to recognise its utility as a labour saving and time saving device, and if to-day we find man in degrading position of a slave to the machine, it is not the fault of the machine but it is largely due to the lack of foresight in those at the helm. Proper organisation and coordination will restore the machine to its proper place with the result that leisure and freedom which are but the prerequisites of all creative works of art and beauty will soon be available to the workers. What is needed is but a reshuffling of the organisation rather than an outright condemnation and total annihilation of the whole system.

Industrialisation is then the need of the hour. Both the considerations of practical politics and economic

expediency require that a vigorous policy of the utilisation of raw materials and natural resources in industrial establishments within the province must be the goal towards which our attention must be focussed. We have already witnessed the decline of indigenous industries in Kathiawar from the growing competition of the foreign and British machine made goods. We have also seen the spectacle of an ever-growing export of raw materials every year from the province to the foreign countries. Why should we then remain passive and resign ourselves to masterly inactivity and invertebrate drift? If Kathiawar imports manufactures which can be easily produced within the province it is imperative that efforts should be directed in those directions with a view to assure better utilisation of the resources of the province.

However, while suggesting the development of industries we should not lose sight of the fact that our recommendations depend for their ultimate success primarily upon the co-operation of the various States. It is upon the willing collaboration of the princes that the industrial future of Kathiawar depends. Various factors such as Inter-State Tariffs and railway freight charges shall have to be adjusted to allow industries to breathe a free air. For the present, therefore, for our purposes we assume the unity of interests and close co-operation of all the parties concerned.

SCHEME

Our scheme, for ascertaining as to what industries can be developed in Kathiawar, envisages the survey of the problem from the following points of view, viz :

(1) Raw Material
(2) Labour,
and (3) Finance.

Under the head of raw materials, we shall survey all those raw materials and natural resources which are at

present exported to foreign countries or which lie dormant in the absence of any facility for being utilised by the industrial establishments within the province. As regards the discussion under the heads of labour and finance, we shall have to survey the problems from the point of view of the sufficiency and efficiency of the labour as well as the availability or shyness of the monetary resources. An analytical examination along these lines will reveal us the extent to which industrial development of Kathiawar becomes a matter of practical proposition. Lest we forget, it should be noted again that our recommendations as regards the industries which can be developed would be purely hypothetical suggestions depending for their ultimate success upon many precarious and unstable factors such as sweet will and kind co-operation of the various States' authorities of Kathiawar. Absence of any clash of interests is presumed; and the political condition of the province is taken as if it were a single State under a single jurisdiction. This will help us to eliminate hindrances in the way from those quarters.

(1) INDUSTRIAL DEVELOPMENT FROM THE POINT OF VIEW OF RAW MATERIALS

It is intended here to suggest various industries which can profitably be started in Kathiawar from the point of view of raw materials and natural resources. An attempt will also be made to name suitable places at which they can be started and though no expert knowledge is claimed for such naming of the places, it is proposed to give due weightage to the proximity or vicinity of raw materials and the easy access to modern transport facilities.

A. Textile Mills

We had enough occasions in our other chapters to point out the importance of cotton in the trade of Kathiawar. It was also suggested at that time that looking to the huge

exports of raw cotton and a limited number of textile mills within the peninsula, textile industry affords a good opportunity for development. As compared with the rapid strides made by the textile industry of Ahmedabad and Bombay, Kathiawar's textile mills have only marked time. Whatever may be the other reasons underlying the apathetic attitude shown towards this industry, it is certainly not the lack of suitable raw material that has come in the way and checked its growth. Following statement gives us the statistics of raw cotton exports to foreign countries from the maritime States of Kathiawar and also its exports *via.*, Viramgam-Dhandhuka Land Custom Lines.

Year	Exports from Maritime States by Sea. Value in Rupees	Exports *via* Viramgam-Dhandhuka Land Customs Line. Value in Rupees	Total Exports of raw cotton from Kathiawar. Total value in Rupees
1931–32	3,63,232	25,30,131	28,93,363
1932–33	34,29,205	45,84,971	80,14,176
1933–34	171,32,687	38,00,780	209,33,467
1934–35	57,79,689	107,79,217	165,58,906
1935–36	55,44,911	57,89,877	113,34,788
1936–37	74,59,102	27,71,443	102,30,545
1937–38	40,07,246	29,09,218	69,16,464
1938–39	52,41,576	30,64,590	83,06,166

Thus, the total annual export of raw cotton from the province is of about one crore rupees.

It is therefore necessary that Kathiawar should possess more textile mills situated at different localities within the province. Kathiawar's imports of cotton cloth are enormous and it is imperative that it should not only be self-sufficient in this respect but it should also try to push its manufactures into the adjoining markets as far as practicable. For this purpose its textile mills are erected at Dhrangadhra, Gondal, Veraval and Bhavnagar they will be working with

greater advantage. Claims of these places are examined in the following lines.

Dhrangadhra:—It is situated within the heart of the cotton districts of Jhalawar and is nearer to Gujarat and adjoining districts. If a textile mill is started here, it can conveniently send its manufactures to upcountry centres like Delhi, Lahore and Amritsar.

Gondal:—Like Dhrangadhra, Gondal also is situated near the heart of the cotton districts of the State. Its position as an important place in the centre of the peninsula may help it to distribute its manufactures in all the parts of Kathiawar.

Veraval:—Veraval's claim is ascertained on a different basis. Ninety-nine per cent of Junagadh State's trade in cotton is carried on *via* Verval. Being a flourishing port connected with the inside by the Railways, Veraval offers good opportunity to the industrialist for developing these resources. Like Bombay it will serve the purpose of a terminal market, and like Bombay too, if textile mill is erected at Veraval, it will be able to export its manufactures to Arabia, Egypt, etc., etc., and a host of other places.

Junagadh State's share in the Export of Raw Cotton to foreign countries is as follows:—

Year	Value in Rupees
1931-32	43,800
1932-33	6,64,000
1933-34	46,25,450
1934-35	12,41,500
1935-36	20,55,960
1936-37	44,11,600
1937-38	14,44,800
1938-39	11,41,492

Though there are two textile mills at Bhavnagar proper and one at Mahuwa within the Bhavnagar territory, Bhavnagar State's share in the export of raw cotton to foreign countries is as follows :

Year	Value in Rupees
1931-32	3,19,110
1932-33	26,76,072
1933-34	97,24,190
1934-35	38,94,480
1935-36	32,58,300
1936-37	28,33,240
1937-38	24,61,054
1938-39	35,73,785

B. Woollen Mills

Exports of raw wool from Kathiawar to foreign countries have continued to assume bigger and bigger proportion every year as will be seen from the following figures :—

Total Exports of Raw Wool

Year	Value in Rupees
1931-32	6,52,033
1932-33	6,51,492
1933-34	13,80,113
1934-35	15,34,958
1935-36	33,32,742
1936-37	62,85,594
1937-38	40,80,500
1938-39	60,41,400

Within a short period of six years the export in 1936-37 was nearly ten times of what it was in 1931-32. The

following statement shows that nearly 95 per cent of the total export of Kathiawar is from the Nawanagar State.

Year	Total Exports Value in Rupees	Nawanagar's share Value in Rupees
1931–32	6,52,033	6,16,883
1932–33	6,51,492	6,41,972
1933–34	13,80,113	13,37,508
1934–35	15,34,958	14,35,173
1935–36	33,32,712	29,41,292
1936–37	62,85,594	60,72,060
1937–38	40,80,500	40,48,700
1938–39	60,41,400	55,93,800

Here then is another kind of raw material which is being increasingly exported to foreign countries and the Nawanagar State seems to possess its virtual monopoly. Wool in large quantities is brought from the districts of Balumbha, Amran and Jodia, to Jamnagar whence it is shipped to foreign countries. According to Mr. Jamnadas Madhavji Vishram, the proprietor of the Steam Ship "Haidari" and a leading business magnate of Jamnagar a Woollen Mill erected at Jamnagar on the lines of Dharival Mills or Lal-imli Mills is sure to thrive.

In his opinion wool exported from Jamnagar is of good quality and it is exported in good quantity hence the question of raw material is easily brushed aside. We have already noted in the above table that Kathiawar exports something like Rs. 60,00,000 worth of Wool out of which 95 per cent of the exports are sent from the Nawanagar State. As for labour there is no question, and as regards Viramgam Cordon, the raw material being found within the State territories, the products of the mill can safely cross the border of Kathiawar into British Territory.*

* The manufactures of Kathiawar, for which raw materials are to be found within the province, are to be exempted from the Viramgam Dhandhuka Land Customs Duties.

It is not at all suggested here that there is a dearth of capital for industrial purposes.† Only thing is that in spite of its existence in abundance it is not available for being utilised in industrial channels. Whatever may be the reasons behind this lack of funds, they require to be mitigated as early as possible. It is not at all desirable that such ample opportunities of industrial development should be allowed to go waste merely because the capital feels shy.

C. Cement Factories

In Chapter VI on Industries, we have surveyed the growth of the two Cement Companies in Kathiawar and noted their amalgamation with the Associated Cement Companies, Ltd. This group of cement works have to contend with another powerful group of Dalmia Cement Ltd., and also with the Assam Bengal Cement Co., Ltd., which has of late appeared on the scene, with an authorised capital of Rs. 50 lacs. What will be the ultimate effect of rivalry between the various concerns it is too early to judge but it is sure to make one very cautious in recommending the erection of other such factories. The starting expenses are very heavy and at the same time it is very doubtful whether the "building Fever" will last for ever. Moreover the quality of imported cement has decreased enormously and at present it is quite negligible. The moment therefore there is a set back in the building boom, these cement works shall have to curtail their productions and enter into a cut throat competition with each other for the early disposal of their products.

Under these circumstances we would like to be cautious in suggesting the eretion of such Cement Companies at suitable places in Kathiawar lest they may become devoid

†Vide Rao Saheb C. M. Kothari's address as the Chairman of the Reception Committee at the Second Kathiawar Economic and Commerce Conference, Rajkot.

of any practical value. If however the market is assured, then the works can be advantageously erected at Jamnagar and Bhavnagar. Both these places possess sea creeks whence the sea silt can be easily obtained. Both have Gypsum and Lime in abundance in the districts adjoining them, and, above all, both possess the greatest advantage of the modernised ports of Kathiawar.

D. Iron Industry

A century ago six iron foundries were in regular work at different centres within the territories of Jamnagar and Porbandar States. The decay of this industry according to the Official Opinion was due to "the absence of coal, the scarcity of wood, and the cheapness of European iron." What seems strange is the utter lack of appreciation of the value of this basic industry to the province as a whole. It is somewhat difficult to comprehend how in the modern days of the growing demand for iron, these valuable sources of rich ore have been left untouched. The neglect may be due to the ultra conservative nature of the States, or to some misunderstanding in the minds of the ruling Princes as suggested by the Chairman of the Reception Committee at the Second Session of the Kathiawar Economic and Commerce Conference. Whatever may be the reasons underlying the absence of any initiative in this direction, it is imperative that callousness and apathy should give way to sympathetic co-operation towards all efforts at the regeneration of this old and defunct industry.

Mr. E. Howard Adye, Director, Geological Survey of Nawanagar is also of the same opinion and records, that "fluxes are abundant, coal could be reasonably procured, but, there is a woeful lack of initiative." Otherwise, according to him a good blast furnace at Asota Mota or Bhatia would long since have been established as a tentative test. In anticipation of a speedy revival of iron industries in the State of

Nawanagar, he records some good localities for initial operations as follows :

(*i*) Portion of a low ridge, swerving from South to West, formed of laterite very heavily laden with rich iron ore, vast quantities of which are washed out and thickly strewed upon the slopes and fields below at a spot 1½ miles due south of Sambelia Bet and 2⅓ miles W. N. W. of Asota Mota.

(*ii*) Conical Hillock and surrounding countryside 1⅓ miles West by W. N. W. of Asota Mota.

Other places where rich iron ore is found are as follows:

(1) The abrupt end of a very long ridge on its northern aspect, 2 miles W. S. W. of Habardi Village.

(2) The South West end of the lateritic ridge, at Maha Devia, is averagely rich in iron ore.

(3) Tamha Talav 1½ miles E. S. E. of Nandana, where there is a good supply of rich iron ore superficially and probably deeply developed.

(4) Khokhra Dhar, a long low ridge on the outskirts of Lamba. Large quantities of iron ore are scattered on the sea board fields.

(5) A "Mandir" or Crowned hillock E. S. E. by E. of Bhatia is the centre of a large lateritic patch full of rich iron ore.

(6) Cheque Dhar, about 2½ miles East of Wadwala in the Alech hills.

(7) Highly ferruginous dykes ¼ mile N. N. W. of the abandoned Police Chowki, and about 3⅓ miles S. S. E. of Jamjodhpur.

As regards the working of this industry within the Nawanagar State it is suggested that "the only prospect in

this connection seems to stand by a revival of the smelting industry on the spot, and the direct supply of 'pig-iron' to the manufacturing centres."

As regards the working of the iron industry within the territories of the Porbandar State it should be remembered that in 1838 the foundry at Ranavav was supplied with ore from the mines of Bakharla, Visavada and Palikhra. Bakharla was at that time a flourishing centre of iron-smelting industry in Porbandar State. It is also rumoured that the smelting at Bakharla yielded a better quality of iron than the present supply of imported metal. With respect to the revival of this industry in the Porbandar State, the same author remarks : "It is not at all probable that the defunct iron industry, at the Bakharla site at all events, will at any future time be revived, though it is commonly rumoured that the smelting yielded a better quality of iron than the present supply of imported metal. There are other sites, however, belonging to the great lateritic belt, of which the Bakharla site is but a small outlier, where the ore occurs in such profusion that it would doubtless be commercially possible to erect a few small blast furnaces and keep them profitably active."

Here is then a great source of industrial activity which deserves a revival. If coal can be procured from distant parts for the successful working of the railways and other large industrial concerns within the province, it can equally be obtained for the purposes of this industry. Restoration of this industry to the eminence which it enjoyed in earlier times is a matter which has been demanded often and often from the public platform but which has failed to attract the close attention of the authorities concerned. What is required of them is a change in their outlook. A sympathetic and steady encouragement coupled with a spirit of commercial enterprise will soon effect a speedy revival of this basic industry. It is this "woeful lack of initiative" both on the

part of the public and the State that is responsible for the non-utilisation of so rich a field of industrial activity.

E. Chemical and Pharmaceutical Industries

Under this head it is proposed to survey the possibilities of starting new chemical works and pharmacies and also the scope of further expansion of the existing concerns. The former will include chemical works of all kinds like the Alkali works and those producing the allopathic medicines while under the head of pharmacies it is intended to survey the possibilities of starting new concerns for manufacturing indigenous Ayurvedic medicines.

