# A Comparative Study of Industrial Development in Himachal Pradesh After the Special Industrial Package

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## Abstract

**The economy of Himachal Pradesh is mainly dependent upon agriculture as it contributes to more than 45% of its state domestic product, and 71% of the state's labour force is employed in this sector. Being a hilly region, the scope of agriculture is very limited, and the government promotes industrialization through various investor friendly measures. Considering Himachal Pradesh as one of the industrially backward hilly states, the Government of India announced a special economic package for the state along with other hill states (i.e. Jammu & Kashmir and Uttarakhand) to augment the process of industrialization. In this paper, an attempt was made to assess the impact of the special economic package on the growth of industries and overall development of the state by comparing it with the neighboring states. The study found that the state registered a significant growth in terms of the number of factories, capital employed, industrial employment, and capital formations during the period from 2003-04 to 2011-12 in comparison to other states.**

***Keywords:*** **special economic package, industrial workers, capital formation, hilly state**

**JEL Classification: H32, L52, R3, Q18**

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Himachal Pradesh, being a hilly state, is dependent upon agriculture and horticulture. The state is one of the advanced states in India due to well established education system, road network, rich forest and natural resources, a rich heritage of handicrafts, and abundant and uninterrupted supply of electricity at reasonable prices.

Considering the limited scope for agriculture, government promotes industrialization in the state through various industrial policies accompanied with the development of industrial infrastructure in various industrial areas and estates. The Government established various agencies like Directorate of Industries, HP General Industries Corporation, HP state Industrial Development Corporation, Industry Centre at District level, Small Industrial Development Bank of India, HP Financial Corporation, Small Industries Service Institute, Baddi Barotiwala Nalagarh Development Authority (BBNDA), and HP State Handicrafts and Handloom Corporation (HIMCRAFT) to expedite the industrialization process. Government eases the process for project clearance through a state level single window clearance and monitoring cell as well as provides subsidies to medium and small scale industries. Being one of the power surplus states in India having ample potential for hydro-electricity generation, the state is able to provide uninterrupted power supply at reasonable power tariff structure.

Promotion and development of industrial environment in the state was a tedious job because of its geographical conditions, limited availability of mineral resources and skilled labour, and inadequate connectivity. Considering the industrial potential of the state, the government at the Centre provides a special package to the state along with Uttarakhand and Jammu & Kashmir in terms of tax exemptions, capital subsidy, investment allowance, and enhancement in assistance in various central government schemes to promote industrial infrastructure.

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The main objective of all these industrial stimulus was to develop a quality industrial infrastructure in high potential industrial growth centers, attract industries into the state, provide employment opportunities to local people, enhance revenue for overall development, encourage and sustain the cottage and tiny industrial sectors, and finally achieve balanced economic and social growth in all regions of the state, particularly the industrial backward areas.

The historical experience observed that industrial development, which is a major cause of economic development, gets concentrated in some urban centers and economic development which is led by industrialization takes place in the surrounding regions. Therefore, the disparities have cropped up between the regions of the country. The concept of backward regions and the concern for their development is not only confined to the developed countries, but the developing countries also recognize the problem of growing regional disparities and felt the need for the development of industries in the backward regions through various monetary and non monetary incentives. Most of the studies found that these incentives have been successful in promoting balanced economic growth and in some of the studies, these incentives just lead to relocation of industries and being too expensive in terms of the cost to the public exchequer of each new job created. Large numbers of studies have been conducted to assess the impact of incentives on industrial growth than on the development of a region.

Industrialization plays a crucial role in the development of a country by raising income, by creating and widening employment opportunities, by expanding trade and commerce, and thereby increasing the pace of capital formation and technology changes (Maizels, 1986). Kuznet (1948) saw industrialization as the permanent growth of the proportion of the non-agricultural sectors within the national economy running with considerable increase of the total industrial production as well as with the spread of up-to-date technology. Bagnar (1960) stated that industrialization is an economic and social process affecting not only the technological standards of the given country, but also the habits of the consumers, the way of thinking, and the organization of the actions, processes, and events in the life of the given society.

The process of industrialization in a particular region not only influences the economic sphere of people's life by raising income and employment opportunities, but it also influences the social and cultural life with increased opportunities for education, superior housing, public health, and other infrastructural facilities. Studies conducted by Dadibhavi (1991) ; Gayithri (1997) ; Mitra (1999) ; Kumar (2000) ; Sridhar (2003) ; Sharma (2007) ; Mittal (2008) ; Sharda, Kumar, and Chandel (2008) ; Flatters (2010) ; Singh and Khurana (2010) ; Patkar and Bhaduri (2011); Narta and Rashmi (2011) have highlighted the various issues related to impact of incentives and role of various agencies on industrialization and development.

The present research work is an attempt to make a comparative analysis of industrial development in the state of Himachal Pradesh due to special package in terms of balanced industrial growth and employment generation for locals by comparing it with the neighboring states.

## Research Design

The study is based upon secondary data collected from Annual Survey of Industries, Industrial reports of the respective states, Plan documents, Economic Surveys, and so forth. The data were analyzed for a period of 12 years beginning from 1998-1999 to 2009-2010 and is divided into two periods, that is, the Pre-Package Period (1998-2003) and the Package Period (2003-2010). While analyzing the data, a recessionary trend has been observed in all the variables at the national level as well as in all the three states during the pre-package period ; whereas, a growth trend was noticed during the package period. These movements in the variables are not because of the package, but may be due to the impact of trade cycles. Thus, an adjustment has been done to remove the impact of trade cycle on the growth of industries by deducting an adjustment factor. The adjustment factor is taken as the average growth rate in variables in neighboring states and at the national level.

