

## ECONOMIC GROWTH AND STRUCTURAL CHANGES : PRELIMINARY EVIDENCE FROM BIHAR

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*[Structural Change is the phenomenon witnessed by almost all the developing and the developed states in their journey towards a higher sustained economic growth. The rise in per capita income and the structural change are complementary to each other. A rise in per capita income reinforces structural change and structural change leads to the rise in the productive efficiency stimulating rise in the per capita income of the people. The paper analyses this phenomenon in the state of Bihar which has, of late, started to witness a higher growth trajectory in its economy. Sourcing the data from the archival records of the various government agencies, the study found that the state of Bihar has mirrored the structural change being experienced by the economy of India. The share of the primary sector in the state's GSDP has drastically declined and is replaced by the services sector. This phenomenon is particularly ascribed to the rising share of trade, communications and the government led public spending in the construction sector. However, the state is not experiencing a balanced growth pattern in its economy; some districts have become more developed relative to the other districts. It has also been seen that due to the low economic base of the state, we cannot expect that the state's socio-economic indicators will converge sooner to the more developed states of India.]*

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## **Introduction**

Each country has to pass through the transition phase. The transition does not occur in one go but in a series of stages (Rostow, 1960). Initially, economy witnesses high rates of per capita output and population growth; high rates of total factor productivity, and then high rates of economic structural transformation along with social and ideological transformation (Kuznets, 1973). Some of the major components of this structural change include the gradual shift from agricultural to industry (Lewis, 1954) and away from industry to services resulting into a significant change in the scale or average size of productive units. For significant economic structural change to take place in any society, concomitant transformations in attitudes, institutions, and ideologies are often necessary (Lewellen, 1995). Structure change is not only confined to sectoral change in the economic structure but the patterns-of-development analysis of structural change focuses on the sequential process through which the economic, industrial, and institutional structure of an underdeveloped economy is transformed over time to permit new industries to replace traditional agriculture as the engine of economic growth. In addition to the accumulation of capital, both physical and human, a set of interrelated changes in the economic structure of a country are

required for the transition from a traditional economic system to a modern one. These include: rationality-the substitution of modern methods of thinking, acting, producing, distributing, and consuming for age old, traditional practices. Secondly, it also implies social and economic equalization-the promotion of more equality in status, opportunities, wealth, incomes and levels of living. Finally, structural changes also entails improved institutions and trade necessary to increase labour efficiency and diligence; promote effective competition, social and economic mobility, and individual enterprise; permit greater equality of opportunities; make possible higher productivity; raise levels of living; and promote development. Among the social institutions needing change are outmoded land tenure systems, social and economic monopolies, educational and religious structures, and systems of administration and planning (Myrdal, 1970).

The economic planners starting in the 1950's incorporated all these tenets while formulating the economic plans of India. However, the different states of India had their own set of economic resources and their allocation had to be decided by them so that the scarce resources could be put to optimum use. Some states did well, while other remained behind until the beginning of this new century. Out of the many

laggard states Bihar was one, despite endowed with a rich mineral resource base; very fertile land and most importantly having a large population base. The dismal performance of the state continued until the beginning of the century. The state became synonymous with poverty. Chronic unemployment became the order of the day in the state and as a result en mass migration of its people in search of earning livelihood to different states and abroad started to occur. Bihar was written off from the growth map of India altogether. At the end of the eighties, there was more number of poor people than any other states of India. On the whole, it was categorized as one of the least underdeveloped regions in the whole world (World Bank, 2005).

At the beginning of the nineties, to give a fillip to the economic growth rate of Indian economy and to give an impetus to the structural change of the economy of India; the government of India initiated the economic reforms, based on neoclassical principles. With the onset of reforms in the Indian economy, India as a whole prospered while many of the states of India did not felt any impact on their economy. One of these states was, again, Bihar. In fact, to the dismay of many, Bihar growth went decelerating (figure 1). The economic reforms bypassed Bihar altogether. Despite the union and the state governments' neoliberal economic policies, hardly any

multinational enterprises opened any of their establishments in the state, industrial development came to the halt and the agriculture sector, the lifeline of the economy of Bihar, before growing at a rapid pace in the eighties, stagnated in the decade of nineties. In absolute terms, more number of people became poorer (NSSO, 61st round) and the economy of Bihar came to a standstill.

