

AN ANALYTICAL STUDY BASED ON INDUSTRIAL POLICY AND ITS IMPACT ON THE INDUSTRIAL STRUCTURE OF THE STATE OF SIKKIM

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ABSTRACT

Earlier study by the author of the industrial policy of 2002 of the Government of India for the north-eastern states, incurring Rsⁱ.1480 billion in taxes foregone over 14 years, revealed large variations in socio-economic performance indicators among the beneficiary states. A positive correlation was observed for Sikkim alone. The present study examines the impact of the policy on the structural changes in the manufacturing sector in Sikkim and offers policy recommendations. Secondary data published by the Government of India, and primary data collected from the manufacturing companies in Sikkim through a questionnaire using data points of the World Bank/the Government of India for studying “Ease of Doing Business”, have been collated and analysed. Only the pharmaceutical sector registered phenomenal growth in Sikkim. Other sectors have either stagnated or declined. “Ease of Doing Business” indicators strongly suggested that pharmaceutical companies encountered a favourable regulatory environment as compared with the non-pharmaceutical companies. Sikkim became a destination of choice for the pharmaceutical companies, due to longer tax incentive period. The regulatory environment was not attractive enough for the entrepreneurs in the non-pharmaceutical sector to relocate to Sikkim from established business agglomerates. Technological upgradation in regulatory framework, time bound clearances by local administration, upskilling of local labour force and establishment of land banks are recommended for inclusive and participatory industrial development of Sikkim.

Keywords: Area-based incentives for the Northeastern states in India; Employment and Investment in Sikkim; Industrial policy of Government of India; Industrial structure of Sikkim; Pharmaceutical industry in Sikkim

INTRODUCTION:

The state of Sikkim is in the north-eastern part of India, sharing international borders, with Tibet in the north and Northeast, Bhutan in the east, Nepal in the west and national border with the state of West Bengal in the south. As per census report of 2011 of Government of India, it has a geographical area of 7096 sq. kms, and has population of 0.6 million people (Government of Sikkim, 2013).

In 1997, the Government of Indiaⁱⁱ (GoI) announced industrial policy for the seven states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura, in the North-Eastern India and in 2002, for Sikkim. The rationale behind the policy was that it will attract industrial units to these states and thereby give impetus to employment and investment. The following fiscal incentives to new industrial units and units undertaking substantial expansion were announced:

- a. 100% exemption from income tax and excise duty,
- b. Capital investment subsidy of 15% subject to a ceiling of Rs. 3 million,
- c. Interest subsidy of 3% on working capital loan, and
- d. 100% subsidy on insurance premium on capital investment.

The industrial policy of 2002 was subsumed and rechristened as North East Industrial and Investment Promotion Policy (NEIIPP) 2007, and extended upto 31.03.2017. After expiry of NEIIPP, GoI approved North East Industrial Development Scheme (NEIDS) upto March 31, 2022.

The main plank of the policy was 100% exemption from income tax and excise duty. It was expected that these incentives will motivate entrepreneurs to set up industrial units in the north-eastern states in large numbers with leading to significant generation of investment and employment. However, large variations in socio-economic performance indicators were observed among the beneficiary states. Positive correlation between the industrial policy and the socio-economic performance indicators was noticed only for Sikkim (Kolhe, 2017). GoI for the first time in financial year 2004-05 disclosed the nature and quantum of tax exemptions availed by the tax payers in budget documents. For the period of twelve financial years from 2004-05 to 2017-18ⁱⁱⁱ, the tax incentives are phenomenal of Rs. 1,480 billion for the eight states of the northeast which includes Rs. 853 billion for Sikkim. For the same period, the quantum of non-tax incentives was of INR 1617 crore, which is miniscule as compared to the quantum of tax incentives (Kolhe, 2017).

The state of Sikkim was the best performing state and therefore it has been chosen for the present study to examine the impact of the industrial policy on the industrial structure of Sikkim. For this purpose, the growth in the eight key performance indicators used in Annual Survey of Industries (ASI)^{iv} being conducted by Ministry of Statistics and Programme Implementation under the Government of India was analysed. It revealed that pharmaceutical industry has hugely prospered when compared with non-pharmaceutical within Sikkim as well as in comparison with pharmaceutical industry at all India level.