Table 1. Project Approved by the Government up to March, 2013

| Category | Units | Investment | Employment |
|---|---|---|---|
| | Nos | (₹ in crores) | Nos |
| New medium/ large scale projects | 1039 | 33370.83 | 175341 |
| Expansion of existing units of medium and large scale sector | 167 | 3114.08 | 12758 |
| **Total medium and large scale** | **1,206** | **36,484.91** | **1,88,099** |
| New small scale units | 14616 | 10913.57 | 3,35,589 |
| Expansion of existing units of small scale sector | 259 | 233.36 | 3543 |
| **Total small scale** | **14,875** | **11,146.93** | **3,39,132** |
| **Grand Total** | **15,655** | **47,631.84** | **5,27,231** |

Source: Department of Industry, Government of Himachal Pradesh

## Results and Discussion

Year wise details of industrial units registered in Himachal Pradesh after the announcement of the special package have been presented in the Table1 and Table 1A, and it has been observed that before the announcement of the package, there were about 30,372 industrial units in the state with an investment of ₹ 70,977.48 lakhs and 1,29,871 persons were employed in these units. The Government had approved 15,655 projects up to March 31, 2013 consisting of 1206 units in medium and large scale sector and 14,875 units in the small scale sector with an expected investment of ₹ 47 thousand crores.

Out of this, 8,335 new units consisting of 8,044 in the small scale level and 291 medium and large scale units were registered after the special package and had invested more than ₹ 448291.2 lakhs. These new units have provided employment to more than 77,000 persons. This means that the special package has resulted in significant growth of industries in the state. These industries are producing from traditional to a wide spectrum of high - tech products like computer monitors, magnetic components, high quality precision components, tele-communication equipments, electronics, drugs and pharmaceuticals, processed food items, textiles, and spinning products.

## Number of Factories

The most common indicator for the level of industrialization is the number of factories in an area. As in any demographic study, the absolute population is the most important variable in any analysis ; for any industrialization study, the number of factories is the most crucial variable. The Table 2 highlights that the state had registered a higher growth rate, that is, 27.35% growth rate during the package period as compared to 1.26% in Haryana, 7.11% in Punjab, and 3.27% at the national level. The faster growth in Himachal Pradesh in comparison to the other neighbouring states during the package period clearly indicates the positive impact of the package.

By observing the growth rate during the pre-package period, it was found that the growth of industries in all the three states as well as in India level was unsatisfactory. A negative growth rate was observed in Punjab and at the national level. Himachal Pradesh and Haryana recorded positive growth rate of 3.79% and 3.44%, respectively. However, it is worthwhile to mention that Haryana recorded a very low growth rate, that is, only 1.26% during the package period, meaning that some of the industries shifted towards Himachal Pradesh or Uttarakhand.

The major increase in industrialization in Himachal Pradesh started from the year 2004-2005, though the package was started in 2003. This may be explained by the gestation period of the industrial investment proposals and the time taken in the procedural formalities for setting up industries. The state recorded a growth rate of 20.62% in a number of factories only because of this special package. Thus, it may be concluded that there has been a definite positive impact of the special package in Himachal Pradesh in terms of the number of factories.

**Table 1A. Year Wise Detail of Registered Industries in Himachal Pradesh after Special Economic Package**

| Year | Medium and Large Scale | | | Small Scale | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|
| | Projects in Nos | Investment (₹ in lacs) | Employment in Nos | Projects in Nos | Investment (₹ in lacs) | Employment in Nos | Projects in Nos | Investment (₹ in lacs) | Employment in Nos |
| up to 3/03 | 196 | 237806 | 29823 | 30176 | 70977 | 129871 | 30372 | 308783 | 159694 |
| 2003-04 | 15 | 3494 | 762 | 663 | 3708 | 3769 | 678 | 7202 | 4531 |
| 2004-05 | 35 | 30287 | 3473 | 913 | 8891 | 6412 | 948 | 39178 | 9885 |
| 2005-06 | 64 | 50159 | 4606 | 914 | 12217 | 6611 | 978 | 62377 | 11217 |
| 2006-07 | 46 | 61526 | 4568 | 952 | 45273 | 10665 | 998 | 106799 | 15233 |
| 2007-08 | 19 | 48264 | 1923 | 842 | 70637 | 11302 | 861 | 118901 | 13225 |
| 2008-09 | 46 | 114103 | 4225 | 909 | 73795 | 10939 | 955 | 187899 | 15164 |
| 2009-10 | 23 | 134382 | 2703 | 1032 | 75320 | 10011 | 1055 | 209702 | 12714 |
| 2010-11 | 27 | 211834 | 3740 | 963 | 96539 | 10002 | 990 | 308373 | 13742 |
| 2011-12 | 16 | 187929 | 2981 | 856 | 61909 | 7732 | 872 | 249838 | 10713 |
| **During package** | **291** | **841978** | **28,981** | **8044** | **4,48,291** | **77,443** | **8335** | **1290269** | **106424** |
| Total | 487 | 1079784 | 58804 | 38220 | 519268.7 | 207314 | 38707 | 1599053 | 266118 |

Source: Department of Industries, Government of Himachal Pradesh

## Fixed Capital

The data pertaining to the fixed capital gives the real impact of the package as this is a more crucial variable than the number of factories. The comparison of the growth rate of the fixed capital given in the Table 3 reveals that Himachal Pradesh and neighboring states had very low growth rates during the pre-package period. Surprisingly, the highest growth among the states under study in this period was seen in case of Punjab, that is, 7%.