While many scholars tried to understand the economic backwardness of Bihar, but consensus among them did not emerged. One school of thought says that that the socio-economic backwardness of the state is rooted in the semi-feudalistic structure originating from the colonial period, which is refuted by many economists (Yuko et al. 2010). The other school of thought ascribes the poor governance of the economy as the most important stifling factor in the Bihar economic progress. In a poor economy like India and particularly Bihar, mobilizing limited resources by the state enhances the “capability to function” providing a genuine lift out of poverty and will bring about the structural change (Sen, 1990); which was, by and large, missing in Bihar.

### **Objectives of the Study**

After stagnation of nearly five and a half decades, in the recent period, it pretty much seems that Bihar is on the growth track. Of late, Bihar witnessed

perceptible improvement in its socioeconomic indicators. The recent spurt in its growth process has posed many a question on the minds of the observers about the pattern of growth in the Bihar's economy. Therefore, it become very much imperative to take a stock of the prevailing economic conditions and direction of the economic growth of Bihar in the recent years. In the backdrop of above analysis, the objectives of the paper are: (a) to analyse the trend in the state's gross domestic product and per capita net state domestic product from the turn of the century; (b) to analyse the sectoral composition of the state's economy and ongoing structural changes in the state's economy; and (c) finally, the paper tries to explore the major socio-economic implications of the recent growth spike on the Bihar's economy.

The study is descriptive in nature and is based on secondary sources of data. In this paper, we have considered data from 1980-81 through 2011-12 for analysis. The period prior to 1981 has not been considered because of various reasons. One reason is non availability of the growth data prior to 1980-81. Secondly, the data so available did not show any significant growth trend prior to the period 1980-81. The data for this study were sourced from the archival records of the Central Statistical Organisation, Reserve Bank of India,

State Planning Commission, Bihar; and various economic surveys of the state.

The rest of the study is divided as follows: section IV discusses the growth performance of Bihar in the last three decades; section V analyses the structural changes undergoing in Bihar and finally section VI discusses the major achievements and limitations of the state's economic growth.

### **Growth Performance of Bihar : 1981-82 to 2011-12**

It is often argued that growth in the real GDP is a sine qua non for necessitating any structural changes in the economy of a country. More importantly, it also becomes very much necessary for a historically poor economy like Bihar, which had recently started to taste the so called economic growth. Therefore, we firstly see the real economic growth in the economy of Bihar over the period 1980-81 to 2011-12. It also becomes all the more important to analyse the trend in the Bihar's economic growth because if an economy does not experience growth, how can we expect to witness structural changes in that economy?

The economy of Bihar, in the 1980's mirrored the growth rate of the economy of India. During the period 1980-81 through 1990-91; its growth rate of GSDP was close to 5 percent. However, during this period, the agricultural growth rate of Bihar had

picked up a momentum, as green revolution started to usher in the state. The agricultural sector grew at a splendid rate of close to 5 percent surpassing the growth rate of India's agricultural productivity. We clearly witnessed the convergence of the agricultural growth of Bihar with the growth rate of the highly productive states of Punjab, Haryana and western Uttar Pradesh. However, unlike the more productive India's agricultural belt of Punjab, Haryana and Western Uttar Pradesh, the Bihar's agriculture did not show a clear upward trend over the years. The agricultural productivity of the state is highly erratic. Of course, the state machinery tried its best to have a sustained agricultural growth rate, still the state's agriculture do depend upon the vagaries of Monsoon. In some years, the farmers have a bounty harvest and in other years due to draught or floods, the harvest is so low that the farmers have to migrate to other states to eke out their living. In more recent years, the productivity has stabilized at around 5 percent, one of the highest in the whole of India. Also, the farmers have diversified the production and now Bihar has become a leading state in vegetable and fruit production.