This finding prompted us to seek the reasons for such an occurrence. Existing literature on the matter, suggested that there is a strong correlation between the quality of governance and economic development. There is a strong causal link, between regulatory quality and economic performance (Jalilian et al., 2007). According to Heckelman (2000), economic freedom precedes economic growth. Political stability, government effectiveness, regulatory quality, rule of law, and corruption control strongly influence entrepreneurship. Further, there is a strong correlation between governance indicators and entrepreneurship (Abegaz et al., 2013). The World Bank has been advocating improvement in “Ease of Doing Business” across the globe and they publish annual report and rankings on this concept. On the similar lines, GoI has been nudging the states within India to improve “Ease of Doing Business” within their territories. World Bank has designed data points for collection of information which has been adopted by GoI with a few modifications. We have made use of these data points in our questionnaire.

Methods segment of the study is divided in two parts. In Part I, we have discussed performance parameters used in the secondary data as published in ASI and in Part II, we have discussed sampling frame and data collection tool. Results portion is also in two parts. In Part I, findings arising from analysis of secondary data, on industrial structure of Sikkim have been narrated and in Part II, we have analysed the findings arising from primary data analysis. In discussion we have summarised the reports of government authorities, articles in trade journals, research papers and our own research findings, and have attempted to explain the disparity in performance indicators of pharmaceutical industry as against non-pharmaceutical industry in Sikkim. Policy recommendations have been offered in the end.

METHODS:

Part I: Measurement of structural changes in the industrial structure of Sikkim by using secondary data:

Annual Survey of Industries is being conducted annually. The data captured by ASI is compiled on all India basis and state wise on 45 parameters, is basically twofold: (i) On employment in which details of nature of employment, man-days employed and emoluments paid are captured and (ii) On investment in which details of number of factories, investment, expenses, income and profit of the factories are captured (ASI for F.Y. 2017-18). More importantly, this data is available, according to the type of industry Central Statistics Office (2013). Thus, the data helps in measurement of

composition of industry and measurement of components of employment and investment within the industry.

The first ASI for Sikkim is for the F.Y. 2010-11, therefore, this analysis begins with F.Y.2010-11. Further, the latest ASI for the pre-Covid period is for the F.Y. 2017-18. Thus, we proceed to analyse the changes in a span of seven years from F.Y.2010-11 to F.Y.2017-18. For the purpose of saliency and brevity, we have limited the parameters to eight. They are: (i) number of factories,(ii) number of persons engaged,(iii) total man-days employed(iv) wages and salaries,(v) fixed capital, (vi) gross value of plant and machinery, (vii) income and (viii) profit.

Part II: Measurement of “Ease of doing business” by using primary data from manufacturing units in Sikkim

The World Bank collects data on the ten domains.: (i) Starting a business, (ii) Dealing with construction permits, (iii) Getting electricity, (iv) Registering property, (v) Getting credit, (vi) Protecting minority investors, (vii) Paying taxes, (viii) Trading across borders, (ix) Enforcing contracts and (x) Resolving insolvency. This data is collected for only two cities: Mumbai and Delhi, from a select group of professionals in the field such as architects, advocates and chartered accountants (World Bank Group, 2020).

The data set of World Bank was modified by Gol for measuring “Ease of Doing Business”. It has fifteen areas: (i) Investment Enablers, (ii) Land Administration and Transfer of Land and Property, (iii) Change in Land Use, (iv) Environment Registration Enablers, (v) Labour Regulation Enablers, (vi) Obtaining Utility Permits, (vii) Paying Taxes, (viii) State Excise, (ix) Construction Permit Enablers, (x) Storage of Construction Material, (xi) Inspection Enablers, (xii) Commercial Disputes Resolution Enablers, (xiii) Sector -Specific Trade License, (xiv) Miscellaneous, (xv) Procurement. Each of these domains has data-points seeking information on domain related aspects. Gol collects data on compliances from the officers of the State Governments (Department for Promotion of Industry and Internal Trade, 2019).

