

GEO-VIEWS, PROBLEMS AND CHALLENGES OF PHARMACEUTICAL INDUSTRIES IN GOA

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Abstract

In modern world, business environment is characterized by increasing global competition rapidly changing technology and amazing growth in international trade and foreign investment. These changes have implications for marketing decisions in an organization. Perspectives on what constitutes marketing and on the place marketing holds in the firm have undergone substantial change over the years. The rapid changes in society and the increasing information din pose supreme challenges especially to small and medium-sized business. The present paper aims to study distribution, future growth and problems of pharmaceutical industry in Goa. The pharmaceutical industry is perhaps among a few sectors in the Goan economy, whose foundation is built on the process of internationalization. Now domestic pharmaceutical companies are leading this process by adopting a host of new strategies like exports, green field, direct investments abroad, acquiring overseas companies, contract manufacturing and research and strategic alliances with global firms. The industrial activity is on fast track in Goa with positive government attitude and support. Besides, the mining and tourism sectors, the pharmaceutical industries also encourage effectively. As a result, the regulated bodies like US FDA, UK MHRA etc have extending their cooperation in all process. The present paper is designed to fill a need in providing planning approaches and guidelines for the future growth of pharmaceutical industry in Goa. Well known Indian Pharma companies like Ranbaxy, Cipla, Cadila, Lupin, Dr Reddy's Laboratories, Glenmark Pharmaceuticals, Unichem Lab, FDC, Indoco Remedies invested huge funds in setting up plants in Goa. Further, multinational companies like Aventis Pharma, Wyeth, and Merck also put up their plants. With better infrastructure facilities, the companies are expanding their operations.

Keywords: *Pharmaceutical industry, Small Scale, Challenges, Pattern.*

Introduction

Health is defined both as cause and effect of economic development. The pharmaceutical industry provides significant socio-economic benefits to the society through creation of jobs, supply chains, and through community development. The industry also plays an important role in technological innovation, which may reduce costs of economic activity elsewhere in the economy. Players in the Indian pharmaceutical industry include: branded drug manufacturers, generic drug manufacturers, firms developing biopharmaceutical products, nonprescription drug manufacturers, and firms undertaking contract research. In addition, there are also enablers of the industry such as universities, hospitals and research centers that play a role in R&D activities.

The Indian pharmaceutical industry is continuing its high growth rate at 13% for the last six years. From foreign control, to domestic grass-roots growth, the Indian pharmaceutical segment has evolved over the last three decades. According to Bio-Plan Associate's recent report, Advances in Biopharmaceutical Technology in India, the Indian pharmaceutical industry has the potential to reach \$25 billion by 2010.

India now ranks 3rd worldwide in volume and 13th in value. Also country shows excellent performance in export. Indian exports to more than 200 countries around the globe including the highly regulated markets of US, Europe, Japan and Australia. Indian pharmaceutical

industry is entering an era in which it is becoming a global hub for R&D activities, which may be in the area of new drug discovery. Indian pharmaceutical industry has also been increasing the R&D expenditure significantly in the recent years.

Review of literature

Pharmaceutical industries/units literature helps to know the different aspects of distribution and growth of pharmaceutical industry in the study area.

Richard Gerster in his research work "People before Patents, the success story of the Indian Pharmaceutical Industry", says The Indian pharmaceutical industry is a success story. 500 000 people are employed in this sector, in some 12 000 firms. 2 900 of them are large scale units, following a recent article by **Pradeep Agrawal** and **P. Saibaba** (2001) in the renowned Economic and Political Weekly of Mumbai. In the pre- and post-production sector, a further 2.5 million jobs are thought to be involved. Compared to the general price index, drug prices have risen much less in the last 15 years and remain far below average. "Worldwide, India is a country of very low drug prices while producing high quality medicines", **Nihchal H. Israni** (1991), president of the Indian Drug Manufacturers' Association (IDMA), states proudly. Self-sufficiency with regard to pharmaceuticals exceeds 90 percent – in spite of the policy of a more open economy pursued by India since 1991.

In his research titled "Growth of Indian Pharma Industry", **Mukul Mukti** (1987), stated that, the Indian pharmaceutical industry has a unique amalgamation of two major critical factors that make it so attractive and thereby add impetus to its growth. These are: The process patent regime Price controls. The implementation of Good Manufacturing Practices has further supplemented the growth of this industry which is now producing bulk drugs for all the major therapy segments, which are now most in demand. In addition to this, the competencies that India has achieved in process re-engineering and organic synthesis have helped derive the most cost-effective solutions which are also compliant with the quality standards. The purpose of this report is to provide an extensive outlook on the pharmaceutical industry.