But as usual the industrial sector played a spoilsport (Figure 1). The fact is that Bihar never witnessed any high industrialization over its existence. The

few industries it have was due to the natural resources it commanded like the iron and steel and the abundant coal reserves. The rest were in public spheres. Unlike the other states where the industrialization was private led investment, the private investment in Bihar never came in abundance. Many commentators ascribed the very weak physical infrastructure of the state as the prime reason for the lack of private investment in the state apart from the dismal law and order. The only sector which remained buoyant during the period 1980-81 through 2008-09 is the services sector of the state. More recently, the sector has witnessed growth of over 15 percent surpassing the growth rate of India's average. It seems the services sector has been the engine of growth of Bihar economy like the economy of India. The growth of the services sector defies the hypothesis that the agricultural sector has been at the forefront in leading the Bihar's economy.

A closer look at the data shows that the Bihar's economy has also passed through a tumultuous phase besides showing a very slow growth rate. After having a stable decade of 1980-81 through 1991-92, during the period 1991-92 through 1995-96, the economy of Bihar reached an abysmally low level as the GDP of Bihar got stagnated, agriculture productivity went to a

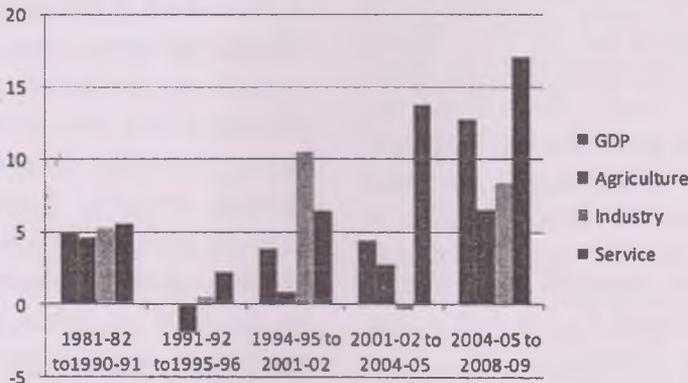
tailspin and the services sector too witnessed stunted growth. During this period, the economy of India initiated new economic reforms and was gearing for the higher growth trajectory in the years to follow. However, India too repeated the same growth rate achieved in the 1980. The major reasons ascribed for the poor performance was decline in public expenditure on agriculture, closure of many industrial activities in the state and the slow rate of growth of the tertiary sector in the state.

The similar story continued during the year 1994-95 through the end of the last millennium. The things went worse after the bifurcation of Bihar into the two separate states of Bihar and Jharkhand. Almost all the rich mineral resources, heavy industries went to the newly created state of Jharkhand, and Bihar economic conditions further got deteriorated. In fact, after the bifurcation of the state, almost all the industrial belt went to the newly created

state of Jharkhand and Bihar was left with almost negligible industrial base. What remained with Bihar was the large agricultural base and huge population to feed upon. Bihar became a pauperized state when the rest of the states were growing at a brisk pace. The agricultural sector of the state, although highly fertile was bereft of better irrigation facilities, better extension services and in some years the natural calamities played the spoilsport and due to these problems the production and productivity of the Bihar's agriculture can never be predicted.

It seems that the turnaround of the economy of Bihar has coincided with the change of governance in Bihar. Since, 2004-05, Bihar's economy has witnessed a phenomenal growth trend. From a laggard state, by clocking the growth rate of over 10 percent, it has set the precedence for the other states of India to follow.