Sampling frame provided by ASI for Sikkim has been used (Central Statistics Office, 2018). There are 29 pharmaceutical companies and 34 non-pharmaceutical companies having manufacturing units in Sikkim. Convenience sampling method was applied and the data was collected from 14 pharmaceutical companies and 16 non-pharmaceutical companies. As a part of larger study for doctoral thesis, we have collected data on all the domains specified by Government of India. However, for the purpose of this article we have limited our analysis to four domains: (i) land administration and transfer of land and property (6 questions), (ii) environmental registration enablers (8 questions), (iii) labour registration enablers (14 questions) and (iv) construction permit enablers (14 questions).

The data was collected using questionnaire as data collection tool on seven point Likert scale. This questionnaire was pilot tested in Nagpur city on 19 industrial units. Cronbach’s alpha was found to be reasonably high ($\alpha = 0.9680$) suggesting thereby a high reliability of the designed instrument. The data collected from Sikkim companies was coded and analysed in statistical software STATA version 10.1 (2011) by StataCorp, Texas, USA. Due to small sample size, Fisher’s exact test was applied for comparing items of pharmaceutical and non-pharmaceutical sectors.

RESULTS:

Part I: Measurement of structural changes in the industrial structure of Sikkim on the basis of secondary data

(A) Increase or decrease in the selected parameters in F.Y. 2017-18 and F.Y. 2010-11 was studied. Our findings are as below:

(a) Number of factories: The entire growth from 64 factories to 82 factories in Sikkim is in pharmaceutical sector. Growth in other industrial sectors such as dairy, food, beverages, paper, chemicals and plastic is either stagnant or negative.

(b) Employment: The pharmaceutical sector has provided highest growth in employment of nearly 270%. The two other sectors are beverages and paper which provide growth of nearly 70%. In the other industries, the growth in employment is either stagnant or negative.

(c) Capital and assets: There is inflow of fixed capital of nearly Rs. 60 billion in the industrial sector during the period and almost whole of it has flown into the pharmaceutical sector. Addition to plant and machinery is of about Rs.15 billion, which has almost entirely taken place in pharmaceutical industry.

(d) Income and profit: Almost all the industries have shown healthy trend in growth in income and profit. However, if the absolute numbers are taken the pharmaceutical industry stands out. As an industrial sector, the income has grown from Rs.27.44billion to Rs.106.10 billion and profit from Rs.24.37billion to Rs.98.77billion. In the pharmaceutical industry the income has grown from Rs.25.07 billion to Rs. 97.93billion and profit from Rs.22.36billion to Rs.92.44 billion. Thus, almost whole of the growth in income and profit has come from the pharmaceutical industry.

(e) Thus, subsequent to the industrial policy, there has been substantial growth in industrial sector in Sikkim but it is not diversified, as almost the whole of it is in the pharmaceutical industry.

(B) Comparison of the growth of pharmaceutical industry within the industrial sector in Sikkim with the growth of pharmaceutical industry in the industrial sector in India was made. The findings are as below:

(a) Number of factories: The industry in general in Sikkim grew by 28%, whereas, pharmaceutical industrial industry grew by 146%. On the all India basis, the growth in overall industrial sector has remained stagnant whereas the pharmaceutical sector grew by 8%.

(b) Employment: The growth in employment of the pharmaceutical units in Sikkim was nearly 270% whereas at all India level, it was more modest at about 55% during the same period.

(c) Capital and assets: The growth of capital in the pharmaceutical units in Sikkim was nearly 820% whereas at all India level, it is more modest at about 114% during the same period. Similarly, increase in gross value of plant and machinery in the pharmaceutical sector in Sikkim is nearly five times as compared to twotimes growth in the pharmaceutical sector at all India level.

(d) Income and profit: The growth in income and profit in the pharmaceutical units in Sikkim is nearly 300% as compared to nearly 140% at the all India level, during the same period.

(e) Thus, subsequent to the industrial policy, growth in the pharmaceutical sector in Sikkim is extraordinarily high as compared to the growth in the pharmaceutical industry at the all India level.

