

## **Analysis of Government spending on education and its impact on unemployment rate during planning Period (1997-2011)**

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### **ABSTRACT**

Education acts a backbone for any growing nation. It is one the most important indicator in evaluating the human development of a country. Being a merit good, government is duty bound to provide & promote such services. Any disbursement on education sector acts as an investment in developing the human capital which further adds to productivity of the nation. No country can achieve sustainable development goals without sustainable investment in human capital. However in India, a pattern of uneven distribution in literacy has been observed. In this context, the present study endeavors to elucidate the relationship between expenditure made by the government on education and its impact on unemployment rate considering the ninth, tenth and eleventh FYP. The study also examines the impact of population growth rate on the relationship.

Key Words : Economic Planning, FYP, Education, Planning Commission, Unemployment

### **INTRODUCTION**

Roots of Planning in India go way prior to its independence. In 1939, Indian National Congress set up its first National Planning Committee under the leadership of Netaji Subhash Chandra Bose as the party president. The Five Year Plans (FYPs) didn't just came into being but were gradually progressed towards with plans like The Bombay Plan and The Gandhi Plan launched in 1941, Peoples Plan in 1945 (by post war reconstruction committee) prior to independence whereas Sarvodaya Plan which was launched post independence in 1950. It laid down the initial steps towards formation of the Planning Commission in March 1950. Consequently, first FYP was launched in 1951.

FYPs are centralized and integrated national economic programs. India has a long history of evolution of economic thinking and its approach towards planning, due to the dynamic features of its economy. Every country has its own peculiar economic planning and

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India is no different. The objectives of planning change according to the needs and opportunities of a country. Indian Planning can be divided into three periods; pre independence period, 1951 to 1990 and 1990 onwards, however present study focuses post independence periods.

The main objective of economic plans in a developing country like India is to bring new forms of productive capital, in order to raise overall productivity of an economy (Mukherjee (n.d). Further, bringing an increment in people's income by providing them adequate employment opportunities and eradicating problems like mass poverty and destitution.

The first FYP witnessed major criticisms and expressed the nature of conflict and difficulties faced by the planners. It states that Planning Commission had a choice between competing objectives and withstanding conflicting pressure, with the resource constraints (Vakil and Brahmananda, 1952). It had a fairly simple methodology with focus on agriculture sector's growth which laid an appropriate foundation for the upcoming FYPs (Rao, 1955). (Dutta, n.d) in her article 'India's economic plan' sheds light on historical progressions of how planning commission came into existence. It also discusses the objectives and characteristics of planning in India. Due to disappointing results of the second, greater acceleration was essential for fulfilling the third plan. Third plan had practical goals unlike the highly optimistic goals of the second such as full employment. (Little, 1962) in his study critically examines third FYP and compares it with its predecessors. It states that the large increase in fund of the third plan was 37 per cent more due to the limited significance of second FYP.

Providing guidelines on resource utilization and implementation should be the primary purpose of any plan. Planning in India is an open process, where the plan makers are sensitive and responsive towards national and international criticism. Various techniques in Indian planning such as aggregate growth model used in the first FYP, where saving function is described as linear and simple growth model pursued in second FYP assisted with two and four sector model prepared by Professor Mahalanobis have been used (Richard, 1967). The major target of the Planning Commission was to expand the education facilities to at least 60 per cent of the children between age group of 6 to 11, where as the goals had physical and financial handicaps. Indian economy could not have supported these modest goals and would only have strained itself in the process (Wood, 1955).

The role of government shall be framed keeping Keynes ideology in mind regarding investment in skill for better economic growth and to tackle unemployment (Blunkett, 2001). An attempt to explore the ways in which management schools and industries can work together is required in order to identify the areas where industry can assist and contribute to academics (Rizvi and Aggarwal, 2005). They conclude that the partnership should be built with long term goals in mind for growth and development for both.