The Bhavnagar Chemical Works at Vartej belonging to Messrs. Parekh Brothers is the only one of its kind in Kathiawar which manufactures spirits, tinctures, acids and other medicines pertaining to the Allopathic system. From the point of view of raw materials it is rather impossible to suggest, the starting of such chemical works in the province. The possibilities, however, of preparing iodine from the sea-weeds of Kathiawar should be investigated. Experiments were made to find out the quantity of iodine from the sea-weeds growing near low cliffs on the Dwarka Coast and it was ascertained that the ash of the burnt weeds contained traces of iodine. But no further steps were taken in that direction.

As regards the economic utilisation of the waste products of salt is concerned, it is imperative that it should be immediately undertaken. There is no need to despair because of the failure of successful operation of Shree Shakti Alkali Works of Dhrangadhra. It has been aptly remarked by Rao Saheb Kothari in his address as the Chairman of the Reception Committee of the Second Kathiawar Economic and Commerce Conference held at Rajkot that because it was a State concern it was bound to meet with such bad luck. Experiments in this direction were made

at the laboratories of the Okha Salt Works, Ltd., and as a result of their success the works have been able to put to a beneficial use their waste products. In co-operation with the Pioneer Magnesium Works the Salt Works are now manufacturing Magnesium Chloride, Magnesium Sulphate, Potassium Chloride and Magnesium Oxide. We are glad to learn that because of the greater possibilities of the use of waste products of salt, of late the Tatas have purchased some land at Mithapur and started Tata Chemicals Ltd. with an idea to produce Soda Alkalies. We also learn that the plans for the manufacture of Soda Ash at Porbandar are also under consideration.

The importance of Alkali manufacture need not be underrated. There is a growing demand for Soda Ash for use in soap and glass works, paper and cotton mills, and, as a detergent in domestic washing generally. If the Imperial Chemical Industries (India) Ltd., float a gigantic concern with an authorised capital of Rs. 5 crores for undertaking the manufacture of Soda Ash, Caustic Soda and Chloride, and, with that ultimate object, undertake a detailed investigation of salt and lime stone resources in the salt range of the Punjab, our lack of initiative and appreciation of the natural resources at hand prevent us from utilising them to the fullest extent. At Porbandar we have both the Salt, and Lime stones, in abundance, and if the plans for the manufacture of Soda Ash and other products mature, the Porbandar products are sure to capture the market. A factory at Porbandar can command advantage in distance over the proposed factory of the Alkali and Chemical Corporation of India, Ltd., at Khewra in the Jhelum district of the Punjab in supplying Soda Ash to the textile mills of Ahmedabad and Bombay. Active steps are therefore imperative to see that the plans of the Porbandar factory do not fizzle out.

In connection with the manufacture of Ayurvedic medicines we have already noted the success of the Rasa Shala

Aushadhashram of Gondal. Indigenous drugs of genuine brand are always in great demand and with the recognition of the native system of medical practice by the Government a further demand is sure to arise. If, therefore, new pharmacies are started at proper places they will be a paying proposition. Porbandar can be selected as a suitable place for such pharmacies. The nearness of Barda Hills with a great variety of medical herbs provide a valuable source of raw materials required by such pharmaceutical works.

F. Lime Factories

"Chunam" wrote Capt. Scott, Acting Assistant to the Agent to the Governor General in Okhamandal in his report of 1876-77 "is also found on the plains between Dwarka and Burwalla and is prepared at kilns built in the vicinity of Rupan Bundar. Most of it is exported to Bombay." This chunam preparing in large quantities has not been explored as yet although sufficient materials exist for the same. The existing kilns at various places supply the local needs and no attention is turned towards developing an extensive export trade. The increasing use of cement in building purposes has replaced the use of chunam to a great extent, and though its demand still persists for plastering and other purposes, Kathiawar's export of chalk, lime, and clay, (for building and engineering purposes) from the maritime States across the Viramgam-Dhandhuka Land Customs Lines is declining year by year as will be seen from the following statement:

Year	Value in Rupees
1934-35	52,694
1935-36	69,575
1936-37	33,189
1937-38	21,851
1938-39	5,335

Lime kilned by indigenous crude methods is of excellent quality as an essential constituent of mortar. It is manufactured from miliolite rubble and as it is considered to be of first grade quality by the builders, there appears to be a constant and increasing demand for lime of a purer quality among the native craftsmen. Lime of such pure quality could be produced at small cost in vast quantities by the establishment of one or two modern lime kilns in the neighbourhood of Pithadia where gigantic veins of calc-spar remain unworked. Other places within the Nawanagar State where calc-spar is found are Rinjpur, Khirsara, Wadala, Narmana, Sarwania and Katkola. Lime Factories can also be started near Bhatia and Bhopalka stations on the Jamnagar and Dwarka Railway. Within the State of Porbandar also lime factories can be profitably started. Lime from the miliolite rubbles as already noted, is accounted to be of first grade quality and a chemical analysis of the Porbandar miliolite has revealed the existence of pure lime to an extent of 51 p.c. The working of lime factories near the quarries at Adityana is likely to meet with success. But then if the possibilities of developing these resources are great, their exports *via* Viramgam-Dhandhuka Land Customs Lines have considerably declined. Moreover, we are informed that exports of cement have replaced the former export of Chunam from Dwarka. Under the circumstances possibilities of greater use of these materials within the province deserve close attention of the authorities concerned.

G. Oil Mills

In Chapter VI on Industries, we had the occasion to note the existence of oil expellers and oil mills at different places within the province, but in spite of their existence Kathiawar still exports oil seeds in large quantities as will be seen from the following statement.

Export of Ground-nuts and Castor seeds to foreign countries.

Year	Ground-nuts Value in Rupees	Castor seeds Value in Rupees
1931–32	30,71,549	2,38,595
1932–33	13,02,093	6,42,277
1933–34	31,58,808	5,54,261
1934–35	38,58,798	4,34,627
1935–36	1,00,87,580	3,66,788
1936–37	82,63,205	3,21,743
1937–38	1,37,93,497	2,40,543
1938–39	1,90,53,072	3,19,541

The export of oil seeds shows remarkable increase, while though the export of oils showed a tendency to rise upto 1936-37, the years that followed show a downward trend. There is still room for the starting of more mills within the province and instead of the exports of oil seeds, the authorities concerned should try to encourage the export of oils.

Export of Oils

Year	Total Exports in Rupees	Export of Ground-nut oil in Rupees
1931–32	15,565	14,998
1932–33	19,578	19,050
1933–34	15,261	14,921
1934–35	17,381	17,266
1935–36	8,80,843	8,80,392
1936–37	12,76,651	12,76,579
1937–38	9,60,658	9,53,234
1938–39	5,40,195	5,24,354

Almost whole of the oil exports consists of the export of ground nut oil.

In connection with the oil industry, we shall make a few suggestions which may be considered to help the development of this industry along lines hitherto not followed in Kathiawar. Outside Kathiawar we see the oil mills undertaking the manufacture of soap and scented oils. The Tata Oil Mills and the Swastik Oil Mills while producing pure oil for domestic purposes, have also undertaken the manufacture of washing and toilet soaps as well as the scented hair oils. Can we not hope of the blending of similar functions in the case of the oil mills in Kathiawar ? A move along these lines is likely to meet with success. As we shall presently see, Kathiawar possesses not a single Toilet Soap Factory within its boundaries and if some of the oil mills undertake its manufacture their products are sure to find a ready market.

Another suggestion concerns the exports of the castor seeds from the province. The use of castor oil for medicinal purposes is universal, and, if a small factory is started at a place like Jamnagar exclusively for the production of refined castor oil, its products may have the chance of replacing the imports of foreign castor oil like Morton's and may in the near future occupy a prominent place in the Indian Market.

H. Toilet Soap

As already stated on more than one occasion, what is needed in connection with the manufacture of soap in Kathiawar is a move in the direction of starting a Toilet Soap Factory at some prominent centre within the province. So far as other materials like tallow are concerned they can be procured from outside places as usual. If, as suggested above, some of the oil mills undertake the production of toilet soap, there will be a saving in cost, and the product will be able to withstand the competition from other sources.

I. Tanning Industry and Leather Shoes Factory

It is rather a paradox that while Kathiawar exports leather including tanned and dressed hides and skins to the

foreign countries of an average value of Rupees two lakhs every year, we are given to understand by the competent persons in the line that for its domestic use Kathiawar imports tanned leather from Cawnpore, Madras and Calcutta. If this be the real state of affairs,—and there is no reason to doubt that—then the possibility of starting a leather shoe factory within the province is remote. Attention, therefore, must be turned in the direction of developing the tanning industry within the province. Kathiawar has sufficient materials for tanning purposes in the shape of the barks of 'Aval' and 'Babul' trees, and its exports of raw hides and skins *via* the Viramgam-Dhandhuka Land Customs Lines, are also considerable. Therefore, the development of this industry, if assiduously undertaken, can be easily assured.

J. Miscellaneous

Over and above the foregoing industries there are other industries also whose development ought not to be neglected. In Kathiawar there are three Glass Factories but none of them is manufacturing either glass plates and glass sheets or bangles for ladies' wear. Following figures give us an idea of the extent to which foreign glass sheets and plates are imported within the province by the maritime States of Kathiawar:*

Year	Value in Rupees
1931-32	1,48,048
1932-33	2,07,170
1933-34	1,93,436
1934-35	2,36,094
1935-36	2,33,247
1936-37	1,76,760
1937-38	2,61,721
1938-39	2,43,308

* *N.B.*—Owing to war the Central Government (in order to economise the use of Stationery) have after January, 1940, stopped publishing "Trade Statistics relating to the Maritime States in Kathiawar and the State of Travancore." We therefore regret that the figures for the year 1939-40 are not available. However, it may be pointed out that even if these figures were available they would not have been representative ones as imports and exports have been greatly affected by the war.

Manufacture of the plates and sheets, therefore, deserves the attention of those concerned.

Another industry which has lost its importance in Kathiawar with the decline of its coastal trade and which requires encouragement and patronage at the hands of the traders, merchants and Princes is the ship-building industry of Kathiawar. As regards the statistics for this industry, they are already given by us in Chapter VI on 'Industries.' Added to this, cattle breeding, ghee, bee keeping, honey, fishing, fish curing and handloom weaving these are some of the important industries which have very good scope of development within this province.

(2) *Development of Industries from the point of view of Labour*

Next point that naturally commends itself for consideration is whether this industrial development is possible from the point of view of labour. On more than one occasion we have analysed this problem and come to the conclusion that so far as the sufficiency of labour is concerned no doubt need arise*. It is true that from the point of view of efficiency we may not expect them to be well versed in mechanical processes or experts in Industrial activities, but we have no reason to brand them as totally unfit working in large scale industrial concerns. The existence of a great variety of industrial pursuits within Kathiawar can be taken as an indication of the extent to which the labour within the province has shown its remarkable adaptive nature. No doubt a bulk of the labourers are illiterate but they are neither adamant nor obstinate. On the other

* "Of Labourers and Miscellaneous Workers there is in Kathiawar as in other districts, a large floating population." (Vide p. 158, *Gazetteer of the Bombay Presidency*, Volume VIII, in this connection). If this was the condition by about 1884, we have already pointed to the growing population of Kathiawar and laid stress on the need for an occupational change while discussing the Human Element in Chapter IV.

hand they exhibit a receptive mind which may be worthy of the working classes in any industrialised country.

From the point of view of the available labour therefore the position regarding the industrial development of Kathiawar can be briefly stated as follows :—

(*a*) In Kathiawar there is no dearth of cheap labour,

(*b*) Labour in Kathiawar is able to adjust and adapt itself to new surroundings and undertakings,

(*c*) Experts shall have to be imported from without the province for the successful working of the new ventures.

(3) *Development of Industries from the point of view of Capital*

Without entering into the controversial discussion of the problems of Labour *vs.* Capital, and without committing ourselves to the exclusive superiority of the one over the other, we can simply state this much that in all production of material wealth Capital like labour plays an important role. But the employment of capital in industrial undertakings presupposes stable political conditions and a good chance for a fair return on the total outlay.

In modern times the growth of industries is closely interrelated with the growth of banking facilities and the adoption of the principle of Joint Stock Companies. It is risky sometimes for individuals or partnership firms to take upon themselves the establishment of large industrial concerns which involve huge capital expenditures; and hence the greater the familiarity of the population with the principles of Joint Stock Companies, and Limited Liability, the more rosy become the chances of co-ordinating capital from different sources for industrial purposes.

In Kathiawar we are told on Official testimony that Joint Stock principle is not current in great part of the

province as the capital is shy of local enterprise*. What can be naturally expected under these circumstances can be easily surmised. The shyness of capital may be due to various reasons chief among which may be the absence of any guarantee regarding the unprovoked interference by the princes. The system of Government of these Princes, their autocratic and despotic behaviour, and, the consequent insecurity of life and property within their States, can have but only one effect of checking the industrial enterprise within the province. One cannot expect private capital under these circumstances to be bold, ready, and, available for investments in industrial concerns.

As regards the State aid to industry, although there are State Banks and Darbar Banks in various States, they are primarily intended for agricultural purposes. The maritime States give facilities to the merchants for import and export purposes, but active financial help in industrial undertakings is seldom afforded. Some States give encouragement to industry by taking only a nominal sum of money as royalty or, by granting tariff concessions. Some States have undertaken themselves the responsibility of running industrial concerns and are not afraid of taking questionable steps to see that they become a paying proposition, while there are States who are chafing under the heritage of financial bungle and industrial mismanagement of the State owned concerns. When the Princes themselves are ready and eager to indulge in industrial activities for the sake of personal gain, it is not only difficult, but almost an uphill task for private enterprise to enter the field and compete with them. State owned Cotton Gins, State owned Cotton Presses, State owned Electric Works, State owned Textile Mills, etc. are but a few examples in

* "Joint stock principle is not current in this part of the country as the capital is shy of local enterprise. The factories are established by an individual or individuals on Partnership Proprietary Principle." (Vide p. 38, Summary of Events of the Administration of the Gondal State 1925-26)

this case. Sometimes monopolies, to trade in certain articles, or, to start Cotton Gins, Cotton Presses, etc., are also given by them. It is but natural that industries under such circumstances do not breathe a free air. Moreover, we hardly find any example where any industrial enterprise within the province is met with an active State Aid.

At times, if the industrial enterprises appear to be paying, the State authorities seem to impede their growth with an ultimate object of taking over their charge and running them. Under these circumstances, capital is bound to feel shy, and, it is for the State authorities to wake up and introduce responsible element in their administration. So long as this is not done even strong canvassing to induce their people to come back and start industries within their territories, and, their vague or wide promises, will not afford necessary inducement to these industrialists. Plain truth lies in the fact that they do not have any confidence in their rule.

CONCLUSION

Discussion in the foregoing pages has revealed three main characteristics of the present position in Kathiawar with regard to the development of industries, viz.:

(*i*) There exist enough raw materials and natural resources which can be effectively utilised in a great variety of industrial concerns. Hence the backwardness of Kathiawar in matters of industrial development is not due to any paucity of raw materials or natural resources.