**Table 2. Number of Factories**

| Year | H.P. | Haryana | Punjab | All India |
|---|---|---|---|---|
| 1998-1999 | 428 | 3,786 | 7,003 | 1,31,706 |
| 1999-2000 | 508 | 4,296 | 6,910 | 1,31,558 |
| 2000-2001 | 507 | 4,448 | 7,137 | 1,31,268 |
| 2001-2002 | 500 | 4,437 | 7,249 | 1,28,549 |
| 2002-2003 | 509 | 4,437 | 6,987 | 1,27,957 |
| 2003-2004 | 530 | 4,265 | 6,853 | 1,29,074 |
| 2004-2005 | 653 | 4,339 | 7,575 | 1,36,353 |
| 2005-2006 | 808 | 4,304 | 8,332 | 1,40,160 |
| 2006-2007 | 851 | 4,410 | 9,256 | 1,44,710 |
| 2007-2008 | 1,160 | 4,707 | 10,178 | 1,46,385 |
| 2008-2009 | 1,294 | 4,450 | 10,065 | 1,55,321 |
| 2009-2010 | 1,545 | 4,640 | 10,262 | 1,58,877 |
| Annual Growth (1998-2003) | 3.79 | 3.44 | -0.05 | -0.57 |
| Annual Growth (2003-2010) | 27.35 | 1.26 | 7.11 | 3.27 |
| Difference in Growth in the Pre Package & Package Period | 23.56 | -2.18 | 7.16 | 3.84 |
| **Growth Due to Package** | **20.62** | Adjustment Factor: 2.94 | | |

Source: Annual Survey of Industries, Ministry of Statistics & Programme Implementation, Government of India

In the package period, keeping in view the overall positive sentiments, the growth rates for all the states showed much better performance with the growth in other states hovering around the all India average of 23%. However, Himachal Pradesh out shined with the average annual growth rate of 52.50%, which was nearly double of the country growth rate (26.52%). This reflects the fact that Himachal Pradesh has been successful not only in attracting more number of factories, but was also able to attract medium and large scale industries. Obviously, there were enough reasons for Punjab and Haryana to oppose the special package granted to Himachal Pradesh. The impact assessment due to the package in the state revealed an outstanding growth rate of 27.24%.

## Invested Capital

The data pertaining to invested capital depicted in the Table 4 follows the low - growth trend, as in the case of fixed capital, low growth rates during the pre-package period were observed in all the states. However, during the package period, the state grew sharply at an annual growth rate of 54.49% in comparison to the performance of the other states and all India growth rate of 26.35%. The growth rate due to the package granted to Himachal Pradesh explained a 27.56% growth rate, meaning that the package resulted in a significant growth of invested capital in Himachal Pradesh.

## Number of Industrial Workers

One of the professed objectives of industrialization is employment generation. The data on the number of industrial workers shown in the Table 5 reveals that the state achieved an exceptionally high growth rate of 37.15% during the package period as compared to a negative growth rate during the pre-package period. This growth rate is more than double as compared to growth rates of Punjab and Haryana. The impact of the package for Himachal Pradesh resulted in 25.96% growth in number of industrial workers. Although the data related to the number of industrial workers highlights the success of the package in generating huge employment opportunities

**Table 3. Fixed Capital (₹ Lakhs)**

| Year | H.P. | Haryana | Punjab | All India |
|---|---|---|---|---|
| 1998-1999 | 2,87,331 | 11,12,285 | 8,42,513 | 3,91,15,145 |
| 1999-2000 | 3,21,001 | 13,16,705 | 10,07,595 | 4,01,86,473 |
| 2000-2001 | 3,40,581 | 13,98,028 | 8,49,312 | 3,99,60,422 |
| 2001-2002 | 4,11,358 | 14,37,671 | 8,41,874 | 4,31,96,013 |
| 2002-2003 | 3,58,278 | 14,10,886 | 11,19,761 | 4,44,75,938 |
| 2003-2004 | 5,71,383 | 15,13,413 | 9,25,642 | 4,73,33,140 |
| 2004-2005 | 5,94,781 | 16,62,464 | 10,71,349 | 5,13,06,925 |
| 2005-2006 | 8,29,821 | 18,52,399 | 13,92,579 | 6,06,94,028 |
| 2006-2007 | 8,28,197 | 22,37,053 | 18,36,524 | 7,15,13,139 |
| 2007-2008 | 20,00,292 | 28,86,838 | 21,78,348 | 8,45,13,209 |
| 2008-2009 | 2189,156 | 37,06,457 | 26,48,036 | 10,55,96,614 |
| 2009-2010 | 26,71,378 | 40,22,443 | 26,10,606 | 13,52,18,367 |
| Annual Growth (1998-2003) | 5 | 5 | 7 | 3 |
| Annual Growth (2003-2010) | 52.50 | 23.68 | 26.00 | 26.52 |
| Difference in Growth in the Pre Package & Package Period | 47.50 | 18.68 | 19.00 | 23.52 |
| **Growth Due to Package (Before and After Frame)** | **27.24** | Adjustment Factor: 20.26 | | |

Source: Annual Survey of Industries, Ministry of Statistics & Programme Implementation, Government of India