The suggestions made by the Education Commission (1966), popularly known as the Kothari Commission puts forward a sincere effort to determine the relevance of the suggestion with respect to the eleventh FYP. It goes on stating that these suggestions had financial implication to them, such as the recommended student-teacher ratio, vocalization of secondary education and promotion of excellence at all levels of education (Tilak, 2007). Indian education system lacks behind when it is compared globally among developed and developing countries. The challenges faced by the Indian education system need to be addressed. The emphasis

for improving the quality of Indian education system is an urge requirement and public policies need to be framed in accordance with the emerging needs of Indian economy (Singh, 2015).

The priorities for later plans shift to primary education for India's twelfth FYP. It states that investment in education boosts the economic growth and enables the citizen to contribute more. Recent decade has shown increase in education expenditure, therefore resulting in improved primary education, yet the student's learning patterns are not in accordance and drop out ratio after second grade is increasing (Muralidharan, 2013). The objective of latest twelfth plan is 'faster, sustainable and more inclusive growth,' earlier the targeted growth rate was 9 per cent which was later revised down to 8 per cent due to low domestic output during first two years of the plan. It states that in upcoming years the labor force will expand which has the potential to increase growth but only if education, health and skill development is enhanced (Bhide, 2014).

However, the higher education in India and issues related to employability are also issues of concern. Several causes regarding shortage of skill among different sectors and how it adversely affects the momentum of economic growth accounts for low productivity. Indian economic growth is dependent upon the masses of qualified manpower which are fuelled by Indian higher education system. The declining standards of academic research at higher level as well as government policy which are due to public pressure also needed to be addressed (Agarwal, 2009).

#### **Research gap :**

At present, the country caters 1.2 billion people and is the world's third largest economy in terms of PPP (Purchasing Power Parity). India has the largest and the youngest workforce the world has ever witnessed. India's future will be determined on how it shapes its human capital in the light that it houses one third of the world's poor population which is around 400 million. With sheer number or work force and the need for employment, it becomes significantly important to study, whether the government spending on education and the improved literacy statistics are further resulting in employability or not?

#### **Objectives of the study :**

- Analyzing the trend of education spending in India during past three FYPs
- Analyzing the trend of unemployment rate
- To examine the trend of population growth rate
- To study the relationship between education spending and unemployment rate
- To examine the effect of population growth rate on education spending and unemployment rate.

## **METHODOLOGY**

#### **Data source and definition of variables :**

It analyzes secondary source of information from database of *World Bank*. The data on education expenditure is retrieved from two sources, respectively from National Accounts Statistics published by CSO and Budgeted Expenditure on education published by *D/o Higher Education*. The major variables used for study are population growth rate, unemployment

rate and education expenditure, respectively.

## RESULTS AND DISCUSSION

For the purpose of analyzing ninth, tenth and eleventh FYPs of India have been considered. The trend for education spending, population growth rate and unemployment rate has been studied on the basis of secondary data obtained from multiple sources.

Further, the study examines the relationship between education spending and unemployment rate, and also tries to develop a relationship with the population growth rate.

In Fig. 1, the trend for education spending is being analyzed for the latter Five Year Plans. During the first half, the rise in the expenditure is gradual. However, from 2005 onwards it is rapidly increasing. The rise is observed after mid 10<sup>th</sup> FYP. The reasons behind was to increase the enrollment ratio (66 % then) for primary education. To achieve the same, various schemes were included such as ‘mid day meal’. There was an urge to pay attention in the Higher education as well. The ‘quantity’ instead of ‘quality’ of university was increasing. The 11<sup>th</sup> FYP was known as ‘India’s Educational Plan’. It considered education as a primary requisite for achieving ‘Inclusive growth’. It followed a comprehensive strategy to strengthen the education sector. As compared to other developing countries, where around 25 per cent was the general attendance; only 10 per cent of the relevant age group was found in India. Expansion of vocational training was also one of its main focuses.