(C) Subsequent to the industrial policy, there has been a marked change in the composition of industrial sector in Sikkim. Our findings on the industrial composition in F.Y. 2010-11 and F.Y. 2017-18 are as below:

(a) Number of factories: In F.Y. 2010-11, the top three sectors were pharmaceutical, food and paper which enjoyed shares of 20%, 14% and 11% respectively. In F.Y. 2017-18, the top three sectors were pharmaceutical, beverages and food having shares of 39%, 10% and 9%. It appears that the pharmaceutical sector and combined food and beverages sector, dominated the industrial sector in Sikkim. More remarkable change is that the share of pharmaceutical industry in the industrial sector went up substantially from 20% to 39%.

(b) Employment: In F.Y. 2010-11, pharmaceutical sector provided highest employment at 62% of the industry, the two other sectors being food and beverages at 15% and 5% respectively, being distant second and third. In the F.Y. 2017-18, pharmaceutical sector, at 81%, became the predominant sector providing employment. The share of other industries in employment reduced during the period.

(c) Capital and assets: Pharmaceutical sector recorded near complete monopoly in capital and assets at nearly 90% in F.Y. 2017-18, as compared to nearly 70% in F.Y. 2010-11.

(d) Income and profit: In F.Y. 2010-11 and also in F.Y. 2017-18, pharmaceutical sector accounted for nearly 92% of income and profit.

(e) Thus, we observe that subsequent to the industrial policy, the pharmaceutical industry attained a pivotal position in the industrial sector in Sikkim.

(D) We have analysed the industrial composition in F.Y. 2010-11 and F.Y. 2017-18 in Sikkim and compared it with the industrial composition at all India level with respect to the pharmaceutical industry, during the same period. Our findings are as under:

(a) Number of factories: While in Sikkim, the share of industrial units in pharmaceutical sector in the industry grew from 20% to 39 %, from F.Y. 2010-11 to F.Y. 2017-18; at the all India level the share of pharmaceutical units continued to remain at 2% during the period.

(b) Employment: The share of employment provided by pharmaceutical units in Sikkim went up from 60% in F.Y. 2010-11 to 80% in F.Y. 2017-18, whereas at all India level, it went up from 4% to 5% during the same period.

(c) Capital and assets: The pharmaceutical units accounted for nearly 95% of the capital and assets in F.Y. 2017-18 as against nearly 66% in F.Y. 2010-11. Whereas at the all India level, share of capital employed by the pharmaceutical units went up from 3% to 4% and the share of plant and machinery installed by the pharmaceutical units remained stagnant at 3%, during the same period.

(d) Income and profit: In F.Y. 2010-11 and also in F.Y. 2017-18, pharmaceutical sector accounted for nearly 92% of income and profit of the industry, as compared to nearly 6% in 2010-11 and 9% in 2017-18 at the all India level.

(e) Thus, subsequent to the industrial policy, share of pharmaceutical industry in the industrial sector in Sikkim across all the parameters is dominant, whereas at the all India level the share of pharmaceutical industry in the industrial sector has almost remained the same.

Part II: Measurement of “Ease of Doing Business” for manufacturing units in Sikkim on the basis of primary data

The data points and the results for the four domains are as below:

(a) Land administration and transfer of land and property (6)

(i) Online access to land transaction history and deeds

(ii) Access to land transaction history and deeds at the registrar’s office

(iii) Access to details of property tax paid

(iv) Payment of stamp duty for purchase of property

(v) Registration of property

(vi) Mutation/change of name at land record office, local body, electricity department and water department

In this domain, the ease of doing business was significantly high for pharmaceutical business as compared to non-pharmaceutical business (p value < 0.05), except for: payment of stamp duty for purchase of property (p value = 0.089).

(b) Environmental registration enablers (8)

(i) Access to information such as procedure, fees and documents required for taking permission Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1974

(ii) Obtaining permission under Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1974

(iii) Access to information such as procedure, fees and documents required for taking permission under Hazardous and Other Wastes (Management and Transboundary Movement) Rules

(iv) Obtaining permission under Hazardous and Other Wastes (Management and Transboundary Movement) Rules

(v) Access to information such as procedure, fees and documents required for taking permission under The E-waste (Management and Handling) Rules

(vi) Obtaining registration under The E-waste (Management and Handling) Rules

(vii) Access to information such as procedure, fees and documents required for taking permission under Plastic Waste (Management and Handling) Rules

(viii) Obtaining registration under Plastic Waste (Management and Handling) Rules