(*ii*) There is no dearth of labour supply in Kathiawar. Only experts shall have to be imported from outside the province, for the purposes of industrial development.

(*iii*) No adequate private finance can be procured within the province for starting new industries, because, capital is shy due to autocratic as well as irresponsible nature of Government. As regards the financial assistance from the States is concerned, except giving a few concessions, the States do not further help the industries. On the other hand, they themselves at times prefer to run various concerns if it is a paying proposition.

This is the gist of the whole problem of industrial development in Kathiawar. The only obstacle in the way is the lack of availability of adequate financial resources for the successful working of the industries. If the local capital is shy, it is the duty of the States to see that reasons underlying the shyness are immediately removed and free movement of capital encouraged. If the monetary resources do not come forward due to the irresponsible nature of administration, it is peremptory that steps towards democratising of the whole administrative machinery should be immediately undertaken. Ideas of Government have undergone a violent change since the War and it is high time that the present system of Government in Kathiawar States based on the whims and caprices of a single individual should give way to a Government amenable to the wishes of the governed. Then, and then only, enough capital will be forthcoming for the development of industries within the province.

CHAPTER XIII

CONCLUSIONS

In bringing the survey of the economic and industrial conditions of Kathiawar to a close, an alternate feeling of diffidence and confidence is bound to pervade. The sense of diffidence arises mainly through the fear of the inherent incompleteness that the pioneer efforts in any direction usually possess, while confidence arises not so much from the zeal of placating oneself as from the fact that the stern path of duty has not been deviated from.

But, apart from this, one would naturally like to ask to oneself as regards the outcome of a thorough and critical investigation of the whole problem attempted in the foregoing pages, and for the said purpose a brief resume of the whole analysis will not be out of place. And though the problem undertaken is as regards the industrial development of Kathiawar with particular reference to its geographical position and natural resources, it has been tackled from all possible points of view and hence an analytical summary of all its aspects is necessary before we formulate the conclusions to which our investigation leads us. It is, therefore, proposed to put forward in a succinct form, and in a logical sequence, all the conclusions to which we have been driven by a critical survey as attempted in the foregoing pages.

REGIONAL BACKGROUND

Situated on the west coast of India, Kathiawar lies between 20°.40′ and 23°.25′ north latitude and 69°.5′ and 72°.20′ east longitude. It is a square peninsula bounded on the south and south-west by Arabian Sea, on the North-east by the Gulf of Cutch, and on the east by the Gulf of Cambay. The climate of the peninsula is pleasant and healthy or what Dr. Dudley Stamp calls 'monsoon climate.' Rivers, streams and streamulets run over the whole province,

while most of the hills belong to one of the two systems which running north-east and south-west, form irregular chains, crossing the country in nearly parallel lines. Thus while Nature has endowed the province with favourable geographical location, healthy climate and good physical features, its population problem tells quite a different tale.

MINERAL AND FOREST RESOURCES

Though a geological survey on purely academical line may fail to be of decisive economic value, it may be useful in as much as it helps us to compare the various geological beds of trap, volcanic, tertiary and other origin with those of the similar types found elsewhere in India. Only a few of the States possess independent geological surveys.

As regards the natural resources of the province lying dormant, we have sufficient evidence of the existence of iron, coal and copper. The miliolite and other varieties of stone exist in abundance and gypsum is found in many parts of the province. The forest resources are also not deficient, but what is needed is a judicious policy of afforestation and an early stoppage of the reckless deforestation.

These natural resources ought to be exploited to the fullest extent with a view to ensure the industrial regeneration of the province, otherwise, as at present, backward agriculture will remain the only available occupation.

COASTLINE

Kathiawar's geographical location gave it an easy access to the outside world with a result that long before the modern ports of Bombay and Karachi were developed, the maritime trade of Kathiawar was in a flourishing condition. Its extensive coastline, and its geographical position were instrumental in the evolution of Kathiawar's many sided economic life. The coastline is broken at intervals

by the mouths of rivers and creeks. The Hansthal, Bhavnagar, Sunarai, Bavaliali and the Dholera are the more important salt water creeks, while, besides these, among the smaller creeks may be mentioned the Mahuva, Chanch, Mandwa, Somar, Sil, Vartu, Salaya, Bedi, Jodiya and the Vavania creeks.

In spite of its extensive coastline and the existence of so many creeks, Kathiawar possesses no really good harbour except Bet at the north-east corner of Okhamandal, where boats can lie during the south-west monsoon. The natural harbours viz. Salaya, Poshitra and Port Albert Victor still mark time for their development.

As regards the effect of the coastline on the development of the coastal towns, we can say that with a seaboard of five hundred miles, and no place more than seventy-five miles from the coast, the produce of Kathiawar found a ready outlet. Every little creek provided a means of access and was utilised as a trade centre. This accounts for the gradual rise of a number of small ports.

After having reviewed the geographical position of Kathiawar and its natural resources, it is but natural that a survey of the Man behind these natural environments be attempted.

HUMAN ELEMENT

Kathiawar as a whole is very thinly populated as compared with the conditions prevailing in most parts of India, but it possesses a higher ratio of urban population though it cannot be asserted from this that Kathiawar is industrialised to a greater degree than the rest of India. For, more than half of the population of Kathiawar resides in villages having less than 1,000 population. Examined in the light of the Sundbarg formula the age distribution possesses all the characteristics of a progressive population but the ratios in the lowest three age groups are higher than in Bombay Presidency and Baroda. The ratio of females to males is 966 females to 1,000 males, while the corresponding figure for the Bombay

Presidency is 909; and even here the ratio in the rural area is 958 while in the urban area it works out at 988. The extent of literacy can be judged very easily when we remember that only 3,88,261 out of a total population of 31,50,963 are literate and though the Kathiawar ratios are higher than those for the British districts of Bombay Presidency both as regards male and female literacy, no importance attaches to this fact so far as numerical strength is concerned, because, higher ratios in small figures are statistically of less importance than lower ratios in large figures. An analysis of the occupational returns reveals that out of every ten workers in Kathiawar between 5 and 6 are agriculturists and between 3 and 4 are engaged in trade and industry. All other kinds of occupations together employ less than 3 workers out of ten. An examination of the main items reveals the fact that industry is not organised hence most of the industrial workers comprise of artisans, craftsmen, and home workers. In the case of females, out of a total of 3 lacs and 24 thousands returned as earners, nearly a lac and a half work as agricultural labourers.

This is the gist of whole problem. With 58 p. c. of the total population engaged in the exploitation of animals and vegetation, with a low level of literacy and a higher percentage of female workers as agricultural labourers, Kathiawar presents all the features commonly found in a backward agricultural land. The extent of the miserable situation can be easily gauged when we remember that 45 per cent of the able-bodied females have to work either as principal workers or working dependents for augmenting the family income. And hence the need for industrialisation, which is also justified when we remember that vast natural resources are lying dormant within the province, and their development will offer the best solution of the present miseries.

AGRICULTURE

A striking feature of the problem of agriculture in Kathiawar is the high ratio of tenant cultivators and the low ratio of cultivating owners. This may partly be due to the system of land tenure as existing within the province. As regards the agricultural labourers, out of some 2,72,000 landless labourers nearly two-thirds are working dependents who are augmenting the family income by their work. Our analysis has revealed that agriculture in Kathiawar is not as paying a proposition as it is in Gujrat or Bombay Presidency.

The soil is varied in its nature. The climate is on the whole temperate, the rainfall moderate, and there is much variety in the texture quality and the depth of the soil. Nature thus is lavish and bountiful.

The leading crops are cotton, Juwar, Bajree, Wheat, Oil-seeds, Ground-nuts, Castor-seeds, Sesamum, Paddy, Sugar-cane, Gram, Urad, Mag, Barley, Pulses, Onions etc. etc.,

The lands are divided into :—

1. Darbari,
2. Bhayati or Mulgarasias'
and 3. Alienated for charitable and other purposes.

No statistics regarding the yield per acre, or the size of the crops etc., are available. Fortunately in "An Atlas of the Progress in Nawanagar State" by John De La Valette—a volume primarily intended as panegyric of the late Jam Sir Ranjitsinghji's Administration—some figures are available which on a closer scrutiny and a critical analysis reveal that the soils of the Nawanagar State have declined by 30% in productivity during the period of less than 25 years. And if this be the real state of affairs of a State which has spent Rs. 20 lacs for irrigation purposes during the said period, the condition prevailing in other parts of the province can easily be imagined.

The causes of the low productivity of soil are the lack of manures, sub-division and fragmentation of land, lack of proper equipment and insufficiency as well as inefficiency of the plough cattle. For the purposes of sub-division and fragmentation, we have utilised the figures relating to the Bhavnagar State as they are the only ones available. They reveal that the average area per Khedut fell from 41.2 acres in the Register of the State in 1912–13, to 26.6 acres in 1934–35.

Regarding the problem of rural indebtedness, an estimate of the total rural indebtedness of Kathiawar has been arrived at which works out at Rs. 13 crores and a half. The estimate is verified by the formula of the Baroda Committee's ratio of total indebtedness to total land revenue in which case the figure works out at Rs. 16 crores.

In the sphere of the State aid to Agriculture, we can certainly assert that vast sums of money have been spent by some of the States for irrigation purposes but judging by the returns we can safely infer that either they must be beyond the reach of the majority of the cultivators or the incidental charges for the facility may be too heavy to be paid.

Another novel feature of the agriculture is that while some States have land tenures based on Vighoti System, the others prefer to continue the age-old system of Bhagbatai.

As regards the per capita incidence of land revenue, it is certainly a regrettable feature of the agriculture in Kathiawar that the charge works out as high as Rs. 7. 7 in some States while in the majority of the States it never works out below Rs. 4.6. This charge is much more higher when compared with the conditions prevailing elsewhere.

So far as the financing of agriculture is concerned beyond granting the tagavi loans the States do nothing. The Co-operative movement is for all practical purposes

non-existent and the village money-lender still enjoys his age-old premier position.

These are the salient features which our detailed study of the problems of agriculture within the province has brought forward. It is now desirable for us to survey the existing industries of the province.

INDUSTRIES

For the purposes of the survey, a rough classification of the industries has been adopted and they are distributed according to their nature into :—

(1) Organised Industries,
(2) Unorganised Industries,
and (3) Agricultural or Pastoral Industries.

Under the head of the 'Organised Industries' are grouped together those industries which employ a comparatively larger number of workmen under one roof irrespective of the use of modern machinery. Thus, under this head, the surveys of the Cotton Industry, the Pottery Works, the Glass Works, the Oil Mills, the Cement Industry, the Salt Works, the Match Works, the Bone Mills, the Tin Factories, the Brass and Metal Works, the Iron Works, the Pharmacies and Chemical Works, the Ice and Aerated Water Factories, the Soap Factories, the Tanneries and Shoe Factories, the Saw and Flour Mills, the Printing Presses, the Cement Tiles Works the Pearl Fishing etc. etc., are attempted.

While under the unorganised industries the surveys of the handloom industry, the Blanket making, Stone Carving, Ivory Works, Tape and Lace Work, Tulsi Beads making, Silver Work on 'Hukka', Cart Manufacturing, Ship Building, Fishing etc. etc., are effected. Under this head the specialities of certain States are also noted.

On the other hand, under the division of the agricultural and pastoral industries, the ghee industry, honey making etc. etc. are surveyed.

As statistical material in respect all the industries is not available, we have to content ourselves by merely noting the tendencies namely, that in Kathiawar there exists a variety of industrial undertakings and that the adaptability of the populace towards the industrial pursuits is remarkable.

TRANSPORTS

In the earlier days, the main trade route was along the coast. The roads that were constructed, were primarily intended for military purposes, but they were later on followed by the traders and Vanjaras, and towns began to grow up on those routes. Those were the hey-days of Kathiawar handicrafts and manufacture. The railway brought with it the ginning and pressing factories and the spinning and weaving mills. The widespread net work of railways coupled with the existence of modernised and commercialised ports gave altogether a new orientation to the trade and industry of Kathiawar. Kathiawar has become united with the outside world by these ports and it no longer depends upon Bombay or Karachi for the supply of foreign articles. After the development of the ports many new industrial concerns have come to exist in the province.

Can it then be asserted that in view of these facilities Kathiawar has been industrialised to the core? It is rather the other way. What new industries can be started within the province has been dealt with in the Chapter XII on Industrial Scope.

NEED FOR A TRANSPORT CO-ORDINATION

At an earlier stage we had the occasion to examine the part played by the transport facilities in the rise and growth of industry within the province; and since transports have acquired an important place in the modern economic system, a detailed survey of the various means of transports undertaken reveals that the carts though they have lost their

premier position as a means of transport, they hold their own and are now used in carrying the farmer's produce from the village to the neighbouring railway station or to the nearest town. Over and above the carts, there are other sytems of transport like, ferries, railways, motor buses, and lorries and the country crafts. But the ferries and the country crafts apportion as among themselves a very negligible portion of the total traffic of Kathiawar both in men and materials. The motor buses, though they have come to stay as a modern means of transport, are handicapped, in as much as the tariff barriers erected by the States in the interior prevent their free province-wide operations. Again they are subjected to heavy license fees and even these licenses issued by a particular State are not recognised by the other States. The railways though a little more than 1,000 miles in length are under as many as six different managements each pulling in its own direction. The individualistic tendencies of the railway owning States sacrifice the interests of the province as a whole to their own selfish consideration of revenue. And, therefore, in the larger interests of the trade and industry of the province a uniform policy, and, co-ordination of means of transport, are the urgent needs of the hour.

REPURCUSSION OF POLITICAL CONDITIONS ON THE INDUSTRIAL ADVANCEMENT: INTER-STATE TARIFFS

In order to appreciate the real nature of the autonomous powers enjoyed by the various States, a historical survey has been undertaken. The history of the States' relation with the British Government has been traced since the days of the Walker Settlement and the nature of their rights and obligations are fully analysed. Nature of the Government carried on by the States in Kathiawar is also examined in minutest details. All these have revealed that the autonomous powers of the States are granted and confirmed by the Paramount Power subject to its inherent

right of supervision and interference, and that this autonomy is limited in as much as "the right divine to govern wrongly" is denied to the States. As a result of these autonomous powers the Princes have developed extravagant habits and irresponsible attitude, and that large sums of money are being spent after the Palace or Darbar expenditure rather than for such important nation-building activities like Education. With their growing extravagance, new sources of taxes had to be invented and this fact coupled with the desire of the maritime States to develop their ports has led to a widespread system of Inter-State Tariffs which are a great handicap in the way of industrial development of the province. The larger interests of the province require their early removal or replacement by a Customs Union of all the Kathiawar States.

If the Inter-State Tariffs act as a great hindrance in the way of the industrial development of Kathiawar, the Viramgam-Dhandhuka Land Customs Cordon is even a greater obstacle and hence a critical analysis of the Tariff Policy of the British Government in relation to Kathiawar States is absolutely essential.