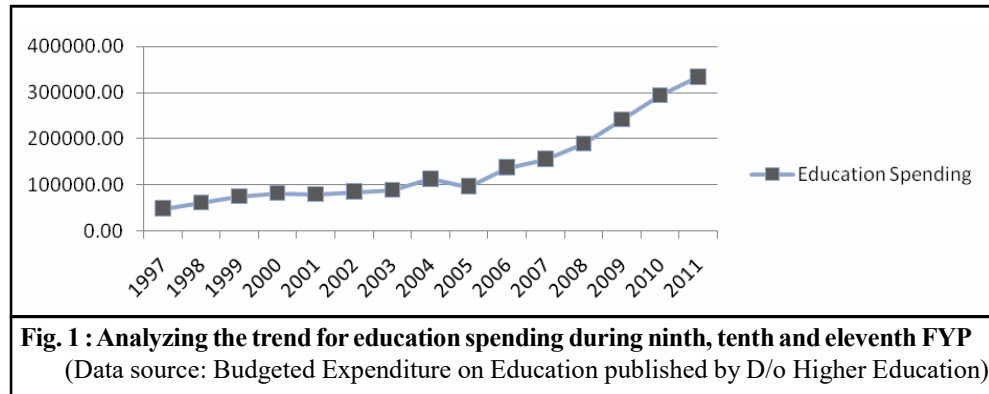
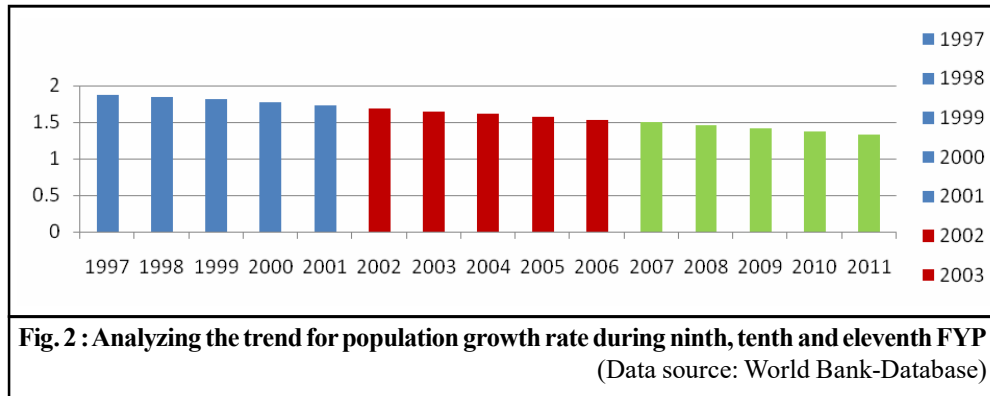


Fig. 2 depicts the trend for population growth. It shows an apparent decline in country’s population growth over the years. Various reasons accounts for the decline. One reason could be positive correlation between female literacy and population growth rate. It was found that population growth rate tends to decline in areas where female literacy rate are higher. For example, Kerala and Bihar have female literacy rate of 91.98 per cent and 53.33 per cent, respectively where as their Fertility rate are 1.67 per cent and 3.17 per cent, respectively. (Source: Census 2011). The additional reasons for the decline could be the schemes introduced and promoted by the Indian Government for population control.

Fig. 3 show that the unemployment rate has been subjected to change over the period of time. Different causes constitute towards the fluctuating unemployment rate *viz.*, seasonal



employment, high rate of growth of service sector especially construction, retailing, transport and telecommunication have a positive impact on reducing unemployment as they absorb large portion of labor force. However, weather conditions such as droughts or heavy monsoon causes temporary unemployment in various places in India. Post 2011, the unemployment rate has become steadier. Further, during the period 2012 to 2014 *i.e.*, mid-twelfth FYP, steady pattern is observed continuing with 3.5 per cent, 3.6 per cent, 3.5 per cent unemployment rate, respectively.

