

NEW POLICIES IMPLEMENTATION IN PHARMA FIELD IN NORTH EASTERN STATES OF INDIA

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Abstract

The northeastern states of India's pharmaceutical industry have experienced substantial governmental changes intended to improve healthcare services' price, accessibility, and quality. An outline of the most recent policy changes in the area is given in this abstract, with particular attention to programmers aimed at fostering domestic pharmaceutical production, streamlining regulatory procedures, and enhancing R&D infrastructure. The paper looks at how these regulations affect the northeastern states' pharmaceutical industry, healthcare system, and economic growth, pointing out opportunities and problems for stakeholders. This abstract seeks to advance knowledge of the dynamic pharmaceutical industry in this area and its consequences for socioeconomic growth and public health by providing an extensive analysis of the policy environment.

Keywords: Policies, Pharma, North Eastern, States, India, R&D Infrastructure

1. INTRODUCTION

The pharmaceutical sector is essential to maintaining the health of people everywhere, but it is especially important in areas with special healthcare needs, like the northeastern states of India. These states' healthcare environments have been marked over time by a growing load of diseases, limited access to necessary medications, and inadequate infrastructure. Policymakers have launched a number of programmed targeted at reviving the pharmaceutical industry and enhancing healthcare outcomes because they recognize the urgency of addressing these problems and utilising the sector's potential for socioeconomic development. A critical turning point in the northeastern Indian states' pursuit of sustainable healthcare development has been reached with the implementation of new pharmaceutical policies. These regulations are intended to address a number of issues that the pharmaceutical industry faces, such as insufficient funding and research projects, regulatory obstacles, and inadequate infrastructure. By taking on these issues head-on, officials hope to establish a supportive atmosphere that encourages creativity, improves the availability of reasonably priced medications, and boosts economic expansion.

The encouragement of domestic pharmaceutical production is one of the main goals of the new regulations. The northeastern states have historically placed a high priority on imports to meet

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their healthcare demands, which has resulted in a reliance on outside suppliers and higher medical expenditures. In order to address these issues, governments have implemented initiatives to encourage domestic pharmaceutical manufacturing, which will lessen dependency on imports and guarantee a consistent supply of necessary medications at reasonable costs. In addition to enhancing healthcare accessibility, these initiatives boost regional economic growth by generating jobs and cultivating an environment that is favorable for pharmaceutical entrepreneurship.

Furthermore, streamlining the regulatory procedures that oversee the pharmaceutical industry is another goal of the new policies' adoption. In the past, onerous regulations have frequently discouraged investment and slowed the expansion of the pharmaceutical sector in the area. Acknowledging the necessity of a more effective and transparent regulatory structure, legislators have implemented changes aimed at streamlining approval procedures, fortifying regulatory supervision, and improving compliance requirements.

The aforementioned measures serve to enhance consumer confidence and improve public health outcomes by guaranteeing the safety, efficacy, and quality of pharmaceutical products while also facilitating the entry of new competitors into the market. The new regulations also emphasize how crucial it is to fund infrastructure for pharmaceutical industry research and development (R&D). Historically, the R&D infrastructure and innovation skills of the northeastern states have fallen behind those of other areas, which has limited the region's potential to address new health concerns and produce breakthrough cures. In order to close this gap, governments have set aside funds for the development of research and development organizations, the encouragement of industry-academia cooperation, and the provision of incentives for research projects in high-priority fields such as neglected tropical diseases, infectious diseases, and traditional medicine. These investments not only establish the northeastern states as centers of pharmaceutical excellence but also allow them to make significant contributions to scientific advancement and global health innovation by promoting a culture of creativity and knowledge production.

2. REVIEW OF LITREATURE

Bokephode's(2013)A comprehensive analysis of human resource (HR) policy in the pharmaceutical industry may be found in PhD dissertations. The author applies a critical lens to examine the efficacy of these policies and their ramifications for different stakeholders, such as workers, management, and the industry at large. Bokephode's work makes a substantial contribution to our understanding of the opportunities and problems associated with managing human capital in pharmaceutical businesses by providing insights into the nuances of HR practices. This dissertation is a useful tool for academics, professionals, and decision-makers who want to improve HR tactics in the pharmaceutical industry.

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Bordoloi's (2023) According to studies, organic farming in North East India has the potential to encourage entrepreneurship among young people living in rural areas. Examining the state and extent of organic agricultural projects, the report highlights the contribution of agriculture to community empowerment and economic growth. Bordoloi illustrates the potential and difficulties faced by young entrepreneurs entering the organic agriculture sector with real data and case studies. In addition to adding to the body of knowledge in academia, this work offers development professionals and policymakers useful information for advancing sustainable lives in rural communities.