REPURCUSSION OF POLITICAL CONDITIONS ON THE INDUSTRIAL ADVANCEMENT: SEA CUSTOMS

The Tariff Policy pursued by the British Government contains two salient features, firstly, that at a time when England adopted free trade it was applied to India irrespective of the stage of her economic development. Kathiawar's industries were also ruined by such an irresponsible policy. And secondly, when Government of India adopted the policy of protecting its infant industries, Kathiawar's industrial development was retarded by the imposition of such pernicious measures as the Customs Cordon. In doing this, scant respect was paid to the rights, privileges and treaties with the Indian States by the Government of India. The penali-

sation of Bhavnagar port is a serious and a glaring instance of the violation of treaty rights. As for the Viramgam Cordon enough has been said in the foregoing pages and its immediate removal is an urgent matter of economic expediency.

VILLAGE INDUSTRIES: SCHEMES FOR THEIR DEVELOPMENT

We have already seen that Kathiawar is preponderantly an agricultural province, and that, like the other parts of India it is also a land of villages. Any scheme of industrial development must, therefore, necessarily take into account the existence of these village industries and must contain specific measures calculated to revive them.

In this connection, we may note that this demand, for the revival of village industries and handicrafts, and also for simple life, is not peculiar to India alone. In the West the demand has arisen by way of reaction against the machine age, while in the case of India it is closely connected with the question of bread to the millions of her population. In Kathiawar there is a variety of village industries and various schemes have been put forward for their revival, but under the present circumstances State-aided Village Industries Associations are the only practical solution or as an alternative the States should invite the co-operation of the All India Village Industries Association and ask it to extend its activities within their respective territories.

INDUSTRIAL SCOPE

The problem as to what industries can be started within the province has been tackled from the points of view of :—

(1) Raw Material,
(2) Labour,
and (3) Finance.

Under the head of raw materials are included all those raw materials and natural resources which are at present exported to foreign countries or which lie dormant within the

province. The erection of more textile mills at selected places, the starting of woollen mills, and the cement factories are recommended. The development of the iron resources and the starting of chemical and pharmaceutical industries are suggested. The establishments of lime factories, oil mills, toilet soap factory, tanning industries and leather shoes factories are also recommended.

Our analysis of the problem from all the points of view has led us to the conclusion that the backwardness of Kathiawar in matters of industrial development is not due to any paucity or want of raw materials or natural resources. As regards labour, our survey has revealed that there is no dearth of labour supply in Kathiawar. Only experts will have to be imported from without for the purposes of industrial development. And lastly, no adequate private finance can be procured within the province for starting new industries because capital is shy due to autocratic as well as irresponsible nature of the States' Government.

And this has compelled us to discuss the political conditions in Kathiawar in the previous pages.

This is a brief resume of the conclusions which our investigations have led us to. The materials required for industrial purposes, and, the man power to work them out, are available in Kathiawar: Only the necessary capital is not forthcoming. Our analysis has confirmed our opinion that the main reason behind the apparent shyness of capital is the feeling of insecurity that confronts a prospective banker or investor under a regime of irresponsible autocracy. It will not be, therefore, too much to expect the Princes to introduce within their States an element of responsibility in the Executive. This much sacrifice on their part is required solely in the interest of their own subjects. One is reminded of the old saying from Maha Bharat that 'राजा कालस्य कारणम्'—the King is the cause of

times (bad or good) and one earnestly hopes that the Princes for the sake of their own subjects by sacrificing their autocratic powers will again be the real protectors of the people (प्रजापालक).

Our investigations and analysis of the various aspects of the problem have revealed that in almost all the spheres of Kathiawar's economic life, Princes or the Rulers are the dominating parties. If there is no co-ordination of the transport systems, the reason is that the various States are pulling in their own directions. If there is no Customs Union the reason is that the maritime States and the interior States fail to see eye to eye with each other. If the nation-building activities are starved, the reason is that the Palace or Darbar expenses form a heavy charge on the revenues of the States. Thus for almost all the undesirable features of Kathiawar's economic life, the Rulers appear to be the chief defaulting party. This is not intended as a condemnation of the policy of the States concerned but this has been borne out by a thorough and dispassionate study of the real situation as existing within the province. A wise statesmanship and a judicious policy on the part of the Princes will, therefore be able to solve the main economic problems confronting Kathiawar at the present juncture, and then and then only, a new economic order will be made possible wherein the industries both large scale and cottage will exist side by side in a thriving condition. It is hoped that wiser counsels will prevail, and Kathiawar will witness within the next few years a new policy, which will rejuvenate the decadent industries, and will bring life blood to the tottering industrial structure of the province.

APPENDIX

TABLES

CHAPTER. I. TABLE NO. I.

KATHIAWAR RAINFALL, 1867 to 1881.

Station	Approximate height above sea level	1867	1868	1869	1870	1871	1872	1873	1874	1875	1876	1877	1878	1879	1880	1881	Total	Average
Ambaran	...	...	...	15	23	14	23	16	19	15	14	16	45	30	16	56	302	23
Atkot	...	...	...	12	15	10	23	23	14	18	22	12	53	21	33	27	284	21
Babra	...	19	25	25	13	15	...	25	27	16	13	13	38	16	21	...	266	20
Bagasra	...	...	...	...	...	...	...	...	...	...	...	...	48	12	23	...	83	27
Bajana	47	...	...	...	...	...	...	19	17	18	18	14	27	17	20	22	172	19
Balambha	...	...	...	16	25	19	22	22	24	22	17	19	57	25	23	...	363	27
Bantva	...	...	...	...	...	...	...	22	28	15	19	11	96	15	22	36	264	29
Barwala	128	...	...	14	10	18	20	18	14	26	21	19	90	9	38	33	330	25
Bhadla	...	...	...	...	...	...	...	...	...	...	...	...	...	21	23	19	64	21
Bhadli	...	...	...	14	15	10	24	15	12	26	27	11	73	...	...	...	246	22
Bhoika	98	...	...	...	...	...	...	...	...	16	20	9	40	17	30	...	132	22
Bhal	40	...	...	...	13	21	27	16	23	23	19	13	40	15	16	13	239	19
Bhahwad	...	...	...	17	18	18	24	16	11	11	8	14	78	14	18	56	323	23
Bhavnagar	...	20	37	29	21	18	27	19	26	24	33	19	55	24	26	23	401	26
Botad	263	14	22	17	23	18	25	24	19	20	12	13	55	16	32	11	311	20
Chamardi	...	...	...	...	17	11	19	16	22	25	28	16	63	23	27	...	267	24
Chotila	...	18	24	24	12	15	20	18	21	14	19	9	54	17	29	...	298	21
Chuda	179	...	...	...	...	...	...	...	...	...	...	13	14	16	22	21	86	17
Dasada	...	...	53	18	14	20	32	13	17	18	20	14	35	19	24	...	297	22
Dhrangadhra	150	...	...	...	...	...	...	12	18	14	20	12	24	16	21	18	155	17
Dhrapha	...	...	...	...	...	13	21	20	23	14	7	6	56	11	16	...	187	18
Gadhda	...	16	33	23	12	16	26	37	22	13	17	13	54	18	24	18	342	22
Gogo	...	...	...	...	...	...	30	21	28	30	23	18	36	...	...	...	186	26
Gondal	...	...	...	...	...	...	20	21	23	14	18	9	88	22	19	...	234	26
Hadiana	...	...	...	13	19	15	13	26	15	11	15	11	70	13	19	51	291	22
Jafrabad	...	...	...	...	...	...	...	56	45	49	15	56	89	26	28	20	384	42
Jasdan	...	...	...	...	...	...	...	18	18	18	16	11	51	20	29	27	208	23
Jodhpur	...	...	...	13	16	12	17	29	16	16	6	6	75	15	19	44	284	21
Jodia	...	...	...	15	25	21	18	25	21	14	16	17	68	26	23	59	348	26
Junagadh	...	...	...	...	...	...	38	32	34	16	32	14	104	34	37	46	387	38
Kalavad	...	...	...	15	12	13	18	22	10	12	21	7	57	8	14	32	241	18
Kandorna	389	...	...	13	12	11	16	27	11	14	12	9	90	13	17	32	269	20
Khambalia	...	...	...	16	14	8	22	16	13	8	11	10	84	14	20	40	276	21
Khijadia	...	...	...	44	35	21	28	22	40	13	26	17	72	19	26	...	363	30
Kotda Sangani	...	...	...	...	...	...	...	21	17	17	17	6	57	24	19	30	208	23
Kundla	495	19	26	27	14	9	18	17	18	9	18	11	62	17	22	13	301	20
Lakhtar	...	...	...	...	...	...	...	14	18	16	20	6	26	18	18	16	152	16
Lalpur	...	...	...	13	19	14	20	15	12	10	6	12	68	16	12	29	246	18
Lilia	...	15	26	20	14	22	25	21	23	12	15	15	64	18	17	23	330	22
Limri	...	...	...	...	...	20	24	16	26	20	20	13	44	19	30	18	250	22
Lodhika	...	...	...	...	...	...	20	24	23	22	17	11	67	20	9	...	213	23
Lakhapadar	...	35	26	18	15	10	21	6	17	6	18	8	50	12	15	...	256	18
Mahuva	28	18	22	18	16	9	22	17	31	21	18	18	50	20	21	15	316	21
Malia	...	...	...	...	...	...	...	...	...	...	19	16	36	...	21	42	134	26
Modpur	...	...	...	16	24	15	27	33	17	13	11	11	63	9	18	35	292	22
Morvi	...	...	...	...	...	...	17	17	20	16	20	10	32	18	17	47	214	21
Muli	390	...	...	...	...	...	...	11	10	9	11	8	39	18	22	23	151	16
Nikava	...	...	...	14	17	18	19	11	19	...	...	...	...	8	14	32	152	16
Navanagar	...	...	...	18	16	19	16	19	15	5	13	12	52	14	28	42	270	20
Padadhari	...	...	...	13	17	23	17	17	16	11	7	12	63	18	32	46	292	22
Padana	...	...	...	16	16	16	14	19	15	16	19	12	46	13	10	20	232	17
Paliad	415	...	29	31	...	13	20	17	15	14	20	14	47	13	28	...	262	21
Palitana	250	...	...	31	23	13	30	21	31	28	23	13	52	13	12	15	304	23
Porbandar	...	...	...	...	...	...	...	...	...	...	15	10	64	9	15	29	142	23
Rajkot	...	21	28	33	20	24	16	25	23	14	21	15	52	25	20	36	374	24
Ranpur	190	...	...	16	27	15	23	27	14	2	11	21	22	7	15	54	254	11
Raval	...	...	...	13	13	11	21	26	12	...	11	10	69	3	14	33	236	19
Saela	...	...	...	...	...	...	...	13	13	12	11	11	24	13	19	16	132	14
Santhali	500	...	...	11	17	15	22	14	13	13	19	9	60	11	23	27	254	19
Sihor	107	16	33	20	11	12	19	18	25	18	30	12	56	20	25	21	336	22
Songadi	102	22	43	22	17	14	27	13	21	17	18	13	55	19	26	...	326	23
Talaja	381	19	30	17	15	18	21	14	24	37	33	19	56	15	33	28	379	25
Umrala	...	23	26	22	15	17	22	22	25	19	22	11	50	16	22	22	334	22
Wadala	...	...	...	14	14	17	22	25	17	13	5	6	57	9	21	48	268	20
Wadhwan Stn.	207	15	30	27	10	16	16	17	21	14	14	6	28	15	29	...	258	18
Wadhwan Town	...	...	...	31	15	14	19	17	16	13	13	7	29	17	29	17	237	18
Wala	...	...	...	...	24	23	27	20	24	20	30	14	56	19	35	21	313	26
Wankaner	...	...	...	...	...	...	...	20	26	22	24	10	29	13	14	31	189	19
Wanthali	...	...	...	40	13	12	29	18	15	13	13	10	46	18	30	41	298	22

(*Vide* Gazetteer of the Bombay Presidency (1884) Vol. VIII. Kathiawar Pages 708-710).

CHAPTER IV, TABLE NO. 1

Table showing the Area, Density of Population, Number of Towns and Villages

States and Agencies	Area	Density per Sq. Mile	Towns	Villages
A. Salute States :				
Junagadh ...	3284	166	7	828
Nawanagar ...	3791	108	5	685
Bhavnagar ...	2961	168.9	11	644
Porbandar ...	636	182	1	103
Dhrangadhra ...	1156	77	2	151
Morvi ...	870	129.9	2	153
Gondal ...	1024	201	5	170
Jafrabad ...	53	228	1	10
Vankaner ...	417	106	1	101
Palitana ...	300	207	1	97
Dhrol ...	283	97.6	1	66
Limbdi ...	344	116.5	1	48
Rajkot ...	282	267.8	1	65
Wadhwan ...	236	180.5	1	31
Total A ...	15637	146	40	3152
B. Eastern Kathiawar Agency				
Lakhtar ...	247	96.1	1	48
Sayla ...	221	69.1	1	42
Chuda ...	78	165.5	1	13
Vala ...	109	129	1	38
Lathi ...	42	223.9	1	9
Muli ...	133	128.6	1	19
Bajana ...	183	73.6	...	29
Patdi ...	39	66	...	8
Wadhwan Civil Station.	1	13344	1	...
Rest of the Agency ...	1711	94	...	363
Total B ...	2764	102	7	569

TABLE NO. 1—*contd.*

States and Agencies	Area	Density per Sq. Mile	Towns	Villages
C. Western Kathiawar Agency:				
Jasdan ...	283	120	1	54
Manavadar ...	100	217	...	22
Thana Devdi ...	117	137	...	29
Valia ...	72	191	...	19
Virpur ...	66	122	...	13
Malia ...	103	118	...	16
Kotda Sangani ...	90	116	...	20
Jetpur (Pithadia) ...	122	64	...	18
Jetpur (Bilkha) ...	40	402	...	25
Khairsara ...	47	99	...	14
Rajkot Civil Station ...	2	5813	1	...
Rest of the Agency ...	1355	166	6	329
Total C ...	2397	159	8	559
D. Baroda–				
Amreli ...	1077	161	4	242
Okhamandal ...	275	110	2	42
Total D ...	1352	.....	6	284
GRAND TOTAL ...	22150	142	61	4564

(N. B. This Table has been computed from the Census of Population Report for Western India States Agency and Baroda State's Census Report for 1931).

CHAPTER IV, TABLE NO. 2

Table showing Population Figures of last six Censuses.

States	1881	1891	1901	1911	1921	1931
A. Salute States.	1743941	2067118	1778921	1898092	1949713	228248
B. Eastern Kathiawar Agency	...	...	...	257623	251402	282468
C. Western Kathiawar Agency	...	...	...	358638	344593	381731
Total A. B. & C.	2245770	2654387	2267648	2514353	2545708	2946681
D. Baroda						
Amreli	121212	153283	146132	152871	152585	173948
Okhamandal	23409	26905	27304	25398	25475	30334
Total Kathiawar Population	2390391	2834575	2441084	2692622	2723768	3150963
Increase or decrease of percentage		18.5	-13.8	10.3	1.1	15.7

Increase of percentage between 1881 and 1931 for the whole of Kathiawar — 31.8 per cent.