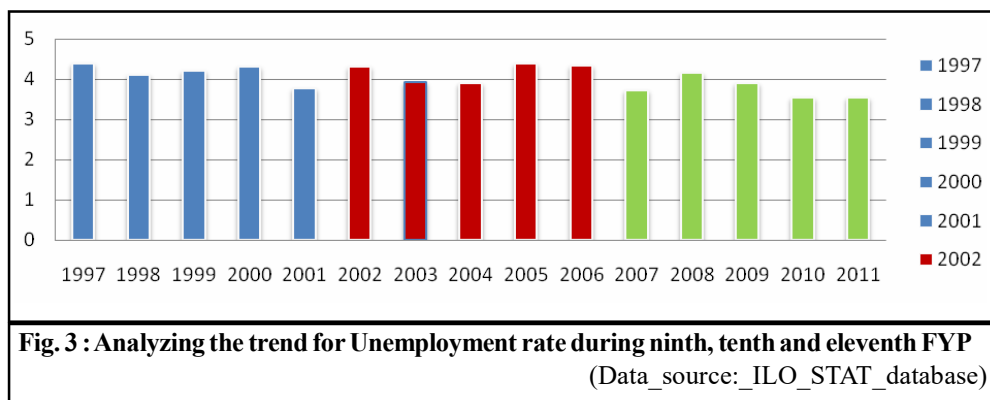
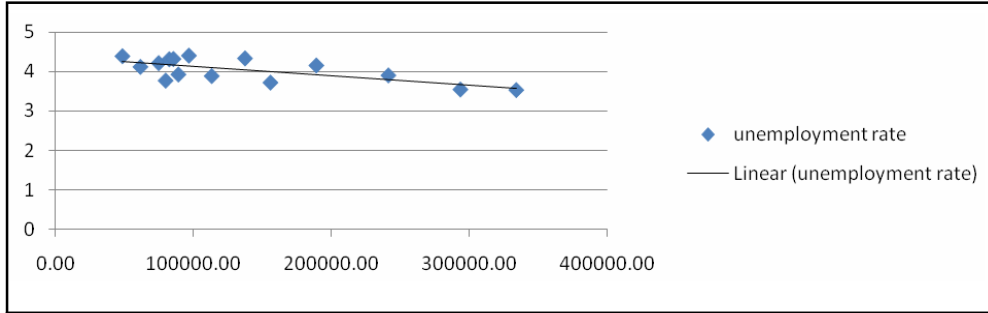


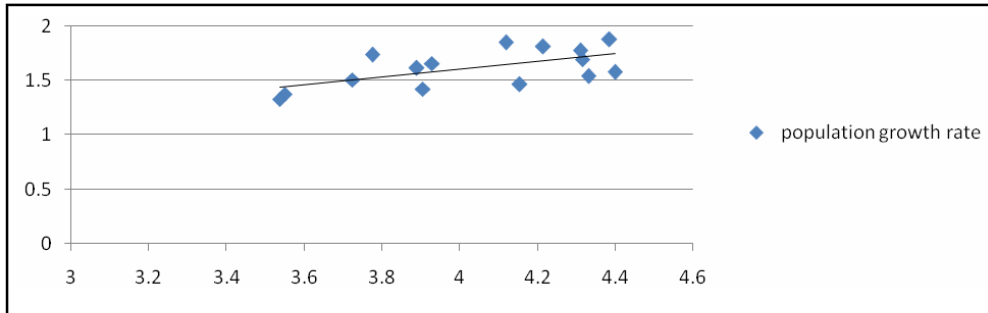
Fig. 4 shows the analysis of unemployment rate and education spending over a period. The trend line in the scatter plot shows a strong negative linear relationship between education spending and unemployment rate. The correlation coefficient between the two is (-0.698217309), which establishes that when there is an increment in education spending the unemployment rate decreases and *vice versa*.