**Table 4. Invested Capital (in ₹ Lakhs)**

| Year | H.P. | Haryana | Punjab | All India |
|---|---|---|---|---|
| 1998-1999 | 3,67,187 | 1,744,983 | 1,404,612 | 53,706,813 |
| 1999-2000 | 4,14,971 | 2,146,941 | 1,784,341 | 56,663,430 |
| 2000-2001 | 4,57,664 | 2,187,358 | 1,500,810 | 57,179,940 |
| 2001-2002 | 5,16,647 | 2,156,012 | 1,498,125 | 60,591,285 |
| 2002-2003 | 4,71,373 | 2,192,630 | 1,859,939 | 63,747,308 |
| 2003-2004 | 6,97,916 | 2,411,266 | 1,660,452 | 67,959,853 |
| 2004-2005 | 7,41,391 | 2,649,303 | 1,925,187 | 75,941,770 |
| 2005-2006 | 10,84,540 | 2,987,200 | 2,373,166 | 90,157,861 |
| 2006-2007 | 10,87,592 | 3,703,862 | 3,232,458 | 107,150,382 |
| 2007-2008 | 24,47,573 | 4,785,642 | 3,998,676 | 128,012,553 |
| 2008-2009 | 28,74,252 | 6,133,423 | 4,612,258 | 153,517,773 |
| 2009-2010 | 33,59,874 | 6,472,739 | 4,842,949 | 19,330,5395 |
| Annual Growth (1998-2003) | 6 | 5 | 6 | 4 |
| Annual Growth (2003-2010) | 54.49 | 24.06 | 27.38 | 26.35 |
| Difference in Growth in the Pre Package & Package Period | 48.49 | 19.06 | 21.38 | 22.35 |
| **Growth Due to Package** | **27.56** | Adjustment Factor : 20.93 | | |

Source: Annual Survey of Industries, Ministry of Statistics & Programme Implementation, Government of India.

in the state, but the qualitative observations and the information gathered from various sources indicate that most of the industrial workers are migrant workers from other states. Thus, from the point of view of significant employment generation, significant benefits have been filtered away to the other states.

## Total Persons Engaged in Industry

The data on total persons engaged in industry broadly follows the trend of the total number of industrial workers (Table 6). The pre-package period performance for all the states was either negative or negligible with the exception of Punjab, which recorded a positive annual growth of 2%. During the package period, the performance of Himachal Pradesh improved drastically, and recorded a growth rate of 35.73% per annum. It is worthwhile to note that during this period, Haryana also recorded an average annual growth rate of 11.96%. The pre-package and package-period growth rates reveal that all the states performed much better in the package-period due to factors beyond the package. The impact of the package to the state explained a 24.76% increase in total persons engaged in the industry.

## Wages to Workers

The amount of wages spent on workers indicates the purchasing power that goes into the hands of the industrial workers, and it shows the socioeconomic impact of industrialization.As shown in the Table 7, during the package period, HP registered a growth rate of 61.37% per annum in terms of wages paid to workers, which was in negative before the announcement of the industrial package. The impact of the package to the state explained 43.99% average annual increase in total wages paid to workers engaged in industry, meaning that the package had made a positive impact on the wages.

## Table 5. No. of Industrial Workers

| Year | H.P. | Haryana | Punjab | All India |
|---|---|---|---|---|
| 1998-1999 | **25,493** | **275,650** | **253,213** | **6,364,464** |
| 1999-2000 | 31,015 | 215,094 | 265,261 | 6,280,659 |
| 2000-2001 | 29,788 | 217,532 | 278,303 | 6,135,238 |
| 2001-2002 | 26,518 | 208,062 | 271,845 | 5,957,848 |
| 2002-2003 | 25,375 | 223,831 | 276,677 | 6,161,493 |
| 2003-2004 | 27,636 | 234,824 | 264,597 | 6,086,908 |
| 2004-2005 | 33,750 | 268,557 | 309,820 | 6,599,298 |
| 2005-2006 | 42,614 | 305,740 | 350,747 | 7,136,097 |
| 2006-2007 | 52,260 | 331,865 | 402,588 | 7,880,536 |
| 2007-2008 | 72,095 | 400,895 | 435,386 | 8,198,110 |
| 2008-2009 | 84,497 | 377,322 | 431,568 | 8,776,745 |
| 2009-2010 | 99,513 | 463,570 | 454,334 | 9,157,802 |
| Annual Growth (1998-2003) | -.01 | -4.0 | 2.0 | -1.0 |
| Annual Growth (2003-2010) | 37.15 | 13.92 | 10.24 | 7.21 |
| Difference in Growth in the Pre Package & Package Period | 37.16 | 17.92 | 8.24 | 8.21 |
| **Growth Due to Package** | **25.96** | Adjustment Factor: 11.20 | | |

Source: Annual Survey of Industries, Ministry of Statistics & Programme Implementation, Government of India