In the domain, the ease of doing business was significantly high for pharmaceutical business as compared to non-pharmaceutical business ($p < 0.05$), except for : Access to information such as procedure, fees and documents required for taking permission Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1974 (p value = 0.05)

(c) Labour regulation enablers (14)

- (i) Access to information such as procedure, fees and documents required for registration of factories under The Factories Act, 1948
- (ii) Obtaining registration of factory under The Factories Act, 1948
- (iii) Access to information such as procedure, fees and documents required for construction or take into use any building as factory
- (iv) Obtaining permission for construction or take into use any building as factory
- (v) Access to information such as procedure, fees and documents required for registration under The Boilers Act, 1923
- (vi) Obtaining registration under The Boilers Act, 1923
- (vii) Access to information such as procedure, fees and documents required for registration under The Contracts Labour (Regulation and Abolition) Act, 1970
- (viii) Obtaining registration under The Contracts Labour (Regulation and Abolition) Act, 1970
- (ix) Access to information such as procedure, fees and documents required for registration under The Shops and Establishment Act
- (x) Obtaining registration under The Shops and Establishment Act
- (xi) Access to information such as procedure, fees and documents required for registration under The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act. 1996
- (xi) Obtaining registration under The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act. 1996
- (xiii) Access to information such as procedure, fees and documents required for registration under The Inter State Migrant Workmen (RE & CS) Act, 1979
- (xiv) Obtaining registration under The Inter State Migrant Workmen (RE & CS) Act, 1979

In the domain of “Labour registration enablers” the ease of doing business was significantly high for pharmaceutical business as compared to non-pharmaceutical business on 11 variables (p value < 0.05), except for the 3 variables: access to information such as procedure, fees and documents required for registration of factories under The Factories Act, 1948 (p value = 0.139), access to information such as procedure, fees and documents required for registration under The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act. 1996 (p value = 0.054) and access to information such as procedure, fees and documents required for registration under The Inter State Migrant Workmen (RE & CS) Act, 1979 (p value = 0.269)

(d) Construction permits enablers (14)

- (i) Access to Uniform Building Code
- (ii) Access to information such as procedure, fees and documents required for obtaining
- (iii) Construction Permit and No Objection Certificate from various agencies
- (iv) Obtaining NOC from Fire Services
- (v) Obtaining NOC from Water and Sewerage Department
- (vi) Obtaining NOC from Discoms
- (vi) Obtaining NOC from Airport Authority of India
- (vii) Obtaining NOC from LA
- (viii) Obtaining NOC from Forest Department
- (ix) Obtaining NOC from Labour Department
- (x) Obtaining NOC from Factory Directorate
- (xi) Obtaining Building Plan Approval
- (xii) Obtaining Construction Permit
- (xiii) Obtaining Plinth Inspection Certificate
- (xiv) Obtaining Completion/Occupancy Certificate

In this domain, the ease of doing business was significantly high for pharmaceutical business as compared to non-pharmaceutical business on all the 14 variables (p value < 0.05)

Discussion:

The aim of GoI in implementing the industrial policy, for Sikkim was to initiate accelerated industrial development of Sikkim. Measured on the parameters of Per Capita Net State Domestic Product (PCNSDP) and Per Capita Manufacturing State Domestic Product (PCMSDP) the policy was a success (Kolhe, 2017). However, we have that observed the increase in PCNSDP and PCMSDP was only due to growth of pharmaceutical units.

The observers of the pharmaceutical sector reported large scale migration of pharmaceutical companies to Sikkim to claim tax incentives. Economic Times (2009) reported that leading pharmaceutical companies including that of Cipla Ltd., Sun Pharma Laboratories Ltd., Zydus Wellness Ltd., Alembic Pharmaceuticals Ltd., IPCA Laboratories Ltd., Alkem Health Science Ltd., Intas Pharmaceuticals Ltd. and Torrent Pharmaceuticals (P) Ltd. were already functioning in Sikkim and further more companies were making plans to open a pharmaceutical units in the State, due to exemption of income tax and excise duty. The companies in the pharmaceutical sector have a tendency to flock together which was seen in Goa, Baddi and now in Sikkim and also that the motivation for such migration was tax incentives (Mukherjee, 2009). Francis (2010) reporting on the Himalayan states claimed that “the tax holiday was blatantly misused by several large units hitting small and medium scale units in the neighbouring states and causing massive revenue loss to the exchequer and that there was no central monitoring to assess whether the tax holiday was actually helping the backward states to industrialize during the past six years and further that the Central scheme had helped more to enrich the large and medium scale companies migrated from other states to profiteer.