Increase for Salute States between 1921-31 — 17.0 per cent.

(N. B. This Table has been computed from the Census of Population Report for Western India States Agency and the Baroda State's Census Report for 1931).

CHAPTER IV, TABLE NO. 3

Table showing the Division of Rural and Urban Population together with Males and Females

States		Total Population	URBAN		RURAL	
			Males	Females	Males	Females
A. Salute States :						
Junagadh	...	545152	59390	59018	219476	207268
Nawanagar	...	409192	42308	42825	163459	160600
Bhavnagar	...	500274	78723	73886	178433	169232
Porbandar	...	115673	17088	16295	41418	40872
Dhrangadhra	...	88961	11804	11895	33342	31920
Morvi	...	113023	11574	11884	45348	44217
Gondal	...	205846	37787	39420	65971	62668
Jafrabad	...	12083	2589	2946	3308	3240
Vankaner	...	44259	5502	5634	16819	16304
Palitana	...	62150	6952	6391	25442	23365
Dhrol	...	27639	3452	4055	10156	9976
Limbdi	...	40088	6842	6966	13388	12892
Rajkot	...	75540	24249	23236	14155	13900
Wadhwan	...	42602	8975	9294	12338	11995
Total A	...	2282482	317235	313745	843053	808449

B. Eastern Kathiawar Agency :						
Lakhtar	...	23754	3043	2968	9050	8693
Sayla	...	15285	2556	2674	5184	4871
Chuda	...	12915	3051	3287	3382	3195
Vala	...	14062	2080	2060	5247	4675
Lathi	...	9404	2997	3099	1666	1642
Muli	...	17109	2731	2658	5980	5740
Bajana	...	13481	...	...	6800	6681
Patdi	...	2573	...	...	1348	1225
Wadhwan Civil Station	...	13344	7185	6159	...	...
Rest of the Agency	...	160541	...	...	82544	77997
Total B	...	282468	23643	22905	121201	114719
C. Western Kathiawar Agency :						
Jasdan	...	34053	3094	2913	14426	13620
Manavadar	...	21733	...	...	11022	10711
Thana Devdi	...	16005	...	...	8158	7847
Valia	...	13722	...	...	7012	6710
Virpur	...	8050	...	...	4112	3938
Malia	...	12134	...	...	6100	6034
Kotda Sangani	...	10420	...	...	5157	5263
Jetpur (Pithadia)	...	7830	...	...	4069	3761
Jetpur (Bilkha)	...	16091	...	...	8223	7868
Khairsara	...	4658	...	...	2342	2316
Rajkot Civil Station	...	11627	6404	5223	...	...
Rest of the Agency	...	225408	29766	30861	83800	80981
Total C	...	381731	39264	38997	154421	149049

TABLE NO. 3—*contd.*

States		Total Population	URBAN		RURAL	
			Males	Females	Males	Females
D. Baroda:	...					
Amreli	...	173948	18698	18187	70108	66955
Okhamandal	...	30334	5872	5620	9922	8920
Total D	...	204282	24570	23807	80030	75875
GRAND TOTAL A. B. C. & D.	...	3150963	404712	399454	1198705	1148092

Total	...	Total Population	Urban	Rural
A	...	2282482	630980	1651502
B	...	282468	46548	235920
C	...	381731	78261	303470
D	...	204282	48377	155905
GRAND TOTAL	...	3150963	804166	2346797

(*N. B.*—This Table has been computed from the Census of Population Report for Western India States Agency, and the Baroda State's Census Report for 1931.)

CHAPTER IV, TABLE NO. 4

Table showing Percentage of Urban Population in Principal Units of Kathiawar

Unit	No. of towns	Percentage of urban population to total population
Junagadh ...	7	22
Nawanagar ...	5	21
Bhavnagar ...	11	31
Porbandar ...	1	29
Dhrangadhra ...	2	27
Morvi ...	2	21
Gondal ...	5	38
Jafrabad ...	1	46
Vankaner ...	1	25
Palitana ...	1	21
Dhrol ...	1	27
Limbdi ...	1	34
Rajkot ...	1	63
Wadhwan ...	1	43
Lakhtar ...	1	25
Sayla ...	1	34
Chuda ...	1	50
Vala ...	1	29
Lathi ...	1	65
Muli ...	1	31
Wadhwan Civil Station ...	1	100
Jasdan ...	1	18
Rajkot Civil Station ...	1	100

(N. B. This Table has been computed from the Census of Population Report for Western India States Agency and the Baroda State's Census Report for 1931.)

CHAPTER IV. TABLE No. 5

Table showing Cities, Towns and Villages classified by Population.

State	No. of Towns & Villages	Population	Under 500		500–1000		1000–2000		2000–5000		5000–10000		10000–20000		20000–50000		50000–100000	
			No.	Population	No.	Population	No.	Population	No.	Population	No.	Population	No.	Population	No.	Population	No.	Population
A. Salute States:																		
Junagadh	835	545152	555	148583	189	129664	67	94374	16	48292	4	32465	2	30770	2	61004	...	...
Nawanagar	690	409192	472	115804	152	102782	47	60951	14	43811	3	19164	1	10913	...	...	1	54804
Bhavnagar	655	500274	377	102606	190	131538	68	91552	12	31394	5	35259	2	31650	...	...	1	74523
Porbandar	104	115673	47	12569	32	21874	18	27319	5	13175	1	7353	...	...	1	33383	...	...
Dhrangadhra	153	88961	109	26757	33	22897	8	12544	1	3064	1	6161	1	17538	...	...	...	...
Morvi	155	113023	78	24354	59	40510	14	18917	3	10308	...	...	1	18934	...	...	...	...
Gondal	175	205846	78	23565	62	44442	17	20934	14	42169	1	7457	1	13404	2	53875	...	...
Jafrabad	11	12083	3	1054	7	5494	...	...	...	...	1	5535	...	...	...	...	...	...
Wankaner	102	44259	83	17996	13	8866	5	6261	...	...	...	...	1	11136	...	...	...	...
Palitana	98	62150	61	15858	29	19173	6	10032	1	3744	...	...	1	13343	...	...	...	...
Dhrol	67	27639	56	11842	8	5280	2	3010	...	...	1	7507	...	...	...	...	...	...
Limbdi	49	40088	34	9228	6	4294	6	8359	2	4399	...	...	1	13808	...	...	...	...
Rajkot	66	75540	47	12086	13	8208	4	5450	1	2311	...	...	...	...	1	47485	...	...
Wadhwan	32	42602	13	3925	8	5632	9	12712	1	2064	...	...	1	18269	...	...	...	...
Total A. ...	3192	2282482	2013	526227	801	550654	271	372415	70	204731	17	120901	12	1,79,765	6	195747	2	129327
B. Eastern Kathiawar Agency:																		
Lakhtar	49	23754	40	8946	6	4180	1	1634	1	2983	1	6011	...	...	...	...	...	...
Sayla	43	15285	36	5781	5	2930	1	1344	...	...	1	5230	...	...	...	...	...	...
Chuda	14	12915	7	1819	4	2231	2	2527	...	...	1	6338	...	...	..	...	...	...
Vala	39	14062	35	7804	3	2118	...	...	1	4140	...	...	...	...	...	...	...	...
Lathi	10	9404	8	2709	1	599	...	...	...	...	1	6096	...	...	...	...	...	...
Muli	20	17109	9	2699	9	6462	..	...	1	2559	1	5389	...	...	...	...	...	...
Bajana	29	13481	20	4879	7	4865	1	1093	1	2644	...	...	...	...	...	...	...	...
Patdi	8	2573	8	2573	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wadhwan Civil Station	1	13344	...	...	...	...	...	...	...	...	...	...	1	13344	...	...	...	...
Rest of the Agency	363	160541	263	60418	70	47594	22	29307	8	23131	...	...	...	...	...	...	...	...
Total B. ...	576	282468	426	97628	105	70979	27	35905	12	35457	5	29064	1	13344	...	...	...	...
C. Western Kathiawar Agency:																		
Jasdan	55	34053	35	9921	13	8059	5	6689	1	3377	1	6007	...	...	...	...	...	...
Manavadar	22	21733	4	1068	13	9966	4	5232	...	...	1	5467	...	...	...	...	...	...
Thana Devdi	29	16005	18	5009	7	4437	4	6559	...	...	...	...	...	...	...	...	...	...
Valia	19	13722	5	1817	12	8188	1	1386	1	2331	...	...	...	...	...	...	...	...
Virpur	13	8050	10	2754	1	519	...	...	2	4777	..	...	...	...	...	...	...	...
Maliya	16	12134	11	2547	3	2405	...	...	2	7182	..	...	...	...	...	...	...	...
Kotda Sangani	20	10420	16	4281	1	569	2	2259	1	3311	...	...	...	...	...	...	...	...
Jetpur (Pithadia)	18	7830	14	3647	2	1878	2	2305	...	...	...	...	...	...	...	...	...	...
Jetpur (Bilkha)	25	16091	13	3858	8	5463	3	3761	1	3009	...	...	...	...	...	...	...	...
Khairsara	14	4658	11	2544	3	2114	...	...	...	...	...	...	...	...	...	...	...	...
Rajkot Civil Station	1	11627	...	...	...	...	...	...	...	...	...	...	1	11627	...	...	...	...
Rest of the Agency	335	225408	217	57880	86	61123	21	26994	4	13539	5	29663	1	13236	1	22973	...	...
Total C. ...	567	381731	354	95326	149	104721	42	55185	12	37526	7	41137	2	24863	1	22973	...	...
D. Baroda:																		
Amreli	246	173948	137	36699	70	49013	31	41246	5	14084	2	12720	...	...	1	20186	...	...
Okhamandal	44	30334	29	7270	10	6491	2	2597	2	6344	1	7632	...	...	...	...	...	...
Total D. ...	290	204282	166	43969	80	55504	33	43843	7	20428	3	20352	...	...	1	20186	...	...
Grand Total A, B, C & D (Kathiawar)...	4625	3150963	2959	763150	1135	781858	373	507348	101	298142	32	211454	15	217972	8	238906	2	129327

(*N.B.*—This table has been computed from the Census of Population Report of the Western India States Agency and the Baroda State's Census Report for 1931).

CHAPTER IV, TABLE NO. 6

General Table showing Distribution of Population by Age Groups.

Age	Persons	Males	Females
0—5	497690	245832	251858
5–10	437658	226778	210880
10–15	400412	212159	188253
15–20	306222	157655	148567
20–30	515205	257525	257680
30–40	392249	197047	195202
40–50	288374	150149	138225
50–60	179289	91391	87898
60 & Over	133864	64881	68983
Total ...	3150963	1603417	1547546

(This Table has been computed from the Census of Population Report for Western India States Agency and the Baroda State's Census Report for 1931).

CHAPTER IV, TABLE NO. 7

Table showing the Distribution of Population into Males and Females.

States	Total Population	Males	Females
A. Salute States :—			
Junagadh ...	5,45,152	2,78,866	2,66,286
Nawanagar ...	4,09,192	2,05,767	2,03,425
Bhavnagar ...	5,00,274	2,57,156	2,43,118
Porbandar ...	1,15,673	58,506	57,167
Dhrangadhra ...	88,961	45,146	43,815
Morvi ...	1,13,023	56,922	56,101
Gondal ...	2,05,846	1,03,758	1,02,088
Jafrabad ...	12,083	5,897	6,186
Vankaner ...	44,259	22,321	21,938
Palitana ...	62,150	32,394	29,756
Dhrol ...	27,639	13,608	14,031
Limbdi ...	40,088	20,230	19,858
Rajkot ...	75,540	38,404	37,136
Wadhwan ...	42,602	21,313	21,289
Total A ...	22,82,482	11,60,288	11,22,194
B. Eastern Kathiawar Agency:			
Lakhtar ...	23,754	12,093	11,661
Sayla ...	15,285	7,740	7,545
Chuda ...	12,915	6,433	6,482
Vala ...	14,062	7,327	6,735
Lathi ...	9,404	4,663	4,741
Muli ...	17,109	8,711	8,398
Bajana ...	13,481	6,800	6,681
Patdi ...	2,573	1,348	1,225
Wadhwan Civil Station ...	13,344	7,185	6,159
Rest of the Agency ...	1,60,541	82,544	77,997
Total B ...	2,82,468	1,44,844	1,37,624

TABLE NO. 7—*contd.*

States	Total Population	Males	Females
C. Western Kathiawar Agency:			
Jasdan ...	34,053	17,520	16,533
Manavadar ...	21,733	11,022	10,711
Thana Devdi ...	16,005	8,158	7,847
Valia ...	13,722	7,012	6,710
Virpur ...	8,050	4,112	3,938
Malia ...	12,134	6,100	6,034
Kotda Sangani ...	10,420	5,157	5,263
Jetpur (Pithadia) ...	7830	4,069	3,761
Jetpur (Bilkha) ...	16,091	8,223	7,868
Khairsara ...	4,658	2,342	2,316
Rajkot Civil Station ...	11,627	6,404	5,223
Rest of the Agency ...	2,25,408	1,13,566	1,11,842
Total C ...	3,81,731	1,93,685	1,88,046
D. Baroda :—			
Amreli ...	1,73,948	88,806	85,142
Okha Mandal ...	30,334	15,794	14,540
Total D ...	2,04,282	1,04,600	99,682
GRAND TOTAL ...	31,50,962	16,03,417	15,47,546

(N. B. This Table has been computed from the Census of Population Report for Western India States Agency and the Baroda State's Census Report for 1931).

CHAPTER IV, TABLE No. 8

Table showing Ratio of Females per 1000 Males

States		Females per 1000 Males	
	Kathiawar ...		966
A.	Salute States ...		967
	Junagadh ...	956	
	Nawanagar ...	989	
	Bhavnagar ...	945	
	Porbandar ...	977	
	Dhrangadhra ...	971	
	Morvi ...	986	
	Gondal ...	984	
	Jafrabad ...	1049	
	Vankaner ...	983	
	Palitana ...	919	
	Dhrol ...	1031	
	Limbdi ...	982	
	Rajkot ...	967	
	Wadhwan ...	999	
B.	Eastern Kathiawar Agency ...		950
	Lakhtar ...	964	
	Sayla ...	975	
	Chuda ...	1005	
	Vala ...	919	
	Lathi ...	1017	
	Muli ...	964	
	Bajana ...	983	
	Patdi ...	909	
	Wadhwan Civil Station ...	857	
	Rest of the Agency ...	945	
C.	Western Kathiawar Agency ...		971
	Jasdan ...	944	
	Manavadar ...	972	
	Thana Devdi ...	962	
	Valia ...	957	
	Virpur ...	958	
	Maliya ...	989	
	Kotda Sangani ...	1021	
	Jetpur (Pithadia) ...	924	
	Jetpur (Bilkha) ...	957	
	Khairsara ...	989	
	Rajkot Civil Station ...	816	
	Rest of the Agency ...	985	

(*N.B.* This Table has been computed from the Census of Population Report for Western India States Agency and the Baroda State's Census Report for 1931).