## Table 6. Total Persons Engaged in Industry

| Year | H.P. | Haryana | Punjab | All India |
|---|---|---|---|---|
| 1998-1999 | 33,664 | 376,585 | 322,274 | 8,588,581 |
| 1999-2000 | 40,152 | 298,501 | 338,647 | 8,172,836 |
| 2000-2001 | 39,368 | 300,882 | 358,558 | 7,987,780 |
| 2001-2002 | 36,263 | 287,253 | 348,668 | 7,750,366 |
| 2002-2003 | 34,023 | 299,765 | 351,102 | 7,935,948 |
| 2003-2004 | 36,753 | 318,266 | 336,397 | 7,870,081 |
| 2004-2005 | 44,287 | 354,861 | 391,081 | 8,453,624 |
| 2005-2006 | 56,838 | 396,155 | 439,246 | 9,111,680 |
| 2006-2007 | 67,752 | 426,717 | 507,463 | 10,328,434 |
| 2007-2008 | 95,612 | 509,617 | 550,351 | 10,452,535 |
| 2008-2009 | 110,242 | 607,527 | 544,776 | 11,327,485 |
| 2009-2010 | 128,665 | 584,762 | 568,211 | 11,792,055 |
| Annual Growth (1998-2003) | 0 | -4 | 2 | -2 |
| Annual Growth (2003-2010) | 35.73 | 11.96 | 9.84 | 7.12 |
| Difference in Growth in the Pre Package & Package Period | 35.73 | 15.96 | 7.84 | 9.12 |
| **Growth Due to Package** | **24.76** | Adjustment Factor: 10.97 | | |

Source: Annual Survey of Industries, Ministry of Statistics & Programme Implementation, Government of India.

**Table 7. Wages to Workers (₹ lakhs)**

| Year | H.P. | Haryana | Punjab | All India |
|---|---|---|---|---|
| 1998-1999 | 11,210 | 111,448 | 78,019 | 2,482,648 |
| 1999-2000 | 9,900 | 97,434 | 91,657 | 2,630,427 |
| 2000-2001 | 11,077 | 101,886 | 98,648 | 2,767,074 |
| 2001-2002 | 10,522 | 100,857 | 103,691 | 2,743,824 |
| 2002-2003 | 10,751 | 120,040 | 110,957 | 2,968,905 |
| 2003-2004 | 12,261 | 130,860 | 113,546 | 3,047,777 |
| 2004-2005 | 15,103 | 145,656 | 130,533 | 3,363,505 |
| 2005-2006 | 19,499 | 166,550 | 155,386 | 3,766,366 |
| 2006-2007 | 24,415 | 192,388 | 185,167 | 4,429,135 |
| 2007-2008 | 39,593 | 253,746 | 216,337 | 5,103,023 |
| 2008-2009 | 51,202 | 273,749 | 231,594 | 5,977,184 |
| 2009-2010 | 64,937 | 418,823 | 269,818 | 6,894,071 |
| Annual Growth (1998-2003) | -1 | 2 | 8 | 4 |
| Annual Growth (2003-2010) | 61.37 | 31.44 | 19.66 | 18.03 |
| Difference in Growth in the Pre Package & Package Period | 62.37 | 29.44 | 11.66 | 14.03 |
| **Growth Due to Package** | **43.99** | Adjustment Factor : 18.38 | | |

Source: Annual Survey of Industries, Ministry of Statistics & Programme Implementation, Government of India

## Net Value Addition

The net value addition may be treated as the most significant indicator of the level of industrialization in a state. Here, it must be pointed out from the Table 8 that in the year 2009-10, Himachal Pradesh recorded a net value addition of ₹ 1,375,547 lakhs in comparison to ₹ 1,473,619 lakhs and ₹ 2,035,386 lakhs in case of Punjab and Haryana, respectively. Since the net value added is one of the best possible indicators of industrialization, though it ignores the population and area parameters of the state, it reflects that Himachal Pradesh has reached quite high levels of industrialization in terms of net value added. If these figures are sustainable, then the objective of the package to the state seems to have been fulfilled. Naturally, once the lagging states attain the level of industrialization in the other neighbouring states, there may be no justification of extending the package for a further period.

The annual growth rate of the net value addition was unexpectedly higher in case of Himachal Pradesh at 98.01% per annum as compared to the neighbouring states. This implies that some of the value addition from Haryana and Punjab might indeed have moved out to Himachal Pradesh. However, it needs to be observed whether the net value added figures are based on the alleged manipulation and over-reporting of value addition in the state by the firms to gain excess-benefit illegitimately by availing the excise duty concessions over and above the actual value addition in the state or not. The analysis of net value added as percentage of output would clear the situation. However, the qualitative observations and information gathered by the state government revealed that a number of factories set up in the state hardly have any actual production and the only purpose of setting up these temporary units is to avoid taxes and availing fiscal incentives. Several such cases have been caught by the government authorities and are often reported in the media.

## Gross Fixed Capital Formation

It can be seen from the Table 9 that Himachal Pradesh had a gross fixed capital formation at ₹ 49,775 lakhs in

**Table 8. Net Value Added (in ₹ Lakhs)**

| Year | H.P. | Haryana | Punjab | All India |
|---|---|---|---|---|
| 1998-1999 | 87,395 | 546,899 | 498,800 | 14,546,105 |
| 1999-2000 | 112,132 | 650,151 | 559,388 | 15,497,442 |
| 2000-2001 | 130,789 | 557,054 | 430,080 | 14,362,141 |
| 2001-2002 | 128,547 | 651,278 | 542,928 | 14,430,212 |
| 2002-2003 | 143,162 | 765,728 | 548,490 | 17,234,004 |
| 2003-2004 | 174,991 | 914,334 | 531,406 | 20,293,276 |
| 2004-2005 | 218,516 | 1,169,560 | 580,741 | 25,990,686 |
| 2005-2006 | 569,280 | 1,358,920 | 661,710 | 31,186,419 |
| 2006-2007 | 709,902 | 1,530,711 | 1,042,899 | 39,572,526 |
| 2007-2008 | 1,125,555 | 1,827,000 | 1,416,746 | 48,159,268 |
| 2008-2009 | 1,333,237 | 2,035,386 | 1,256,840 | 52,776,558 |
| **2009-2010** | **1,375,547** | **2,797,454** | **1,473,619** | **59,211,387** |
| Annual Growth (1998-2003) | 13 | 8 | 2 | 4 |
| Annual Growth (2003-2010) | 98.01 | 29.42 | 25.33 | 27.40 |
| Difference in Growth in the Pre Package & Package Period | 85.01 | 21.42 | 23.33 | 23.40 |
| **Growth Due to Package** | **62.69** | Adjustment Factor: 22.72 | | |