The researchers are also concerned about the sustainability of the pharmaceutical sector in Sikkim after the period of tax incentives came to an end. Francis (2015) underscored that after the same policy was notified in 2003 for Himalayan states, pharmaceutical companies from Gujarat, Punjab, Maharashtra and Goa migrated to the Himalayan states and more than 120 pharmaceutical units were operating at Baddi alone and that after the sun set clause became operative in these areas, the pharmaceutical units were being closed. The Comptroller and Auditor General of India (2019), recorded that since the industries were attracted to Sikkim due to benefits available under the central schemes, there is every possibility that such industries might close operations in Sikkim and shift their bases to locations better suited for them after termination of the incentive schemes of the Government of India, as they have done in Uttarakhand after withdrawal of the incentives.

Our questionnaire also had two questions on degree of importance the pharmaceutical units attached to the tax incentives. Regarding income tax incentives, out of 14 respondents, 5 responded as extremely important, 2 responded as very important and 5 responded as important. Thus on an average for 86% of the respondents, income tax benefits were very important to establish a manufacturing unit in Sikkim. With regard to the excise duty exemption, out of 14 respondents, 5 responded as extremely important, 2 responded as very important and 3 responded as important. Thus on an average for 70% of the respondents, excise duty benefits were very important to establish a manufacturing unit in Sikkim. Thus it appears that the pharmaceutical industry was on a look out for new tax friendly regime which was offered by Sikkim and this was the main reason for establishing their units in Sikkim.

Now the question arises why units from other manufacturing sectors did not find Sikkim attractive where tax incentives were available even for them. Land is an important factor of production. Only 33 acres of private land is available for industrial use (Commerce and Industries Department, 2019). The entrepreneurs have to depend on state government for land allocation and fair and transparent system for allotment of land by government was absent. The unplanned allocation of Government land without publicity about availability of such land for industrial purposes, non-invitation of open applications from potential investors and the allotment of different sizes of lands to a few agencies at different lease rates much lower than the applicable rates for varying time periods revealed the irregular, arbitrary and random action of the Government in making public land allotments (Comptroller and Auditor General of India (2019).

On the issue of the process of land acquisition, an uneasy relationship between the persons who parted with the land and the pharmaceutical companies who acquired their land has been observed. Chettri M., 2020, has observed that “corporate land grabs have altered the relationships between people, land and the state in expected and unexpected ways. Ambiguous land rights and the establishment of pharmaceutical factories have led to spatially contained land booms in Setipool which replicate nexuses of illegality, claim-making and exclusions that are characteristic of corporate land grabs. Land grabs and different forms of intimate exclusion that have emerged within the slum challenge prior assumptions around local responses to corporate incursions and illustrates how even without dispossession, commodification of land can lead to different forms of access and exclusions.” National Council of Applied Economic Research (2021) has ranked Sikkim at 30 (2.9 points out of 100 points) among the 32 states and union territories. This study focuses on textual record, spatial record, registration and quality of land records. Our analysis also found that non-pharmaceutical sector experienced significant difficulty than pharmaceutical sector in land acquisition process (p value < 0.05 except for: payment of stamp duty).

The related issue with land acquisition is of getting approvals for construction activity. Nearly 20 permissions are required for construction activity and they have to be obtained in person (Urban Development and Housing Department, Sikkim, 1991) and use of heavy machinery attracts permit fees (Sikkim Express, 2022, March 12). Usually, for the 4 months of monsoon excavation activity is banned in Sikkim (Northeast Now, 2022, March 12). Our study also revealed that non-pharmaceutical entities experienced significant difficulty as compared to non-pharmaceutical business on all the 14 variables (p value < 0.05).