Nilesh Zacharias and **Sandeep Farias** in their report Patents and the Indian Pharmaceutical Industry stated that, Indian pharmaceutical industry is a prime example of an industry that is being forced to revisit its long-term strategies and business models as India opens its markets to global trade. Factors such as protection of intellectual property are increasing in significance due to the growing recognition of the need to ensure protection of valuable investments in research and development (R&D). Efforts are being made in India to curb problems of weak enforceability of existing intellectual property legislations, and the Indian government is moving towards establishing a patent regime that is conducive to technological advances and is in keeping with its global commitments.

Study area

The State of Goa has an area of 3,702 square kilometers with the total population of 1458545 (2011 Census), out of which 7, 39, 40 are males' and 7, 19, 405 are females. It has extended from 14°53'54" North to 15°48'00" North Latitudes and 73°40'33" East to 74°21'13" East Longitudes. North, Goa shares its boundary with Sawantwadi taluka of Ratnagiri and Kolhapur districts of Maharashtra, in the East and South bounded by Belgaum and Uttara Kannada districts of Karnataka, and on West surrounded by the mighty Arabian Sea (Fig no:-1).

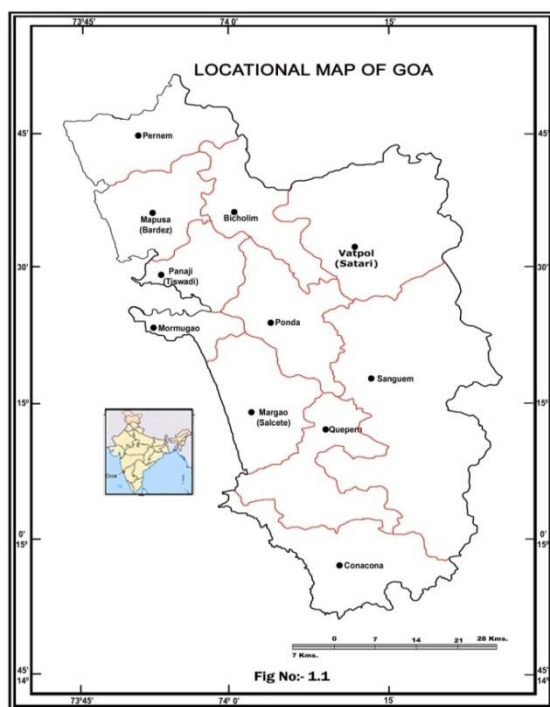


Figure 1. Location Map

Objective

The specific objectives for the present study are: To study the existing Pharma industries in Goa. To discuss the growth and prospects of the Goan Pharma companies on a national level. To examine the problems associated with the pharmaceutical industries in the study area.

Hypothesis

It is hypothesized that. The locational aspects of pharmaceutical industries are not only the outcome of the physic-culture factors rather than the socio-economic condition of the people. The multi-associations are the hurdles for the pharmaceutical industrial prosperity. The pharmaceutical industrialists have not adopted the MSMEs policies in a proper manner.

Data base and methodology

The present paper is an outcome of exhaustive secondary sources of information/data. The information related to pharmaceutical units were collected through the secondary data, Udhayog Bhavan, Panjim, MSME, Government of India Margao, Goa, Goa Small Industries Association (GSIA), Goa Chamber of Commerce & Industry (GCCCI) and Confederation of Indian Industries (CII). The collected information has been compiled and prepared the tables and charts for analysis. The analytical method has been employed in the study.

History and growth of pharmaceutical industry in Goa

The pharmaceutical industry in Goa developed only after liberation. Pascoal Menezes of the diversified trading group, Cosme Mathias Menezes (CMM), initiated Goa's first phanna manufacturing site in 1963. Small pharmaceutical workshops and units on a small scale were set up by local entrepreneurs in the seventies which conducted manufacturing operations. Prominent among the entrepreneurs were Ramnath Kare who started DCI Pharmaceuticals in 1971, Arun Naik who set up Merit Pharmaceuticals in 1977 and Dilip Salgaokar who established Geno.