Source: Annual Survey of Industries, Ministry of Statistics & Programme Implementation, Government of India

1998-99, which rose to ₹ 2, 58,850 lakhs in the year 2009-10 (almost by 5.2 times). It registered an average annual growth rate of 18.74% during the incentive period, but this growth rate is comparatively less than it was in other states and the national average of 52.33%. However, in terms of package impact, Himachal Pradesh explained -16.84% annual increases in gross fixed capital formation, which means Himachal Pradesh has lagged far behind in accumulating fixed capital formation and has failed to attract capital despite the package incentives.

## Average Annual Wage Per Worker

The annual growth rate of the wages for Himachal Pradesh showed an appreciable increase (Table 10). The growth rate increased from a negative figure of - 1% in the pre-package period to 6.73% during the package period, just equivalent to the all India average. The change in average annual wage per worker in the before- and after- framework reflected as an increase of 7.05% per annum while in case with- and without- framework, there was a mild increase of 0.55% per annum. Thus, it seems that the package to the state has benefited the workers employed in the industry as there was an increase in average wage per worker in Himachal Pradesh.

## Fixed Capital per Factory

The fixed capital per factory data highlights the fact that capital subsidy has led to high ratios of fixed capital per factory in Himachal Pradesh. Unlike all other indicators, in respect of fixed capital per factory, it is Himachal Pradesh which is still the leader with average fixed capital of ₹ 1,729 lakhs in the year 2009-10 (Table 11). However, Haryana had more than double growth rate of Himachal Pradesh, which was 20.60% per annum as compared to only 8.63% in Himachal Pradesh. The impact of the package resulted in negative, that is, -5.71% annual increase in fixed capital per factory in case of Himachal Pradesh, which shows that the state has lagged behind in this area.

**Table 9. Gross Fixed Capital Formation (in ₹ Lakhs)**

| Year | H.P. | Haryana | Punjab | All India |
|---|---|---|---|---|
| 1998-1999 | 49,775 | 303,318 | 113,480 | 6,907,081 |
| 1999-2000 | 60,191 | 312,095 | 124,014 | 4,867,882 |
| 2000-2001 | 43,879 | 239,306 | 99,399 | 4,687,927 |
| 2001-2002 | 36,640 | 215,850 | 97,817 | 7,015,145 |
| 2002-2003 | 38,874 | 259,422 | 236,616 | 4,745,424 |
| 2003-2004 | 111,981 | 202,738 | 119,714 | 5,753,380 |
| 2004-2005 | 60,308 | 366,041 | 216,443 | 7,525,046 |
| 2005-2006 | 174,099 | 431,504 | 322,930 | 12,607,674 |
| 2006-2007 | 121,024 | 525,174 | 434,598 | 14,432,500 |
| 2007-2008 | 367,642 | 733,673 | 466,081 | 17,779,098 |
| 2008-2009 | 179,940 | 866,919 | 581,302 | 22,594,701 |
| 2009-2010 | 258,850 | 817,828 | 422,011 | 26,830,068 |
| Annual Growth (1998-2003) | -4 | -3 | 22 | -6 |
| Annual Growth (2003-2010) | 18.74 | 43.34 | 36.07 | 52.33 |
| Difference in Growth in the Pre Package & Package Period | 22.74 | 46.34 | 14.07 | 58.33 |
| **Growth Due to Package** | **-16.84** | Adjustment Factor: 39.58 | | |

Source: Annual Survey of Industries, Ministry of Statistics & Programme Implementation, Government of India

**Table 10. Average Annual Wages per Worker (in ₹)**

| Year | H.P. | Haryana | Punjab | All India |
|---|---|---|---|---|
| 1998-1999 | 43,973 | 40,431 | 30,812 | 39,008 |
| 1999-2000 | 31,920 | 45,298 | 34,554 | 41,881 |
| 2000-2001 | 37,186 | 46,837 | 35,446 | 45,101 |
| 2001-2002 | 39,679 | 48,474 | 38,143 | 46,054 |
| 2002-2003 | 42,368 | 53,630 | 40,103 | 48,185 |
| 2003-2004 | 44,366 | 55,727 | 42,913 | 50,071 |
| 2004-2005 | 44,750 | 54,237 | 42,132 | 50,968 |
| 2005-2006 | 45,757 | 54,474 | 44,301 | 52,779 |
| 2006-2007 | 46,718 | 57,972 | 45,994 | 56,203 |
| 2007-2008 | 54,918 | 63,295 | 49,689 | 62,246 |
| 2008-2009 | 60,596 | 72,551 | 53,663 | 68,103 |
| 2009-2010 | 65,255 | 90,347 | 59,388 | 75,281 |
| Annual Growth (1998-2003) | -1 | 7 | 6 | 5 |
| Annual Growth (2003-2010) | 6.73 | 8.87 | 5.48 | 7.19 |
| Difference in Growth in the Pre Package & Package Period | 7.73 | 1.87 | -0.52 | 2.19 |
| **Growth Due to Package** | **6.55** | Adjustment Factor: 1.18 | | |