Another important factor of production is labour. The pharmaceutical units provided highest growth in employment at 270% in these seven years. In other sectors it was either stagnant or declined during the same period. However, nearly 70% of the work force is from outside Sikkim and there were industrial relations problems as aspirations of local youth were not addressed (Das, 2015.). Confrontation of the labour force with the management of pharmaceutical companies has been reported (Sikkim Express, 2022). According to Comptroller and Auditor General of India (2019), the local people were not driven to enter into joint ventures with large firms based outside the State due to lack of experience, uncertainty associated with such ventures and also due to the sheer size of the capital investment required, and rather preferred opening and running hotels. Even though labour issues were for all the sectors, in our study we noticed that difficulties faced by non-pharmaceutical companies in getting permissions on labour regulations were significantly higher as compared to pharmaceutical companies on 11 variables (p value < 0.05).

The implementation of pollution control acts is with Sikkim Pollution Control Board and it has been ranked 20th, among 30 states and union territories (42.1 points out of 100) (Verma, 2021). In 2005, Sikkim created “Sikkim Ecology Fund” in which 1% cess on sell price of non-biodegradable material (includes all the raw material required for manufacturing industrial products excluding pharmaceutical products) brought from outside the state is deposited to reduce pollution (Law Department, 2005). This was perhaps the major impediment in establishing non-pharmaceutical industries in Sikkim as most of the raw material had to be brought from outside state. We found that non-pharmaceutical companies had significant difficulty in getting clearances than pharmaceutical companies ($p < 0.05$ except for one data point).

In the seven years from F.Y. 2010-11 to F.Y. 2017-18, there was fixed capital infusion of Rs. 60 billion and addition to plant and machinery of Rs. 15 billion in Sikkim, which was almost entirely absorbed by the pharmaceutical industry. In fact, in F.Y. 2017-18, the pharmaceutical industry in Sikkim monopolised capital and creation of new assets as its share was 90% of the industrial sector. This finding is supported by Duncan et al, (2018) who observed that pharmaceutical industry, has turned Sikkim into ‘backyard’ for Indian capital. Nearly whole of the income and profit generated by the industrial sector in Sikkim has been generated by the pharmaceutical industry whereas, at the all India level, the pharmaceutical industry generated only 8% of the income and 9% of the profit of the industrial sector.

The analysis of the secondary and primary data suggested that even though PCMSDP significantly increased it was not widespread but only due to rise in output of pharmaceutical companies and that it did not generate employment for the local people. Comptroller and Auditor General of India (2019) have also commented that the benefits derived by the State from the growth of manufacturing sector remained unclear and that the huge growth of manufacturing industries post NEIIPP, 2007 inflated the per capita GSDP of the State by 60 to 64 per cent but failed to contribute to either the State's revenue or the income of the local people as the revenues from the industries went to the manufacturing companies based outside the State.

We further found that the pharmaceutical companies steered the regulatory environment much better than the non-pharmaceutical companies leading to better performance than the latter. Large firms frequently pursue better management and organisation of production, as well as seeking outward orientation, innovation, and investment in human capital, which translates into better outcomes for their owner, but also for their workers and for smaller enterprises in their value chain (Ciani et al, 2020). From the demographic profile we found that pharmaceutical companies (9 out of 14 had turnover exceeding Rs. 1500 million and only 2 had turnover of less than Rs.500 million) were bigger in size as compared to their non-pharmaceutical counterparts (Only 2 out of 16 had turnover exceeding Rs. 1500 million and 14 had turnover of less than Rs.500 million) and therefore due to bigger size the pharmaceutical companies could navigate the regulatory framework better.

Technological upgradation in regulatory framework, time bound clearances by local administration, synergies among the government departments, right skilling of local labour force and establishment of land banks are recommended for inclusive and participatory industrial development of Sikkim. These recommendations have relevance in the larger context as Government of India has taken policy initiatives such as "Make in India" and "Atmanirbhar Bharat" and has announced several production linked incentive (PLI) schemes to boost the manufacturing sector.

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ⁱRs. means Indian Rupee

ⁱⁱGovernment of India is abbreviated as GoI

ⁱⁱⁱ The methodology of this computation remained consistent up to Financial Year 2017-18, after which significant changes were made. Therefore, Financial Year 2017-18 was selected as the last data point.

^vAnnual Survey of Industries is abbreviated as ASI

^vSelf reliant India