CHAPTER IV, TABLE NO. 9

Table showing Literacy by Age and Sex

Age	Total			Literate			Illiterate			Literate in English		
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
Total	3150963	1603417	1547546	388261	318231	70030	2762130	1284879	1477251	35234	34012	1222
0—5	497690	245832	251858	.....	.....	.....	497690	245832	251858	.....	.....	.....
5–10	437658	226778	210880	35097	26253	8844	402561	200525	202036	889	829	60
10–15	400412	212159	188253	55491	42054	13437	344921	170105	174816	3377	3213	164
15–20	306222	157655	148567	59451	46716	12735	246771	110939	135832	7652	7370	282
20 & Over	1508409	760686	747723	238222	203208	35014	1270187	557478	712709	23316	22600	716
Unspecified	572	307	265	.....	.....	.....	.....	.....	.....	.....	.....	.....

(N.B. This table has been computed from the Census of Population Report for Western India States Agency and the Baroda State's Census Report for 1931).

CHAPTER IV, TABLE NO. 10

Table showing Literacy by Age, Sex and Locality

State	Number per mile who are literate										
	Persons	All ages 5 & over		5–10		10–15		15–20		20 & Over	
		Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
A. Salute State:											
Junagadh ...	110	186	29	79	20	140	34	234	47	222	27
Nawanagar ...	140	230	47	132	38	213	63	286	72	254	40
Bhavnagar ...	162	254	64	115	44	201	76	314	104	298	58
Porbandar ...	190	273	105	163	79	264	125	342	163	292	96
Dhrangadhra ...	152	242	60	128	46	203	70	288	86	280	57
Morvi ...	124	225	33	103	27	165	42	257	47	270	29
Gondal ...	102	165	37	27	7	128	42	279	56	188	40
Jafrabad ...	132	219	49	113	50	194	67	317	40	247	45
Vankaner ...	135	207	62	121	54	198	83	257	89	225	53
Palitana ...	115	173	51	122	40	174	62	192	70	184	48
Dhrol ...	81	162	18	96	16	146	23	176	28	185	15
Limbdi ...	191	302	78	147	65	241	99	350	111	357	70
Rajkot ...	267	379	118	196	105	319	166	502	174	424	99
Wadhwan ...	168	272	62	119	40	207	73	331	102	322	58

State	Number per mille who are literate										
	Persons	All ages 5 & over		5–10		10–15		15–20		20 & over	
		Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
B. Eastern Kathiawar Agency:											
Lakhtar ...	144	231	54	133	40	210	70	278	74	259	49
Sayla ...	103	158	36	81	29	135	44	175	58	204	32
Chuda ...	139	232	47	69	20	144	42	290	89	295	37
Vala ...	135	207	55	116	52	180	66	235	65	234	51
Lathi ...	181	281	82	157	74	247	116	330	131	322	66
Muli ...	135	224	41	115	43	180	60	241	64	266	31
Bajana ...	119	213	23	127	24	196	31	246	29	234	20
Patdi ...	96	176	8	141	6	195	...	194	9	176	8
Wadhwan Civil Station ...	338	484	163	284	156	434	233	558	217	532	138
Rest of the Agency ..	110	178	36	93	27	142	46	203	55	209	32

CHAPTER IV, TABLE NO. 10—*contd.*

State	Number per mille who are literate										
	Persons	All ages 5 & over		5–10		10–15		15–20		20 & over	
		Males	Famales	Males	Famales	Males	Famales	Males	Famales	Males	Famales
C.Western Kathiawar Agency :											
Jasdan ...	109	180	33	104	33	157	46	202	45	204	27
Manavadar ...	137	242	27	124	23	222	37	322	40	265	22
Thana Devdi ...	100	175	21	97	28	151	34	189	27	202	15
Valia ...	113	167	26	112	22	179	34	228	39	220	23
Virpur ...	129	212	41	142	39	197	56	254	67	229	31
Malia ...	120	206	34	102	27	153	37	217	47	249	33
Kotda Sangani...	91	155	28	59	9	105	24	185	59	195	25
Jetpur (Pithadia).	77	137	11	58	4	101	4	128	16	172	13
Jetpur (Bilkha)...	99	172	24	92	17	148	24	195	29	198	23
Khairsara ...	77	125	27	57	22	81	21	118	25	159	31
Rajkot Civil Station ...	402	535	235	291	148	478	251	621	341	584	230
Rest of the Agency ...	146	253	38	146	34	199	51	300	57	283	32

(N. B. This Table has been computed from the Census of Population Report for Western India States Agency and the Baroda State's Census Report for 1931)

CHAPTER IV, TABLE 11

Table showing Occupation or Means of Livelihood

Occupation	Total following Occupation	As principal Occupation		As working dependants		As subsidiary to other occupation	
		Males	Females	Males	Females	Males	Females
Total All Classes ...	1225876	723955	100422	156589	223582	19485	1843
Class A. Production of Raw... Materials	704379	367230	51360	103089	173962	7885	853
Class B. Preparation and... supply of Material Substances	297104	216039	17276	36000	20583	6689	517
Class C. Public Administration... and Liberal Arts	79844	67858	3361	5169	980	2427	49
Class D. Miscellaneous ...	144549	72828	28425	12331	28057	2484	424

(N.B. This Table has been computed from the Census of Population Report for Western India States Agency and the Baroda State's Census Report for 1931).

CHAPTER IV, TABLE NO. 12

Table showing the Distribution of Workers in the Various Occupations

No.	Sub Class	As principal Occupation		As Working Dependants		As subsidiary to other occupation	
		Males	Females	Males	Females	Males	Females
	Class A.						
I.	Exploitation of Animals and Vegetation ...	362484	50483	102503	173498	7822	851
II.	Minerals	4746	877	586	464	63	2
	Class B.						
III.	Industry ...	117042	11442	20333	14027	2405	259
IV.	Transport ...	24873	1474	4060	2836	531	24
V.	Trade ...	74124	4360	11607	3720	3753	234
	Class C.						
VI.	Public Force ...	15542	40	506	13	346	...
VII.	Public Administration ...	23875	833	1472	280	1126	20
VIII.	Professions and Liberal Arts ...	28441	2488	3191	687	955	29
	Class D.						
IX.	Persons living on their income ...	1860	689	31	143	122	11
X.	Domestic Service ...	16759	1680	1101	1797	215	12
XI.	Insufficiently described Occupations ...	38621	23588	8682	24303	1553	362
XII.	Unproductive ...	15588	2468	2517	1814	594	39
	Total ...	723955	100422	156589	223582	19485	1843

(N.B. This Table has been computed from the Census of Population Report for Western India States Agency and the Baroda State's Census Report for 1931).

CHAPTER IV, TABLE NO. 13

Table showing the Details of Sub Class III.—Industry

Order No.	Description	Principal Occupation		Working Dependants		Subsidiary	
		Males	Females	Males	Females	Males	Females
5	Textiles ...	24330	4727	3460	5212	545	77
6	Hides, Skins, etc., ...	8902	602	965	722	213	8
7	Wood ...	13379	403	2369	734	261	75
8	Metals ...	8328	92	1939	125	198	5
9	Ceramics ...	10259	1115	2286	3737	128	22
10	Chemical Products ...	3444	422	533	280	186	3
11	Food ...	3888	1177	712	378	106	49
12	Dress and the Toilet ...	23689	1268	3744	1246	313	6
14	Building, etc., ...	8508	310	2305	473	111	4
17	Miscellaneous and Undefined ...	11409	1314	1903	1039	330	9
	Total ...	116136	11430	20216	13946	2391	258

(N. B. This Table has been computed from the Census of Population Report for Western India States Agency and the Baroda State's Census Report for 1931.)

CHAPTER IV, TABLE NO. 14

Table showing the Details of Sub Class 5 Trade

Order No.	Description	Earners		Working dependants		Subsidiary	
		Males	Females	Males	Females	Males	Females
23	Banks, establishments of credits, etc.,	3841	863	401	118	943	15
24	Brokerage, commission agents, etc.,	1199	15	134	...	148	...
25	Trade in Textiles ...	10668	50	3824	101	886	...
26	Trade in Skins, leather, etc., ...	781	47	72	27	8	...
27	Trade in Wood ...	835	108	58	124	30	...
31	Hotels, Cafes, restaurants, etc., ...	3411	149	346	25	49	...
32	Other Trade in food-stuffs ...	24453	1509	3855	2007	954	112
36	Trade in means of transport ...	949	7	24	...	17	...
37	Trade in fuel ...	692	883	131	751	63	91
38	Trade in articles of luxury ...	1437	31	158	3	29	...
39	Trade, other sorts ...	24188	656	2405	508	553	16
	Total ...	72454	4318	11408	3664	3680	234

(N. B. This Table has been computed from the Census of Population Report for Western India States Agency and the Baroda State's Census Report for 1931).

CHAPTER V, TABLE NO. 1

Table showing the Distribution of the Agricultural Workers

Class	Principal earners		Working dependants		Subsidiary	
	Males	Females	Males	Females	Males	Females
Total Class A: Production of Raw Materials...	3,67,230	51,360	1,03,089	1,73,962	7,885	853
Total Sub-Class I: Exploitation of Animals and Vegetation ...	3,62,484	50,483	1,02,503	1,73,498	7,822	851
Total Order I: Pasture and Agriculture ...	3,61,465	50,265	1,02,262	1,73,305	7,727	851
Total Sub-Division I-A: Cultivation ...	3,33,471	46,156	92,530	1,65,703	6,749	572
Total Sub-Order I-A, Group 1: Non-Cultivating Proprietors taking rent in money or kind ...	17,672	2,406	506	1,085	1,011	29
Total Sub-Order I-A, Group 2: Estate Agents and Managers of Owners ...	1,162	...	2	...	9	...
Total Sub-Order I-A, Group 3: Estate Agents and Managers of Government ...	1	...	...	...	...	...
Total Sub-Order I-A, Group 4: Rent Collectors, Clerks, etc....	12	...	...	...	...	...
Total Sub-Order I-A, Group 5: Cultivating Owners ...	44,102	1,144	12,427	23,496	1,230	31
Total Sub-Order I-A, Group 6: Tenant Cultivators ...	2,05,128	11,499	13,756	24,260	1,990	79
Total Sub-Order I-A, Group 7: Agricultural Labourers ...	55,394	31,107	65,839	1,16,862	2,509	433
Total Sub-Order I-B: Cultivation of Special Crops...	3,038	238	897	516	125	18
Total Sub-Order I-C: Forestry ...	2,931	879	456	1,535	69	22
Total Sub-Order I-D: Stock Raising ...	32,023	2,992	8,379	5,550	784	239
Total Sub-Order I-E: Raising of Small Animals and Insects ...	2	...	...	1	...	...
Total Sub-Order II: Fishing and Hunting ...	1,019	218	241	193	95	...
Total Sub-Class II: Exploitation of Minerals ...	4,746	877	586	464	63	2

(N.B. This table has been computed from the Census of Population Report for Westren India States Agency and the Baroda State's Census Report for 1931).

CHAPTER V, TABLE No. 2

Table showing the number of Darbari Khedutş and the total area cultivated by them in the Bhavnagar State

Year	Number of Darbari Khedutş	Total area cultivated by them
		Acres
1912–13	19,857	8,19,119
1915–16	19,608	7,26,553
1919–20	19,901	7,52,694
1924–25	19,727	7,40,038
1925–26	19,736	8,01,944
1926–27	19,804	8,19,884
1927–28	20,029	8,06,994
1928–29	20,029	8,24,294
1929–30	20,029	8,20.118
1930–31	23,959	8,23,531
1931–32	22,413	9,07,200
1932–33	22,243	8,01,048
1933–34	24,552	7,76,173
1934–35	29,827	7,95,395

(*N.B.*—Figures have been taken from the Administration Reports of the State. As the Bhavnagar State Authorities have stopped publishing the number of Darbari Cultivators in their Administration Reports from 1935–36 onwards, the latest figures are not available to us.)

CHAPTER V, TABLE No. 3

Table showing the Land Revenue and the Total Population in the six principal States of Kathiawar

State	Year	Land Revenue	Total Population
		Rs.	
Junagadh	1933–34	24,55,658	5,45,152
Bhavnagar	1933–34	26,48,799	5,00,274
Jamnagar	1933–34	29,03,113	4,09,192
Rajkot	1933–34*	3,50,294	75,540
Gondal	1933–34	15,98,248	2,05,846
Porbandar	1932–33	8,37,514	1,15,673

* Samvat Year 1990

(N.B.—Figures have been taken from the Administration Reports of the States concerned).

QUESTIONNAIRE

1. A—Enumerate the Industries that have come into existence in your State during the last decade.

   B—How do you account for their rise ?

2. A—Which premier Industries of your State have experienced decline in the last decade ?

   B—How do you account for their decline ?

3. A—Which Industries are suitable for development in your State with particular regard to the Raw Materials produced within the territories ?

   B—Whether in your opinion the said Industries can thrive without the active support of the State ?

   C—Whether in your opinion the said Industries can be developed without the support of outside Capital ?

4. A—What facilities your State is affording to outside capital for investment within its boundaries ?

   B—To what extent the development of Industries by means of outside Capital will benefit your State ?

5. A—Do you think it desirable that the profits of the Industries developed by means of outside capital should remain within the State and thus alleviate the economic conditions of the people ?

   B—How far is this practicable ?

   C—Whether any attempt has been made in this direction ?

6. A—Do you believe in Monopolies in Industries ? If so, whether State or Private ?

   B—How many Industries in your State are State Monopolies ? Which are they ?

   C—How many Industries in your State are Private Monopolies ? Which are they ?

7. A—To what extent in your opinion the industrial development of Kathiawar is retarded or hampered by the Inter-State tariffs.

   B—Whether a plan for tariff union embracing all the States is feasible in your opinion ?

8. A—Viramgam Cordon–how far is it responsible for the declining trade in Kathiawar ?

   B—Can you suggest any practical scheme for replacing the said Viramgam duties ?

   C—To what extent and in what manner the industries and trade of your State are hampered by the Viramgam Cordon ?

9. What improvements in Transport Facilities do you suggest for a better co-ordination of industrial activities ?

10. Which Handicrafts are in existence in your State ?

11. What Cottage Industries can be developed within your State ?

BIBLIOGRAPHY

In the absence of other sources of definite statistical data regarding the various problems confronting Kathiawar, States' State Administration Reports are taken as representative depicting the real existing situation.