Source: Annual Survey of Industries, Ministry of Statistics & Programme Implementation, Government of India

**Table 11. Fixed Capital per Factory (in ₹)**

| Year | H.P. | Haryana | Punjab | All India |
|---|---|---|---|---|
| 1998-1999 | 671 | 294 | 120 | 297 |
| 1999-2000 | 632 | 306 | 146 | 305 |
| 2000-2001 | 672 | 314 | 119 | 304 |
| 2001-2002 | 823 | 324 | 116 | 336 |
| 2002-2003 | 704 | 318 | 160 | 348 |
| 2003-2004 | 1,078 | 355 | 135 | 367 |
| 2004-2005 | 911 | 383 | 141 | 376 |
| 2005-2006 | 1,027 | 430 | 167 | 433 |
| 2006-2007 | 973 | 507 | 198 | 494 |
| 2007-2008 | 1,724 | 613 | 214 | 577 |
| 2008-2009 | 1,692 | 833 | 263 | 680 |
| 2009-2010 | 1,729 | 867 | 254 | 851 |
| Annual Growth (1998-2003) | 1 | 2 | 7 | 3 |
| Annual Growth (2003-2010) | 8.63 | 20.60 | 12.59 | 18.84 |
| Difference in Growth in the Pre Package & Package Period | 7.63 | 18.60 | 5.59 | 15.84 |
| **Growth Due to Package** | **-5.71** | Adjustment Factor: 13.34 | | |

Source: Annual Survey of Industries, Ministry of Statistics & Programme Implementation, Government of India

### Average Number of Workers per Factory

The average number of workers per factory indicates the average size of the firms and it is argued by some that instead of the capital per factory, it is the number of workers per factory that should be emphasized in development policy. It is observed from the Table 12 that Haryana had the highest average number of workers per factory, that is, 100 workers per factory during the year 2009-10 followed by Himachal Pradesh (66), and Punjab (44). The analysis of the pre-package and package-period data reveals no significant impact of the special package on the average number of workers in Himachal Pradesh. Thus, it is doubtful whether the increase in case of Himachal Pradesh can be attributed solely to the special package or is it inconsistent with other states, and the impact of the package seems to have been insignificant in terms of average number of workers per factory.

### The Capital Labour Ratio

The capital labour ratio as depicted in the Table 13 is highest in case of Himachal Pradesh, that is, ₹ 26.84 lakhs per worker. It may be attributed to the capital investment subsidy. The increase in the capital labour ratio was almost similar for all the states during the package period, and Punjab had witnessed the highest growth rate of 9.18% per annum followed by Haryana at 4.97% , and 4.26 % in Himachal Pradesh as against the national average of 12.82%. It seems that there was hardly any significant impact of the package on the capital labour ratio during pre-package and package periods as the state recorded a negative growth rate, that is, 3.73%.

## Conclusion

The package has led to industrialization of the state, but it is still far behind other neighboring states. There has been a definite positive and significant impact of the package, both in with and without the framework as well as before- and after the framework in Himachal Pradesh in terms of an increase in the number of factories, fixed capital, invested capital, number of industrial workers, total persons engaged in industry, wages to workers, total emoluments, net value added, value of output, and gross fixed capital formation.

Although the data related to the number of industrial workers highlights the success of the package in generating huge employment opportunities in Himachal Pradesh, but most of the industrial workers in Himachal Pradesh are migrant workers from other states. Thus, significant benefits have been filtered away to other states.Very high figures of net value as a percentage of output for Himachal Pradesh reflect rampant misuse of the fiscal incentives. There is alleged manipulation and over-reporting of value addition in Himachal Pradesh by the firms to gain excess-benefits illegitimately by availing the excise duty concessions over and above the actual value addition in the state.

During the course of the study, the package for Himachal Pradesh has received both praise and criticism. Supporters firmly believe that new factories would not have been established in Himachal Pradesh without the package incentives. The critics, on the other hand, view the package as being too expensive in terms of the cost to the public purse of each new job created. Other critics focus on the relocation of industries from the neighbouring states. Whatever the problems or constraints, the package has made a positive contribution to the industrialization in Himachal Pradesh. However, the state should be capable of becoming a high quality location if the impact of the incentives is to continue beyond the duration of the package. If this is not followed, the industries in the state will collapse once the benefits are withdrawn, and industrial plots and sheds will become unlettable or unsalable.

Thus, the government should design these packages in such a way that it can avoid an unpredictable and risky business environment. These should be designed as simply and clearly as possible to avoid excessive government red-tapism and long delays in the provision of government services because a complex cocktail of different and overlapping incentives can make the business environment unduly obscure, and therefore, can be counter-productive by increasing the degree of real and perceived risk. International best practices suggest that the package incentive regime should be rule-based and not reliant on discretionary decisions, and its implementation should be equitable and transparent.

## Research and Policy Implications

The study has highlighted various achievements of the government on industrial fronts along with various challenges and the factors which would be relevant in the next millennium. On the basis of the observations, findings, and conclusions of the present study, it has been proposed that providing good quality pre investment services to investors is important to secure potential investors' trust and for fast-track implementation of their investments. The most important post-investment services and after-care could help investors in expanding their operations. Single Window Clearance Authority (SWCA) can be used more effectively to obtain all the necessary approvals and documents, and undergo the necessary procedures for opening a business.