Lack of appropriate infrastructure, inadequate availability of industrial land, power and water supply, shortage of skilled labour, want of technical manpower could be cited as some of the reasons for the slow development of this industry in the early post liberation period. Around 1975, the Government of Goa established the Economic Development Corporation (E.D.C) with the objective of accelerating industrialization in the territory. Government's industrial policy offered various financial incentives to industrialists and EDC identified pharmaceuticals as one of the thrust industries. State-owned Goa Antibiotics was set up in 1983 and Centaur Pharmaceuticals in 1987. The availability of appropriate space in the industrial estates, establishment of convenient and fast communication as well as transit links with the rest of the country, particularly the metros like Mumbai, Delhi, Bangalore, etc. coupled with the Government incentives for setting up industries resulted in the establishment of some small, medium, and large pharmaceutical units in Goa.

It was in the early 1990s that the pharmaceutical industry really blossomed in Goa with several big names setting up shop in the state. Many Mumbai-based companies started shifting to Goa as it became increasingly difficult to expand their operations in Mumbai due to rising trade union militancy and escalating real estate prices. In addition, the state Government offered a liberal income and sales tax holiday as an 'industrially backward state' which lasted for a decade between 1994 and 2004.

As per official figures, Goa has 295 registered pharmaceutical producers together with 403 units in operation, including loan-licensed units. Of this 108 are independent units. While most units undertake manufacturing of various pharma products, some have also set up **R&D** centres. Goa's pharma hub employs more than 10,000 persons directly and several thousand indirectly as well.

Growth trend

Presently, there are 295 (2015) pharmaceutical formulating units in the State. Even though number is small, researchers find exponential growth of pharmaceutical formulating units in Goa in the late 1990,s. There were hardly 3 units before 1970. The number of units before 1980 was less than 10 and about 17 units were there up to 1990 and 21 units up to 1995. After 1995, more than 50% of the total numbers of units have come up in Goa. These units are large units, having their units in other parts of India. Following table gives an idea about the growth trend of pharmaceutical units.

The industry is not location specific. In fact it is not a natural cluster. Units are spread across the state. However, there is concentration of pharmaceutical industries in selected pockets like Verna Industrial Estate, Tivim Industrial Estate, and around Ponda. The Government is giving preference to locate the new units in Verna Industrial Estate.

Factors for the growth of industry

Following are the main reasons attributed for sudden growth of pharmaceutical industries in recent years. Income Tax Holiday (May, 2004); Sales Tax Exemption Scheme (April, 2003); Capital Investment Subsidy (2004); Infrastructure.

Distribution of pharmaceutical industries in Goa

The spatial distribution is one of the main aspects in geographical studies. Any phenomenon on the earth surface has its own location, and is distributed on a geographical space. The topographical features are responsible for such distributions, followed by the socio-economic and politico-religious characteristics. Different geographical regions are responsible for different types of distributions of the phenomena. Hence, the present study aims to study the spatial distribution of the pharmaceuticals in a typical topographical characteristics present in the study area.

The study of spatial interactions of the distribution and density of things has been a major concern to researchers. The term 'distribution' refers to placement of location or disposition. The concept of distribution is a difficult one. It is still more difficult to analyse and discern the pattern of distribution. Thus, many attempts have been made between the 'points' of distribution.

Spatial distribution pattern can be defined as the 'visual expression of the spatial organization' of particular elements in a study area. Spatial distribution mainly consists of the study of the distribution, size, and economic significance of human settlements of growth centres, rail, road and other transport systems; administrative centres at different grades.

Table-1.1, 1.2 and Fig 1.1 and 1.2 depict the general distribution pattern of pharmaceuticals in the study region for the years 2015. The figures evidently explain that, all the talukas doesn't witnessed pharmaceutical units, because of many reasons. In all three categories (List of licensed drugs manufactures and loan licensed drug manufactures) are made to show the distribution of pharmaceuticals in the study area by using simple statistical technique, i.e. Chloropleth map.

Table 1.1. List of licensed drugs manufacturers-state of Goa for original licensee

S.No	Name of the taluka	No of units	Category
1	Bardez.	18	Very High
2	Bicholim,	13	High
3	Canacona	0	Very Low
4	Mormugao	2	Very Low
5	Ponda,.	24	Very High
6	Pednem	2	Very Low
7	Quepem	0	Very Low
8	Sanguem;	0	Very Low
9	Salcete.	31	Very High
10	Sattari	1	Very Low
11	Tiswadi	12	High
	TOTAL	103	

Both the tables have similar characteristics in the study region. Three talukas namely, Salcete (31 and 68), Ponda (24 and 41) and Bardez (18 and 37) falls in the category of Very high, this is due to the Industrial Estates in these talukas are doing very well. Industrial estates like Verna in Salcete, Madkai in Ponda and Tivim in Bardez are giving more importance to industrial activities, and attracting more and more investors also. These talukas have more locational advantages also, where as talukas like Canacona, Quepem and Sanguem doesn't witnessed any pharmaceutical units, this mainly, the industrial estates which are located in these talukas are not performing very well, plus the geographical condition of these talukas is not favoring any industrial activities.