Figure 1: Growth Rate of GSDP of Bihar at 2004-05 Prices



Source: Central Statistical Organisation

With the change of government, the economy started to rebound, and for the first time in the economic history of India as well as in the economy history of Bihar, the state's economic performance is being discussed in India and in the world forum. Bihar became a state to reckon with as its economy clocked 12.8 percent (11.06 percent according to the planning commission, Bihar) in the year 2010-11 and the recent year's growth rate of over 14 percent have silenced all the critics of Bihar. In fact, Bihar recorded the highest rate of growth rate among the whole states of India in the last year. Over the five years period, the per capita net state domestic product of Bihar has doubled and Bihar has become one of the states in India to reckon with. However, Bihar's people per capita income is still one of the lowest among their brethren in the other states and about a third of the per capita income of India's average (CSO, 2012). The turnaround, as argued by the economists, is due to the low economic base, and state led heavy public expenditure coupled with the heavy investment in the construction sector. But what is most important is that the Bihar's economic growth is moving northwards.

### **Structural Changes in Bihar**

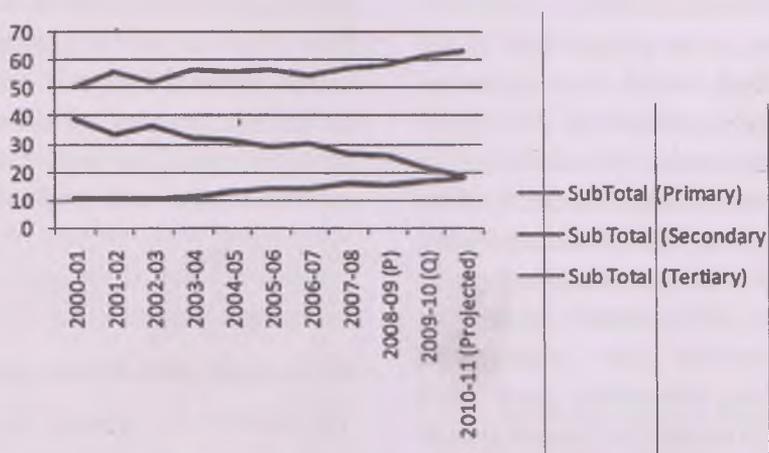
With economic development, it is historically observed that structure of any economy also witnesses transformation. The low yielding and high employing agriculture sector will be replaced by relatively high valued and more productive industrial and services sector. A rise in the real per capita of the country is one of the most important reasons for the structural change to occur in that economy (Kuznets, 1973). Given the rise in the per capita income, it is almost certain that the share of the traditional sector will decline and the share of the modern sector will start increasing. On one account, Bihar has stayed behind in the pace of development, while on the other hand there had been a slow but gradual transformation in its economy. The analysis of Bihar economy somewhat defy the phenomenon of structural transformation observed in the more developed world and presents a quite interesting trend. The economy of Bihar has been mirroring the structural growth pattern of the economy of India despite experiencing a very low growth. The share of the agricultural sector has been continuously declining, replaced by the

services sector. On the other hand, the industrial sector share has remained flat (Figure 2).

Until the end of 1990-91, the agriculture and the allied sector constituted 48.76 percent of Bihar GSDP, industry constituted the minimal 10 percent and the rest was of the services sector. This pattern continued but at a declining trend in favour of services and against agricultural sector until the end of the last century. However, the estimate at the beginning of the new century shows that the agriculture sector share has fallen to a level of 35.83 percent in 2000-01 (figure 2), and the services sector has overtaken the agricultural sector, while there was not any marginal impact of industrial sector on the Bihar's GSDP. In absolute terms, there had been a rise in all the sectors. This sector holds a prime position as the sustenance of 80 percent of the population of Bihar is dependent, directly or indirectly on it (Economic Survey of Bihar, 2011). Since, 200-01, the share of Bihar's agricultural sector is continuously declining, and in the year 2008-09, it has converged to the India's agricultural share (figure 2) of 18.5 percent. We notice that there has been a decline in

the share of Bihar's agriculture relative to the state's GDP. However, Bihar has witnessed one of the highest increases in the productivity over the period 2004-05 to 2011-12. Having missed the first green revolution of the sixties, the Bihar's agriculture clocked compound annual growth rate of around 4 percent during the period (Economic Survey of Bihar, 2012). More and more allocation of resources to the Bihar's and technological upgradation and extension services have, in fact, yielded good dividends to the Bihar' farmers. However, one often sees that with the growth of the state's economy there is displacement effect. That is, more and more workforce leaves the agricultural sector to join the industrial workforce and services sector. We do not see any perceptible change in this sphere. Still, over 70 percent of the Bihar's workforce is in the traditional sector and majority of them practices circular migration. In agricultural lean season, they moved out of the state and during the harvest or/and at the time of sowing they come back to their respective villages. This trend is conspicuous not only in Bihar but many of the states of India.