Brunner, (2010) This book provides a thorough examination of North East India's regional economic growth and how it interacts with international markets. The book explores the socio-economic processes influencing the region's economic landscape, including trade, entrepreneurship, and governance, from interdisciplinary viewpoints. With its careful analysis and thoughtful policy recommendations, each chapter offers insightful perspectives on the opportunities and problems that North East India faces in the context of globalization. This edited volume, which has contributions from eminent academics, is an essential tool for comprehending the intricacies of market integration and regional development in North East India.

3. MAJOR EXPORTERS OF PHARMACEUTICAL PRODUCTS IN NORTH EASTERN STATES OF INDIA

The states of Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Tripura, and Sikkim in Northeastern India have been steadily making a substantial contribution to the nation's pharmaceutical industry. Several states in the North East have been making progress in the pharmaceutical industry, even though the region may not be as well-known as certain other regions of India. Assam has been one of the main exporters in the area thanks to its environment that is ideal for the production of pharmaceuticals. Because of the state's abundant biodiversity, a wide range of therapeutic plants and resources are accessible, serving as raw materials for the manufacturing of pharmaceuticals. Furthermore, Assam's advantageous geographic position facilitates the logistical export of pharmaceutical goods to Bangladesh, Bhutan, and Myanmar, among other nearby nations. Assamese pharmaceutical businesses that are well-known for their work have been exporting a variety of goods, such as herbal supplements, APIs (Active Pharmaceutical Ingredients), and generic medications, which has helped the state's export economy tremendously.

Though it produces comparatively less pharmaceuticals than other states, Arunachal Pradesh has been steadily making a name for itself in the sector. Due to the state's wealth of natural resources and climate, which is ideal for growing medicinal plants, small and medium-sized pharmaceutical businesses have emerged. These businesses cater mainly to the growing demand

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for natural healthcare solutions worldwide by producing herbal and Ayurvedic goods. Despite being relatively small in comparison to other states, Arunachal Pradesh's pharmaceutical export industry has room to grow and diversify. Another state in the Northeast, Manipur, has also been involved in pharmaceutical exports quite a bit. The primary focus of the state's pharmaceutical sector is the production of generic medications and formulations for both local and foreign markets. The geographical location of Manipur, adjacent to Myanmar, presents trading prospects and facilitates the export of pharmaceutical items to nations in Southeast Asia. Additionally, the construction of pharmaceutical units has been promoted by the state government's attempts to support industrial growth and investment, which has improved export capacities and boosted the state's economy.

Meghalaya has been using its natural resources to support pharmaceutical manufacture because of its favorable agro-climatic conditions. The state has drawn investments in the pharmaceutical industry due to its emphasis on organic farming and the production of medicinal plants. Pharmaceutical firms established in Meghalaya have been exporting a range of products to foreign markets, such as nutraceuticals, herbal medications, and traditional treatments. Additionally, the state's accessibility to important ports and transportation hubs makes it easier to export pharmaceutical products to other countries, increasing its competitiveness on the international market. Even though they are smaller than other Northeastern states, Mizoram, Nagaland, Tripura, and Sikkim have been contributing to the pharmaceutical export scene. Pharmaceutical firms that specialize in herbal and traditional medicine, nutraceuticals, and specialist formulations have emerged in these states. Even though these states only export a small number of pharmaceuticals, they are important for diversifying India's pharmaceutical exports and reaching specialized markets where there is a great demand for particular items.

Table 1: Leading Pharmaceutical Product Exporters in India's Northeast

State	Major Exporters of Pharmaceutical Products	Frequency
Assam	- North East Pharmaceutical Pvt. Ltd.	10
	- NIPER-Guwahati	10
	- Sun Pharma Industries Ltd.	26
Meghalaya	- The Shillong Pharmaceuticals	20
	- Zydus Cadila	15
Manipur	- Haffkine Bio-Pharmaceutical Corporation Ltd. (Imphal Unit)	15
	- Esteem Pharmaceuticals	5
Nagaland	- Biomark Laboratories Ltd.	15
	- Themis Medicare Ltd.	13
Arunachal Pradesh	- Lincoln Pharmaceuticals Ltd.	12
	- Rusan Pharma Ltd.	11

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Tripura	- Sun Pharmaceutical Industries Ltd.	20
	- Medopharm	10
Sikkim	- Alkem Laboratories Ltd.	13
	- Mankind Pharma Ltd.	15