Tiswadi taluka experience different characteristics in terms of licensed and loan-licensed categories are concerned. In licensed sector this taluka is falls under high category, whereas loan-licensed category it falls under low category. This is due to many geo-socio-economic

conditions of the taluka. Similarly Pernem taluka is visa vers, under licensed it is low category, but loan-licensed it is under high category. The other talukas namely, Mormugao and Sattari are under very low in both licensed and loan licensed categories of pharmaceutical units in the State. Only Bicholim noticed from high to very low.

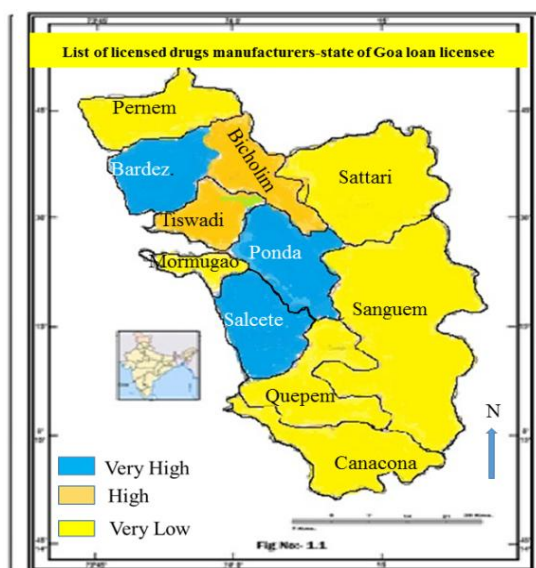


Figure. 1.1

Table 1. 2 List of licensed drugs manufacturers-state of Goa loan licensee

S. no.	Name of the taluka	No of units	Category
1	Bardez.	37	Very High
2	Bicholim,	08	Very Low
3	Canacona	00	Very Low
4	Mormugao	04	Very Low
5	Ponda.,	41	Very High
6	Pednem	28	High
7	Quepem	00	Very Low
8	Sanguem;	00	Very Low
9	Salcete.	65	Very High
10	Sattari	02	Very Low
11	Tiswadi	07	Very Low
	Total	195	

Problems of pharmaceutical industries

Any manufacturing and commercial activity cannot be carried on in isolation. It is a process in which many operations are linked together. Therefore, the study has brought out some of the following observations. Lack of Huge investments. Up gradation of machineries have not done to the extent of the requirements. Stoppage/closer of subsidies and other government benefits. There is no public testing laboratory in the state. Patent issues are another hurdle. There are no effective linkages with the firms, raw material suppliers, machinery suppliers or with regulatory bodies, financial institutions, technical institutions etc. The Pharmaceutical industries are not strictly following the existing regulations or Acts. The

basic drug manufacturing units are not encouraged in the State as a matter of Policy of the Govt. in order to keep the pollution free environment. There are no local units making Excipient and procured mainly from Mumbai. The printing and packaging requirement of pharmaceutical units is met partly by local packaging units and partly procured from outside the state. Skilled manpower is the main problems, most of the skilled labourers are appointed on temporary or contract basis, and local people are not available. The state is smallest in size, population is also very less, this leads to lower demands, and number of technical institutions are also less. Goa Pharmaceutical Manufacturers Association (GPMA) is not holding monthly meetings regularly, because majority of the members of the association are working managers, hardly they find any time to involve in such activities. All the pharmaceutical units are not associated with only one association. Since, state has associations of Goa Small Industries Association (GSIA), Goa Chamber of Commerce & Industry (GCCl) and Confederation of Indian Industries (CII), Goa State Council are the other associations in the state. The price, Brand name, Volume of output, Sales promotion, and Fake drugs are the main hurdles for the industries.

Measures for prosperity of the pharmaceutical industries

Outsourcing of raw material is the need of the hour. The Associations must work with the frame of the policies. To extend the R&D facilities and Public Testing Laboratories. Weak capital base of small firms are to be encouraged with quality up gradations. To monitor for fake drugs with an effective vigilance enforcing the existing laws. Kind of environment is created for export marketing for small firms in the study areas.

Conclusion

The study has focused in the deeper roots of such industries and concluded that the suggested measures are to be taken care; hope there will be prosperities for pharmaceutical industries in the study area.

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