Figure 2: Structural Changes in the economy of Bihar



Source: Central Statistical Organisation

The rise in per capita income give rise for higher standard of living and as a result of that services sector steps in. The Bihar' story is in tandem with that of India's as far as the rise of services sector in the economy is concerned. Although, Bihar has been a traditionally agrarian economy, the significance of the services sector was least factored in to capture the Bihar growth saga. Of late, the sector has shown a stupendous growth rate and its share in the Bihar's state economy is closed to 58 percent, similar to India's average. In more recent times, the engine of growth in Bihar has been trade. The combined sector of trade, hotels and restaurants in Bihar has grown on an average of over 12 percent during the period 1999-00 to 2004-05 and even at a more rapid pace in the period 2004-05 to

2010-11, when it clocked a figure of 20.22 percent in the period 2004 - 05 to 2010-11. Banking, insurance and other financial services are also doing a brisk business in Bihar. They are moving at an average speed of over 16 percent from the beginning of the turn of this century. The services sector has shown a steady increase and it has even surpassed the India's figure and it is hovering around 63.46 percent of the Bihar GSDP at factor cost at constant price (2004 - 05).

The structural change in Bihar in the present era, bypassed the industrial sector like the economy of India, but still the share of the industrial sector in the India's economy is close to a quarter of India's GDP. In fact, Bihar was never able to industrialise its economy, and the very few manufacturing sector located

in the state was in the public sector. Private investment in Bihar, in real sense of the term, never materialized in the state of Bihar, which is a matter of concern. During the period, 1999-00 to 2004-05, registered manufacturing in Bihar witnessed a declining trend. Many businesses shut their premises during this period. The registered enterprises declined by 6.53 percent during this period, whereas the unregistered manufacturing enterprises grew by a sluggish 1.80 percent in the same period. The poor law and order conditions and declining profitability of the businesses during that period has been ascribed for the dismal performance of the manufacturing enterprises during those years. With the change in guard, we are seeing a transformation in the industrial scenario of the state. It is being felt that the present regime has understood that to change the industrial landscape of the state something substantial on the infrastructure sector has to be done. Because of the improvement in the physical infrastructure and most importantly the improvement in the law and order, the state has seen the growth in industrial front by more than 23 percent in the registered manufacturing and by 5.71 percent in the unregistered manufacturing in the state. The rise in registered manufacturing is predominantly accounted for by the public sector enterprises, private investment, more importantly; foreign

direct investment is yet to materialize on a mass scale in the state of Bihar. More than 74 percent of the growth in GSDP in the period between 1999-2000 and 2008-09 consists of the sectoral contributions of four sectors: agriculture, communication and trade, hotels and restaurants; while the rest of the sectors together accounted for just a quarter of the growth process (Das Gupta, 2011).

### **Discussions and Policy Implications**

The double digit growth rate of Bihar and more recent 14.58 percent has put the state into the league of those states which has been constantly recording phenomenal growth rate: Gujarat, Chattisgarh, Uttarakhand and Jharkhand. However, a careful look of the growth figures of these states and when compared with the growth rate of Bihar paints a contrasting picture. The growth rate of Bihar is an outcome of the initiatives of the government whereas the growth rate witnessed in the other rapidly growing states is the private investment led growth. The favourable destination of Gujarat and Maharashtra and other coastal states have a long period of industrial and prosperous growth history, whereas the states of Jharkhand and Chattisgarh have abundant natural resources. Uttarakhand's economy gained momentum due to the enjoyment of special category status and its proximity to the national capital region of India.