Statistical Records

Baroda State Administration Reports 1876–77 to 1938–39

Bhavnagar State „ „ ... 1912–13 to 1938–39

Dhrangadhra State „ „ ... 1926–27 & 1932–33

Gondal State „ „ ... 1925–26 to 1933–34

Janjira State „ „ ... 1930–31 to 1935–36

Junagadh State „ „ ... 1920–21 to 1937–38

Lathi State „ „ ... 1920–21 to 1928–29

Limbdi State „ „ ... 1935–36

Morvi State „ „ ... 1929–30 to 1938–39

Muli State „ „ ... 1935–36

Nawanagar State „ „ ... 1929–30 to 1938–39

Porbandar State „ „ ... 1924–25 to 1935–36

Rajkot State „ „ ... 1907–08 to 1934–35

Wadhwan State „ „ ... 1924–25 to 1934–35

Baroda State Statistical Abstract ... 1914–15 to 1923–24

„ „ „ „ ... 1919–20 to 1928–29

„ „ „ „ ... 1920–21 to 1929–30

„ „ „ „ ... 1923–24 to 1932–33

„ „ „ „ ... 1924–25 to 1933–34

„ „ „ „ ... 1925–26 to 1934–35

Gazetteer of the Bombay Presidency. Vol. VIII Kathiawar.

„ „ „ „ ... Vol. VII Baroda.

Geography :

Geography of the Baroda State.
Geography of the Bhavnagar State.
Commercial Geography Pitman's Publication.
A Concise Geography of the World by L. Dudley Stamp.
Geography of the Dhrangadhra State.
Geography of the Gujarat.
Gūjarāt nī Ābōhavō.
Our World—A Human Geography by Morrison
Geography of the Junagadh State.
Geography of the Morvi State.
Geography of the Nawanagar State.
Geography of the Wadhwan State.

Geology :

Economic Geology of the Porbandar State by E. H. Adye.
Economic Geology of the Nawanagar State by E. H. Adye.
Geology of India by Medlicott and Blanford.
The Geology of Baroda State by R. Bruce Foote.
Mineral Resources of Baroda by Iyer.
Report on the Geology of the Morvi State by H. J. Eunson.
Summary of G. Theobald's Paper on Gujarat's Geology.

Population :

Census of the Baroda State	1931
Census of the Bhavnagar State	1931
Census of the Bombay Presidency Vols. I & II.	1931
Census of the Western India States Agency	1931

Population Problem in India by Ranadive
The Population Problem in India by P. K. Wattal.

Agriculture :

Agricultural Debt Redemption and After in Bhavnagar by Sjt. N. M. Surati, B.A., LL.B.

Agricultural Indebtedness by K. S. Gupte.

Agricultural Progress in Western India by G. Keatinge.

Cattle Improvement in Bhavnagar State (1938).

Economics of Agricultural Progress by Sapre.

Intensive Farming in India by Kenny.

The Indian Peasant Uprooted by Margaret Read.

Land and Labour in a Deccan Village by Dr. H. Mann.

Landlordism in India by Datta.

Land Taxation in India by M. H. Vakil.

Life and Labour in a South Gujarat Village by Mukhatyar.

Outline of reforms worth introducing in Agricultural and Village Life, by Sjt. N. M. Surati, B.A., LL.B.

Peasant Proprietorship in India by Prof. D. Datta.

Progress in Nawanagar State by John De La Valette.

The Punjab in Prosperity and Debt by M. L. Darling.

Redemption of Agricultural Indebtedness in Bhavnagar State (1934)

Report of the Linlithgow Commission on Indian Agriculture.

Rūna-Mukti anē Rachanātmak-Kārya by Sjt. N. M. Surati.

Some South India Villages by Dr. Gilbert Slater.

Wealth and Welfare of the Punjab by Calvert.

Industries :

Bardānū Vanaspatī Shāstrā (Herbs of Barda) by Thakar Jaykrishna Indraji.

Capital's Indian Industries & Transport Supplement 1936.

„ „ „ „ „ 1937.

Economic Conditions in India by Dr. Pillai.

Economic History of India by Dutt.

Growth of English Industry and Commerce by Cunningham.

Growth of Trade and Industry in Modern India by Vakil & Bose.

Industrial Decline in India by Dr. Balkrishna.

Industrial Evolution of India by Gadgil.

Industrial Revolution by Alfred Toynbee.

Large and Small Industrial Establishments in the Baroda State during the year 1936–37.

The Okha Salt Works, Ltd., by K. H. Vakil 1936.

Presidential Address at the Kathiawar Economic & Commercial conference (Second Session) Rajkot, by Sjt. Jamnadas M. Mehta.

Prospectus of the Bhavnagar Chemical Works, Vartej.

Report on the Art-Crafts of the Bombay Presideney by G. P. Fernandes, (1932).

Report of the Baroda Economic Development Committee, 1918–19.

Report of the Indian Cement Co., Ltd. 1936.

Report of the Indian Industrial Commission.

Report of the Indian Taxation Inquiry Committee.

Report of the Marine Fisheries of the Baroda State by Mr. James Hornell.

Report on the Okha Cement Works, Ltd. 1936.

A short history of the *Rasashālā Aushadhāshram*, Gondal.

Socio-Economic Survey Reports of Shekhdi, Simodra Nana Bhavda, Tavadia and Padersinga by Development Board, Baroda State, (1933).

Trade & Tariff:

Amreli District Local Customs Tariff 1936.

Annual Report of the Administration of Okha for the year ending 31st July 1937.

Bhavnagar State Schedule of Customs Tariff 1934.

Bombay Minor Ports Committee Report (1939)

Dhrangadhra Raj Gazette December 1934.

Federal Finance by K. T. Shah.

India and the Tariff Problem by Lees Smith.

Jasdan Local Customs Tariff 1931.

Kathiawar Trade Statistics ... 1931–32.

" " " ... 1932–33.

" " " " 1933–34.

" " " April 1934.

" " " May 1934.

Lathi State Local Customs Tariff 1903–04.

Malia " " " " 1938.

Nawanagar State Local Customs Tariff 1936–37.

Our Fiscal Policy by Prof. C. N. Vakil.

Oriental Commerce by William Milburn.

Okha-Harbour Board Schedule "B"—Charges recoverable from the Shippers and Importers at Okha 1937

Okhamandal Local Customs Tariff 1936.

Palitana State " " " 1938.

Public Finance and our Poverty by J. C. Kumarappa.

Rajkot State Local Customs Tariff 1937.

Report of the Indian Fiscal Commission.

Report of the Indian Tariff Board Inquiry Committe on Salt Industry.

Vankaner State Local Customs Tariff 1938.

Wadhwan " " " " 1931.

Railways :

Bhavnagar State Railway's Goods Tariff Part III No. 2.

Gaekwar's Baroda State Railways Goods Tariff Part I.

" " " " " " Part II.

Economics of Transport in Kathiawar by Badheka.

A Copy of the Schedule of freight charges in operation over Jamnagar and Dwarka Railway.

Gondal Railway Goods Rates Lists Appendix A
" " " " " " B
" " " " " " C
" " " " " " D
" " " " " " E
" " " " " " F
" " " " " " G

Gondal Railway's Porbandar Docks & *via* Goods Rate List.

Junagadh State Railways Goods Tariff Part III

" " " " " Part IV

Opening Address at the Conference of the Kathiawar Railways, 1937 by Rai Saheb G. D. Mehta.

A copy of Schedule of Maximum and Minimum rates chargeable over Morvi Railway.

Political

Aitchison's Treaties of Kathiawar State with the Paramount Power.

"*Bhagwad Gaūrav Sūvarna Granth.*"

Forbes' "*Rāsmālā.*"

Gondal's Cherished Treasures 1934.

The Government of India Act, 1935.

How Morvi's Ruler is maintaining the Great Traditions.

Indian Constitutional Documents Vols. I and II, by Panchanandas Mukherji

India Insistent by Sir Harcourt Butler

Indian Princes Under British Protection by P. L. Chudgar

Indian States Register and Directory by A. N. Sudarisanam.

"*Kāthiāwād Sarva Sangrah*" by Narmadashankar Lalshankar.

Memoranda on the Indian States 1937.

Porbandar State Directory Vol. I
" " " Vol. II
" " " Vol. III
" " " Vol. IV
The Princes of India : Historical Sketch by J. Clunes.
Rajkot State Directory Vol. I
" " " Vol. II
" " " Vol. III
" " " Vol. IV
Report on Kathiawar Province (Bombay Govt. Selections) by Col. Walker.
Scraps of Paper or India's Broken Treaties by A. P. Nicholson.
Swaraj or Surrender by Issac. A. Ezekiel.
Times of India Coronation Supplement 1937

Rural Reconstruction

Aims and Objects of the Association (E) by Bharatan Kumarappa.
The All India Village Industries Association
" " " " Annual Report for 1935 (E)
" " " " " " " 1936 (E)
" " " " " " " 1938 (E)
Baroda State "Stree Udyogalaya's Working" by T. P. Adalja (1933).
Bee-Keeping (E) by H. Vishwanathan.
Diet (E) by H. P. Dastur.
Directory of the Cottage Industries of C. P. & Berar.
Economics of Khaddar by Richard B. Greg.
Economic Transition in India by Theodor Morison.
The Foundations of Indian Economics by Radhakamal Mukerjee.
"*Graha Udyōg Pradarshan Mārgdarshikā*," Baroda State (1939)

Gur Making (E) by Gajanan Naik.

Hand Made Paper (E) by S. B. Khodke.

An Introduction to the Demonstrations at the Lucknow Exhibition (E).

"*Khadi-Rahasya*" Shri Udyoga Mandir Publication (Shri Bombay Suburbun Satyagrah Samiti), Vile Parle.

Oil Pressing (E) by Jhaverbhai P. Patel.

Our Organization by Nawjivan Sangh.

Reports of the All India Spinners' Association.

Report of the Pardi Taluka Inquiry Committee.

Revival of Village Industries (E) by Bharatan Kumarappa.

Rural Economy of India by R. Mukerjee.

Rural Reconstruction by S. S. Talmaki.

Self Help for the People by G. C. Gray.

"*Shērtha Nī Arthīk Tapās*" by Vithaldas M. Kothari and Jhaverbhai P. Patel.

Soya-beans (E) by S. K. Dharmadhikari.

A Suggested Solution of the Rural Problem by Horace Plunkett.

The Three National Reforms by S. A. Fraser.

"*Vastraswāvalambanam*" in Bhavnagar State by Sjt. D. L. Trivedi.

Village Uplift in India by F. L. Brayne.

Village Industries and Reconstruction (E) by Bharatan Kumarappa.

Weavers' Studies No. 3. Amreli (1932), Department of Commerce, Industries and Labour, Baroda State, Bulletin No. 33.

Why the Village Movement ? by J. C. Kumarappa.

General

Boycott of British Goods by M. H. Vakil.

Cotton Industry in India (being a series of articles reprinted from the Bombay Chronicle).

Essays in Indian Economics by Ranade.

Five Essays by Dean Inge

Frontiers of Trade by Julius Klein.

"*Hīndnūn Gowdhan*" by V. G. Desai.

Industrial India by Glyn Barlow.

Land and Labour in China by R. H. Tawney.

Planned Economy for India by Sir M. Visvesvaraya.

Poverty and plenty by J. A. Hobson.

Principles of Economic Planning by G. D. H. Cole.

Prosperity in the British Empire by Stephen Leacock.

Report of the Whitley Commission.

Restoration of Agriculture in the famine area of Russia by Eden and Cedar Paul.

Trade, Tariffs and Transport by K. T. Shah.

Wealth of India by Wadia and Joshi.

Wealth and Taxable Capacity of India by Shah and Khambatta.

INDEX

Activity, State—, p. 291
Advancement, repurcussions of political conditions on the industrial—, pp. 218, 240
Aerated water, ice and-factories p. 145
Age, p. 58
Agricultural, finance, p. 111
, or pastoral industries, p. 174
, population, p. 78
Agriculture, p. 77, 327
Appendix A, pp. 45, 191, 215, 264
B, pp. 47, 192
C, p. 196
, givingthe scheme evolved by the Udyoga Mandir of Lathi, p. 297
Appendix Tables pp. 337 to 364
Area and population, p. 49
Association, state-aided village industries—, p 293
, voluntary—, p. 290
Background, regional—, pp. 1, 323
Baroda State Railways p 194
Barvala, p. 174
Basis of calculation, p. 48
Basket making, p. 287
Beads, tulsi—making, p. 163
Bee-keeping and honey industry, p. 286
Bhavnagar, p. 173
, port, case of the—, p. 259
, State, p. 100
, State, Railways, p. 192
Blanket making, p. 162
Bone mills, p. 138
Boundaries, p. 1
Brass and metal works, p. 140
Bricks, pottery—and tiles, p. 288
British, origin of the—supremacy in Kathiawar, p. 222
British origin of the rise and growth of the—power in Kathiawar, p. 249
, relation of the—Government with the States after 1858 A. D , p. 249
, tariff policy of the—Government p. 241
Building, ship—, p. 166
Buses, motor—and motor lorries, p. 211
Calculation, basis of—, p. 48
Capital, development of industries from the point of view of—p. 319
Capital expenditure, p. 206
Cart manufacturing, p. 165
Carts, p. 198
Carving, stone—, p. 163
Case of the Bhavnagar Port, p. 259
Castor Seeds, exports of—p. 315
Cattle-breeding and ghee indusry, p. 274
Causes of the low productivity of soil p. 95
Cement, p. 132
, tiles works, p 149
Cement factories, p. 307
Change, need for occupational—, p. 76
Character of the coast, p. 28
Chemical and pharamaceutical industries, p. 311
Chemical, pharmacies and—works, p 142
Class, proportion of earners and working dependants in each—, p. 69
, poroportion of workers in each —, p. 69
Climatic conditions, p. 6
Coast, character of the—, p. 28

Coastline, pp. 25, 324
, effect of—on the development of the coastal towns, p. 42
, political divisions of the—, p. 27
Conclusion, pp. 112, 176, 189, 213, 238, 261, 296, 321,
Conclusions p. 323
Condition, climatic—, p. 6
, existing—, p. 207
, of the Kathiawar States after 1820, p. 223
Col. Walker's, nature of—settlement, p. 221
Co-operative methods, p. 292
Co-ordination, need for a—, p. 212
, need for a transport—, pp. 197, 330
Cordon, Viramgam—and its nature, p. 247
Cord on Viragam from the point of view of the Government of India, p. 253
Cotton Industry, p. 121
Country crafts, p. 212
Crafts, country—, p. 212
Creeks, p. 30
Crops, main—, p. 83
Customs, effect of these local—tariffs, p. 234
, Indian States and—revenue, p. 246
, local—tariff, p. 232
, need for a—union, p. 236
, origin and growth of Indian —revenue, p. 245
, rise and growth of land—, p. 218
, rise & growth of sea—, p. 240
Decay of Kathiawar's industries, p. 242
Density, p. 51
Dependants, proportion of earners and working—in each class, p. 69
Details of occupational sub-classes, p. 71
Developed mineral resources, p. 20
Development of, effect of coastline on the—the coastal towns, p. 42
village industries—, p. 265
Development of industries from the point of view of Capital, p. 319
Development of industries from the point of view of Labour, p. 318
Development, village industries and schems for their—p. 333
Dhrangadhra, p. 174
, State Railways, p. 195
Different kinds of transport facilities. p. 198
Divisions, geographical—and sub-divisions, p. 11
, political—of the coastline, p. 27
Earners, proportion of—and working dependants in each class, p. 69
Effect of Viramgam Cordon on the Industrial development of Kathiawar, p. 260
Element, human—, pp. 48, 325
Existing conditions, p. 207
,—of the village industries of Kathiawar, p. 270
Expenditure, capital—,p. 206
Exports, p. 37
figures of ghee—, p. 279
Exports, of castor seeds, p. 315
, ground nuts p. 315
, ground nut oil p. 315
, main crops from the maritime States of Kathiawar, p. 87
, main crops *via* Viramgam Dhandhuka Land Customs Line p. 87
, oil p. 315
, of raw cotton, p. 303
, of raw wool p. 305