Fig. 5 shows the analysis of the relationship between unemployment rate and population growth rate from 1997 to 2011 (9<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup> FYPs). The trend line in the scatter plot shows a moderately strong positive linear relationship between population growth rate and unemployment rate.

The correlation coefficient being 0.60, which establishes that when there is an increase in population growth rate the unemployment rate also tends to increase and *vice versa*.

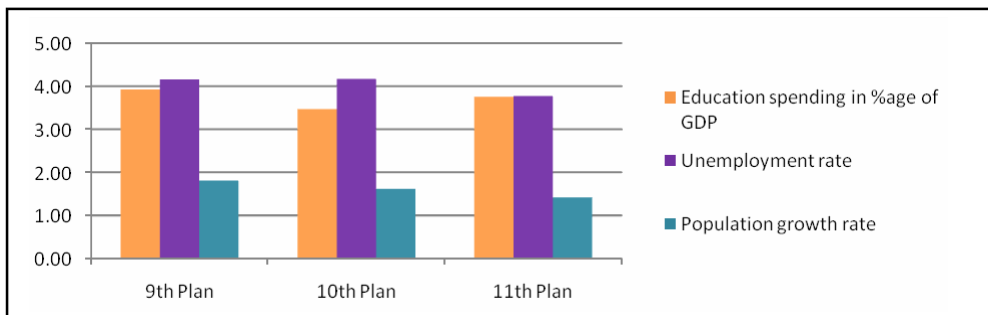


**Fig. 4 : Analyzing the relation between education spending and unemployment rate during the period 1997 to 2011**  
(Data source: World Bank-Database)



**Fig. 5 : Analyzing the impact of population growth rate on unemployment rate during the period 1997 to 2011**  
(Data source: World Bank-Database)

From Fig. 4, it has already been established that education spending and unemployment rate have a strong negative linear relationship. Also, Fig. 5 statistically analyzes the impact of population growth rate on the relationship of education spending and unemployment rate. From Table 1 and Fig. 6, it is evident that how population growth rate and education spending affects the above mentioned relationship.



**Fig. 6 : Relation between average education spending, average unemployment and average population growth rate during the period 1997 to 2011**  
(Data source: World Bank-Database)

**Table 1: Showing average education spending, average unemployment rate and average population growth rate (1997-2011)**

Plan period	Average education spending in %age of GDP	Unemployment rate	Population growth rate
9th Plan	3.92	4.161000061	1.806975508
10th Plan	3.47	4.172999954	1.615937854
11th Plan	3.76	3.774199915	1.417592409

**Conclusion :**

From theoretical background, it was found that post independence the government of India adopted five year plans to encounter various issues such as poverty, allocation of resources, inflation and refugee problem. Setting short term goals was possible with the adoption of FYPs and if the planned goals were under or over achieved the future plans could be adjusted accordingly so that the long term goals could be achieved. Various issues such as unemployment, low literacy and high population growth rate had to be addressed through planning process for the betterment of the nation. Many academicians along the line have studied importance of education in a democratic nation such as India, expanding of educational facilities to improve literacy and have arrived to a conclusion that education reforms and policies are necessary for a country to develop and grow due to increased people participation. Further, many scholars and academicians' studied the impact of higher education and vocational skills on employment. India's economic growth is fueled by qualified masses with skills for which higher education is directly responsible.

In the present study trend for education spending, unemployment rate, and population growth rate were observed, it also examined the relationship between education spending and unemployment rate, the effect of population growth rate on the relationship of education spending and unemployment rate.

After comparing the analysis of theoretical background and of the secondary data gathered, the study was able to establish that education spending is related to unemployment rate and population growth rate also governs the relationship. It is important that the relationship between them is understood and further explored for the growth and development of the nation. To move forward this relationship must be tended to by employing various schemes and policies so that we continue to move on the road of all over development of the nation. All of the efforts of FYP must be taken into consideration and all the past learning must be optimally utilized to achieve the goal even when the FYP cease to exist and we venture into the future with Niti Aayog.

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