But the state of Bihar does lack all such locational as well as other geographical advantages and the recent spurt in the growth rate of the states is the outcome of the initiatives of the state. In fact, we can call it as the public investment led growth.

One theory of growth states that more public investment in an economy 'crowds out' the private investment but in the case of Bihar, we expect to see the other way round. No doubt, looking at the underdeveloped nature of the state it was necessary to have more and more public investment, but if the private investment does not come into play, the growth rate of Bihar will soon taper off. Therefore, it becomes imperative that the state government should strive to bring in more and more private investment into the state. The state government, of late, is demanding the status of special category states on the expectation that it will boost the private investment in the state and will spruce up the state's revenue. If these things happen, we feel that the outmigration of the skilled as well as unskilled people will stop and the disgrace, Bihar and its people has been facing will come to a halt. Undoubtedly, Bihar's agricultural productivity is moving at a rapid stride; still the fate of agriculture in Bihar is in doldrums. Drought, floods and other natural calamities play havoc almost each recurrent year. Not only is that,

the agricultural practices being practiced in Bihar is not sustainable in the long run. The high growth in cereals and commercial crops are the result of very high use of fertilizers and pesticides. Sooner, the agriculture productivity of Bihar will succumb to the law of diminishing returns as being witnessed in the erstwhile highly productive states of Punjab, Haryana and Western Uttar Pradesh.

The second question which comes to the mind of an observer of the Bihar's economy is whether the growth rate in Bihar is an inclusive one? If we look at the conditions of roads and other physical infrastructure, the answer is, yes. However, the data defies this hypothesis. Apart from the intersectoral lopsided sectoral changes in Bihar, the allocation of public expenditures to social and economic development has been extremely skewed in favour of some districts of Bihar (Tsujita et al, 2011). The recent data shows that all the districts of Bihar have benefited from the economic growth in Bihar, but the pace of development in the districts of Patna, Munger and Begusarai were more pronounced than the other districts of Bihar. The per capita income of Patna, the state capital, was recorded to be Rs. 47,293, marginally higher than the all India average, while, the districts of Jamui, Araria and Sheohar recorded per capita income of a meager

Rs. 5000 (Economic Survey of Bihar, 2010-11), which is not even one fourth of the state's capital and India's average per capita income. The data shows a sordid picture of the socio-economic health of the state. On the one hand, Patna is poised to become a metropolitan city; on the other hand the people of other districts are reeling under extreme poverty. The intradistrict disparity has grown to a very high level. Not a single district of Bihar, except Patna, has a per capita income higher even half of India's level. The magnitude of poverty can be gauged from this fact. Despite more than six decades of planning of the state more than half of the state's people are striving to meet the basic subsistence of living standard. The state's economy is plagued with all the ills one can think upon: a very high level of infant mortality rate, maternal mortality rate, and most importantly a very low literacy rate. The low literacy rate hinders the human capital formation in the state and as a result the skill formation of the people of the state has been in an infancy stage. Therefore, the people took up the low skilled and menial job.

The foregone analysis underscores the fact that although economic growth is occurring in Bihar at a very rapid pace, but the pace of improvement in the socio-economic indicators is very slow. Therefore, it will be naïve to say, or it

will be too early to say that the state will get converged with the highly prosperous state of the country sooner. Given the lowly base of the state's economy, a little achievement in any socio-economic parameter gets magnified and translates into a very high number for the state. The other prosperous states of India had already achieved a lot and their base number is already high, therefore, the growth into the succeeding years translates into a relatively lower figure. Therefore, as of now, it would be preposterous to say that if this sustained pace of economic growth continues to occur in Bihar, there would be convergence of the Bihar's economy with the economy of the rest of India. However, the recent surge in the literacy rate of the state along with the other socio-economic indicators present a healthy trend in the state's economy. The momentum which had been built in the recent years, if continues for a longer period only can we expect a real structural growth rate in the Bihar's economy.

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