Facilities, different kinds of transport—, p. 198
Factories, cement—p. 307
, ice and aerated water,—p. 145
, lime p. 313
Factories, soap—, p. 146
, tanneries and shoe—, p. 146
, tin—, p. 139
Factory, leather shoes—and tanning industry p. 316
Features, physical—, p. 1
Ferries, p. 200
Figures of ghee exports, p. 279
Finance, agricultural—, p. 111
Fishing industry, p. 167
, pearl—, p. 150
Flour, saw and—mills, p. 148
Forest resources, p. 22.
mineral and—, pp. 13, 324
Fragmentation, sub-division and—, p. 100
Free trade, p. 244
Freight rates, p. 208
General, pp. 13, 117, 197, 218, 240, 265
, remarks, p. 48
Geographical divisions and sub-divisions, p. 11
Geology of Kathiawar, p. 13
Ghee, p. 174
, cattle-breeding and—industry, p. 272
, figures of—exports, p. 279
, industry, p. 277
Glass sheets & plates, imports of—p 317
Glass works, p. 129
Gondal, p. 174
, State Railways, p. 193
Government, nature of the—carried on by the States in Kathiawar, p. 227
, relation of the British—with the States after 1858 A. D. p. 251
, tariff policy of the British—, p. 241
, Viramgam cordon from the points of view of the—of India p. 253
Groundnuts, exports of—p. 315
Groundnut oil, exports of—p. 315
Growth, origin and—of Indian customs revenue, p. 245
, rise and—of land customs, p. 218
, rise and-of sea customs, p. 240
Handloom industry, p. 159
Handspinning and Weaving, p. 270
Harbours, natural—, p. 31
History, a short sketch of the political—, p. 219
Honey, p. 176
, bee-keeping and—industry, p. 286
Hubble-Bubble, silver work on—or 'Hukka', p. 164
Hukka, silver work on 'hubble-bubble' or—, p. 164
Human element, pp. 48, 325
Ice and aerated water factories, p. 145
Imports, p. 36
Imports of glass sheets & plates, p. 317
Indebtedness, rural—, p. 106
Indian, origin and growth of—customs revenue, p. 245
, States and customs revenues, p. 246
Industrial advancement, repurcussions of political conditions on the—p. 218, 331

Industrial development, effects of Viramgam cordon on the—of Kathiawar p. 260
Industrial scope, pp. 299, 333
Industries, pp. 117, 329
, agricultural or pastoral. p. 174
, chemical and pharmaceutical p. 311
, decay of Kathiawar's—p. 242
, development of—from the point of view of capital p. 319
, development of—from the point of view of labour p. 318
, need for a revival of the village—p. 267
, organised—, p. 120
, scheme of arrangements followed by the All India Village Industries Association, p. 268
, unorganised —, p. 159
, village—, p. 265
, village industries of Kathiawar, p 269
, village—schemes for their development p. 333
Industry , Bee-Keeping & honey—p. 286
, cattle breeding and ghee —, p. 274
, cotton—, p. 121
, fishing—. p. 167
, ghee,—p. 257
, hand-loom—, p. 159
, iron—, 308
, tanning,—p. 280
, tanning and leather shoes —p. 316
, textile —, p. 126
Inter-State, origin and nature of—tariffs, p. 230
Inter-State tariffs p. 331
Iron, p. 18
, and iron works, p. 141
, Industry p. 308
Irrigation, p. 108
Ivory works, p. 163
Jamnagar, p. 173
, State Railways, p. 194
Jetalsar Rajkot Railway, p. 195
Junagadh State, P. 234
, Railways, p. 193
Kathiawar, conditions of the-States, after 1820, p. 223
, effects of Viramgam Cordon on the industrial development of—p. 260
, existing condition of the village industries of—, p. 270
, Geology of—p. 13
, nature of the Government carried on by the States in —p. 227
, neglected ports of—, p. 41
, old ports of—, and the process of silting up, p. 32
, origin of the British supremacy in—, p. 222
, origin of the rise and growth of British Power in—p. 249
, ports, of—, p. 32
, present ports of—, p. 33
, schemes to develop the village industries in—, p. 289
, village industries of—p. 269
, Viramgam Cordon from the point of view of the maritime States of—p 256

Kathiawar's, decay of—industries, p. 242
Kundla, p. 174
Labour, development of industries from the point of view of—p. 318
, mobility of—, p. 65
Lace, tape and—making, p. 163
Lakes, p. 4
Land, revenue, p. 110
, rise and growth of—customs, p. 218
, tenures, p. 108
Lathi, appendix giving the scheme evolved by the Udyoga Mandir of—p. 297
Length, p. 201
Limbdi, p. 174
Lime factories p 313
Literacy, p. 62
Local customs, effects of these—tariffs, p. 234
, tariff, p. 232
Lorries, motor buses and motor—, p. 211
Main crops, p. 83
, exports of—from the maritime States of Kathiawar p. 87
, exports of—*via* Viramgam Dhandhuka Land Customs Line p. 87
Making, basket—p. 287
, blanket—, p. 162
, rope—p. 288
, tulsi beads—, p. 163
Management, p 204
Mauufacturing, cart—, p. 165
Manures, p. 97
Maritime States, Viramgam Cordon from the point of view of the—of Kathiawar, p. 256
Match works, p. 137
Materials, industrial development from the point of view of raw—p. 302
Metal, brass and—works, p. 140
Methods, co-operative—, p. 292
Miscellaneous, pp. 158,173
Mills, bone—, p. 138
, oil—, pp. 130, 314
, saw and flour—, p. 148
, textile—p. 302
, woollen—p. 305
Mineral, and forest resources, pp. 13, 324
, developed—resources, p. 20
Miscellaneous p. 317
Mobility of labour, p. 65
Morvi, p. 174
, State Railways—p. 194
Mountains, p. 1
Motor buses and—lorries, p. 211
Muli, p. 174
Natural harbours, p. 31
Nature of Col. Walker's settlement, p 221
, of States' rights and obligations, p. 225
, of the Government carried on by the States in Kathiawar, p. 227
, of the soil, p. 81
, ortgin and—of Inter-State tariffs, 230
, Viramgaum Cordon and its —, p. 247
Nawanagar State, p. 232
Need for a co-ordination, p. 212
, for a Customs Union, p 236
, for a revival of the village industries, p. 267
, for a transport co-ordination, pp. 197, 330
, for occupational change, p. 76
Non-workers, proportion of workers and—, p. 67
Obligations, nature of States' rights and—, . 225

Occupational, details of—sub-classes, p. 71
, need for—change, p. 76
, returns, p. 66
Occupations of women, p. 73
Oil, exports of—p. 315
, mills, pp. 130, 314
, pressing, p. 284
Organised industries. p. 121
Origin, and growth of Indian customs revenue, p. 245
, and nature of Inter-State tarriffs, p. 230
, of the British Supremacy in Kathiawar, p. 222
, of the rise and growth of the British Power in Kathiawar, p. 249
Paramount power and its relations with the States, p. 250
Part played by the ports, p. 107
, railways p. 183
, roads, p. 180
, other means of transport, p. 188
Pastoral, agricultural or—industries, p. 174
Pearl fishing, p. 150
Pharmaceutical, chemical and—industries p. 311
Pharmacies and chemical works p. 142
Physical features, p. 1
Policy, State—, p. 108
, tariff—of the British Government, p. 241
Political, a short sketch of the—history, p. 219
, conditions, repurcussions of—on the industrial advancement, pp. 218, 240, 331
, divisions of the coastline, p. 27
Population, agricultural—p. 78
, area and—p. 49
, by towns and villages, p. 52
, the—of villages, p. 55
Porbandar State Railways, p. 195
Ports, development of modern—of Kathiawar, p. 34
, neglected—of Kathiawar, p. 41
, of Kathiawar, p. 32
, old—of Kathiawar, and the process of silting up, p. 32
, part played by the—, p. 187
, present—of Kathiawar, p. 33
Position of the States after 1858, p. 224
Pottery, bricks and tiles, p. 288
, works, p 129
Power, paramount—and its relations with the States, p. 252
Presses, printing—p. 148
Pressing, oil—p. 284
Printing presses, p. 148
Problems, the soil and the - connected with the soil, p. 81
Productivity, causes of the low—of soil p. 95
Proportion, of, earners and working dependants in each class, p. 69
, of workers and non-workers, p. 67
, of workers in each class, p. 69
Railways, p. 201
, Baroda State—, p. 194
, Bhavnagar State —, p. 192
, Dhrangadhra State—, p. 195
, Gondal State—, p. 103
, Jamnagar State—, p. 194
, Jetalsar Rajkot—, p. 195
, Junagadh State—, p. 193
, Porbandar State—, p. 195

, Morvi State—, p. 194
, mileage, p. 186
, part played by the—, p. 183
Rainfall, p 10
Rainfall, 1925-26 to 1935-36, p. 9
Rajkot, Jetalsar—Railway, p. 195
Rates, freight, p. 208
Raw cotton exports p. 303
Raw wool exports p. 305
Raw materials industrial development from the point of view of—, 302
Regional background, pp. 1, 323
Relations of the British Government with the States after 1858 A. D. p. 251
Remarks, general, p. 48
Repurcussions of political conditions on the industrial advancement, pp. 218, 240, 331
Resources, mineral and forest—, p. 13
, developed mineral—, p. 20
Returns, occupational, p. 66
Revenues, Indian States, and customs—, p. 246
Revenue, land—, p. 110
, origin and growth of Indian customs,—p. 245
Revival, need for a—of the Village industries, p. 267
Right, nature of States'—and obligations, p. 225
Rise and growth of, land customs, p. 218
, sea customs pp. 240, 332
Rise, growth and origin of the British Power in Kathiawar, p. 249
Rivers, p. 2
Roads, part played by the—, p. 180
Rope making, p. 288
Rural indebtedness, p. 106
Salt works, p. 133
Saw and flour mills, p. 148
Scheme of arrangement followed by the All India Village Industries Association p. 268
Scheme of survey, of the existing industries p. 120
Scheme of survey of industrial scope p. 301
, of transports survey p. 179,
Schemes for their development, p. 265
Schemes to develop the village industries in Kathiawar p. 289
Scope, industrial—pp. 299, 333
Sea, rise and growth of—customs, pp. 240, 332
Settlement, nature of Col. Walker's—, p. 221
Sex, p. 60
Ship-building, p. 166
Shoe, tanneries and—factories p. 146
Shoes, leather—factory and tanning industry p. 316
Silver work on 'Hubble-Bubble' or 'Hukka', p, 164
Situation, p. 1
Sketch, a short—of the political history, p. 219
Soap factories, p. 146
Soap, toilet, p. 316
Soil, causes of low productivity of—, p. 95
, nature of the—, p. 81
, the—and the problems connected with the—, p. 81
Specialities of some of the States, p. 173
State, activity, p. 291
State—aided village industries Association p. 293
State, Baroda—Railways, p. 194
, Bhavnagar, p. 100
, Bhavnagar—Railways, p. 192
, Dhrangadhra-Railways, p. 195
, Gondal—Railways, p. 193

State Jamnagar—Railways, p. 194
, Junagadh—Railways, pp. 193, 234
, Morvi—Railways p. 194
, Nawanagar, p. 232
, policy, p. 108
, Porbundar—Railways p. 195
, Indian—and customs revenues, p. 246
States, Conditions of the Kathiawar—, after 1820, p. 223
, nature of the Government carried on by the—in Kathiawar p. 227
, position of the—after 1858, p. 224
, specialities of some of the—, p. 173
Stone carving, p. 163
Sub classes, details of occupational—, p. 71
Sub divisions, and fragmentations, p. 100
, geographical divisions and—, p. 11
Supremacy, origin of the British—in Kathiawar, p. 222
Survey, scheme of—, p. 120
Tanneries and shoe factories, p. 146
Tanning industry, p. 280
Tanning industry and leather shoes factory p. 316
Tape and lace work, p. 163
Tariffs, Inter-State—p. 331
Tariff, local customs—, p. 232
, policy of the British Government, p. 241
Tariffs, effect of these local customs —, p. 234
, origin and nature of Inter-State—, p. 230
Technique, tillage and—, p. 102
Temperature, p. 7
Tenures, land—, p. 108
Textile, industry, p. 126
, mills, p. 302
Tiles, cement—works, p. 149
, pottery, bricks and—, p. 288
Tillage and technique, p. 102
Tin factories, p. 139
Toilet soap, p. 316
Towns, effect of the coast-line on the development of the coastal—, p. 42
, population by—and villages, p. 52
Trade, free, p. 245
Transport, different kinds of—facilities, p. 198
, need for a—co-ordination, pp. 199, 330
, part played by other means of—, p 188
Transports pp. 179, 330
Tulsi beads making, p. 163
Udyoga Mandir, appendix giving the scheme evolved by the—of Lathi, p. 297
Union, need for a customs—, p. 236
Unorganised industries, p. 159
Village industries, p. 264
, existing conditions of the—of Kathiawar p. 270
, need for a revival of the—, p. 267
, of Kathiawar, p. 269
, scheme of arrangement followed by the All India Village Industries Association p. 268
, schemes to develop the—in Kathiawar pp. 289, 333

Village industries, State aided—Association, p. 293
Villages, population by towns and—, p. 52
, the population of—, p. 55
Viramgam Cordon, and its nature, p. 247
, effects of—on the industrial development of Kathiawar, p. 260
, from the point of view of the Government of India, p. 253
, from the point of view of the maritime States of Kathiawar, p. 256
Voluntary Association for developing the village industries, p. 290
Weaving, hand-spinning and—p. 270
Women, occupations of—, p. 73
Woolen mills, p. 305
Works, brass and metal—, p. 140
, cement tiles—, p. 149
, glass—, p. 129
, iron and iron—, p. 141
, ivory—, p. 163
, match—, p. 137
pharamacies and chemical—, p. 142
, pottery—, p. 129
, salt—, p. 133
, tape and lace—, p. 163
Workers, proportion of—and non-workers, p. 67
, proportion of—in each class, p. 69
Working dependants, proportion of earners and—in each class, p. 69