An overview of the top pharmaceutical product exporters from the different states in India's northeast is given in the table. The pharmaceutical firms that operate in each state are given, along with the matching frequency of export for each company. NIPER-Guwahati, Sun Pharma Industries Ltd., and North East Pharmaceutical Pvt. Ltd. are prominent exporters in Assam; Sun Pharma Industries Ltd. has the greatest export frequency (26). The Shillong Pharmaceuticals and Zydus Cadila are the representatives of Meghalaya; The Shillong Pharmaceuticals has a slightly higher export frequency of 20 compared to Zydus Cadila's 15. Esteem Pharmaceuticals and Haffkine Bio-Pharmaceutical Corporation Ltd. are the two companies that export the most pharmaceuticals from Manipur; Haffkine Bio-Pharmaceutical Corporation Ltd. is in the lead with an export frequency of 15. Themis Medicare Ltd. and Biomark Laboratories Ltd. are two of Nagaland's largest exporters, with export frequencies of 13 and 15, respectively. Lincoln Pharmaceuticals Ltd. and Rusan Pharma Ltd., with export frequencies of 12 and 11, respectively, are regarded as major players in Arunachal Pradesh. Sun Pharmaceutical Industries Ltd. and Medopharm, with export frequencies of 20 and 10, respectively, are the main exporters to Tripura. Lastly, with export frequencies of 13 and 15, respectively, Alkem Laboratories Ltd. and Mankind Pharma Ltd. are the primary exporters of pharmaceuticals from Sikkim. This information sheds light on how pharmaceutical manufacturing and export activities are distributed among India's northeastern states.

4. CHALLENGES IN POLICY IMPLEMENTATION

❖ Infrastructure Restrictions:

Limited Facilities: The area could not have the proper roads, energy, or water supply that are required for the production and delivery of pharmaceuticals.

Remote Locations: Establishing and maintaining pharmaceutical facilities can be challenging in several of the northeastern states due to their geographic isolation.

Logistical Challenges: Inadequate transportation systems and connectivity problems can cause problems for the supply chain, making it more difficult to deliver raw materials and completed goods on time.

❖ Complexity of Regulatory Compliance:

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Strict restrictions: Regulatory bodies like the Food and Drug Administration (FDA) and the Central Drugs Standard Control Organisation (CDSCO) enforce strict restrictions and quality requirements on the pharmaceutical business.

Costs of Compliance: It can be expensive to comply with regulations, especially for smaller pharmaceutical companies with tighter budgets.

Capacity Building: For policy implementation to be successful, it is essential to guarantee that pharmaceutical companies have the knowledge and resources needed to adhere to rules.

❖ **Diversity in Geography and Culture:**

Diverse Socio-Economic Conditions: The states in the Northeast have different levels of infrastructure and development as well as cultural and socioeconomic diversity.

Local Context: The distinct requirements and difficulties faced by various towns and areas in the Northeastern states must be considered by policies.

Language and Communication: Linguistic and cultural limitations may make it more difficult to communicate effectively and disseminate policy information.

❖ **Limited Human Resources:**

Skills Shortage: The pharmaceutical business may not have enough qualified workers in the area in fields like quality control, regulatory affairs, and research and development.

Training and Education: In order to overcome the shortage of human resources, it is crucial to fund education and training initiatives that will increase local ability and competence.

Brain Drain: The lack of qualified workers in the pharmaceutical industry may be exacerbated by talented people leaving their home country or region in quest of better possibilities.

❖ **Red tape in the political system and political instability:**

Policy Uncertainty: Political unrest and governmental transitions may result in uncertainty over the creation and application of policies, which may have an impact on the pharmaceutical industry's long-term planning and investment decisions.

Bureaucratic Delays: The establishment and growth of pharmaceutical operations may be postponed by convoluted bureaucratic processes and red tape that impede the acquisition of regulatory permissions and permits.

Corruption: The efficacy of laws and regulations may be compromised by corruption and rent-seeking activity within government organizations, which would erode public confidence in the

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pharmaceutical industry.

5. CONCLUSION

In conclusion, there are possibilities and problems associated with the pharmaceutical industry's adoption of new rules in India's northeastern states. These policies seek to promote innovation, provide access to healthcare, and stimulate economic growth in the area, but they face a number of challenges before they can fully accomplish their goals. The pharmaceutical industry faces numerous problems in implementing policies, including those related to infrastructure, political instability, cultural and geographic variety, regulatory compliance complexity, and human resource limits. These obstacles can be addressed, nevertheless, by taking a multifaceted strategy that entails cooperation between governmental bodies, business partners, civil society organizations, and foreign allies. Investments in regulatory changes, sound governance practices, infrastructure development, and capacity-building programmes are essential elements in establishing an environment that will allow new policies to be implemented successfully in the pharmaceutical industry. In the end, the North Eastern states of India can achieve their pharmaceutical sector's full potential by tackling these issues and utilising the region's advantages, like its abundant biodiversity and skilled workforce, which will enhance healthcare outcomes and promote sustainable development in the area.

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