The government must draw up an explicit contract with a company receiving package incentives specifying explicit goals and performance requirements that the investor must satisfy and may include such factors as (a) the number of employees that must be hired to receive the incentives, the wages and benefits that must be paid, (b) to ban relocation of a facility for a specified period of time as well as specify the date by which the company should have fulfilled its performance requirements, (c) monitoring and disclosure requirements, and so forth. Penalties for breach of contract should be substantial, including claw-back provisions that stipulate the return of incentives awarded if conditions are not met. Even better is for incentives to be back-loaded whenever possible, that is, subsidies should only be paid when a firm attains its performance goals.

The government should open more number of industrial training institutes (ITIs); technical institutions need to train local people to fill the skill gap, and the course curriculum should be redesigned in collaboration with the industry and should be continuously updated to meet the changing requirements of the industry. Thus, the package incentives should also include a budget aimed at developing the skill levels of the labour force. The government needs to promote implementation of standards and certifications. Incentives may be given to small

**Table 12. Average Number of Workers per Factory**

| Year | H.P. | Haryana | Punjab | All India |
|---|---|---|---|---|
| 1998-1999 | 60 | 73 | 36 | 48 |
| 1999-2000 | 61 | 50 | 38 | 48 |
| 2000-2001 | 59 | 49 | 39 | 47 |
| 2001-2002 | 53 | 47 | 38 | 46 |
| 2002-2003 | 50 | 50 | 40 | 48 |
| 2003-2004 | 52 | 55 | 39 | 47 |
| 2004-2005 | 52 | 62 | 41 | 48 |
| 2005-2006 | 53 | 71 | 42 | 51 |
| 2006-2007 | 61 | 75 | 43 | 54 |
| 2007-2008 | 62 | 85 | 43 | 56 |
| 2008-2009 | 65 | 85 | 43 | 57 |
| 2009-2010 | 66 | 100 | 44 | 58 |
| Annual Growth (1998-2003) | -3 | -6 | 2 | 0 |
| Annual Growth (2003-2010) | 3.85 | 11.69 | 1.83 | 3.34 |
| Difference in Growth in the Pre Package & Package Period | 6.85 | 17.69 | -0.17 | 3.34 |
| **Growth Due to Package** | **-.11** | Adjustment Factor: 6.96 | | |

Source: Annual Survey of Industries, Ministry of Statistics & Programme Implementation, Government of India.

**Table 13. Capital Labour Ratio (in ₹ Lakhs per Worker)**

| Year | H.P. | Haryana | Punjab | All India |
|---|---|---|---|---|
| 1998-1999 | 11.27 | 4.04 | 3.33 | 6.15 |
| 1999-2000 | 10.35 | 6.12 | 3.80 | 6.40 |
| 2000-2001 | 11.43 | 6.43 | 3.05 | 6.51 |
| 2001-2002 | 15.51 | 6.91 | 3.10 | 7.25 |
| 2002-2003 | 14.12 | 6.30 | 4.05 | 7.22 |
| 2003-2004 | 20.68 | 6.44 | 3.50 | 7.78 |
| 2004-2005 | 17.62 | 6.19 | 3.46 | 7.77 |
| 2005-2006 | 19.47 | 6.06 | 3.97 | 8.51 |
| 2006-2007 | 15.85 | 6.74 | 4.56 | 9.07 |
| 2007-2008 | 27.75 | 7.20 | 5.00 | 10.31 |
| 2008-2009 | 25.91 | 9.82 | 6.14 | 12.03 |
| 2009-2010 | 26.84 | 8.68 | 5.75 | 14.76 |
| Annual Growth (1998-2003) | 5 | 11 | 4 | 3 |
| Annual Growth (2003-2010) | 4.26 | 4.97 | 9.18 | 12.82 |
| Difference in Growth in the Pre Package & Package Period | -0.74 | -6.03 | 5.18 | 9.82 |
| **Growth Due to Package** | **-3.73** | Adjustment Factor : 2.99 | | |

Source: Annual Survey of Industries, Ministry of Statistics & Programme Implementation, Government of India

scale enterprises for getting quality system certifications. Special cells at regional/state levels need to be created that would work as facilitating centers for implementation of standards and getting certifications.

Regular government interface with the industry is required as purely government initiatives could have unintended implications that could frustrate economic growth and industrial development. Efforts should be made to address the specific concerns raised by firms about government implementation of policies, bureaucratic burdens, and uncertainty. The traditional industries should be encouraged by offering special packages and by promotions through melas & exhibitions.

## Limitations of the Study and Scope for Further Research

There are different methods of evaluating the impact of a special economic package on industrial development, but in the present study, only secondary data were used to study the influence of special incentives offered to the state of Himachal Pradesh. Consequently, the validity of the present study's findings is limited due to the methodology which relied heavily on the data collected from various secondary sources. Thus, a primary survey can be conducted to further investigate the importance of various locational factors. The environmental consequences of investment incentives are unclear and substantially under-researched. The frequency with which incentives have gone to projects harming the environment was not considered in the present study. Similarly, there are reports that fertile agricultural lands in plain areas of Himachal Pradesh have been diverted to industries causing economic hardships to the farmers, and sometimes, this is done even without adequate compensation to the farmers. This also requires further investigation. The scope of the study is limited to assessing the impact in Himachal Pradesh only. Similar studies can be conducted in the future in other regions or special economic zones/free trade zones.

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