

## **CHAPTER 7**

**CONCLUSION, MAJOR FINDINGS AND POLICY**

**IMPLICATION**

## **7.1 Conclusion**

The study was an attempt to evaluate the relationship between government expenditure on education and economic growth in Odisha using annual data over the period 25 years i.e. 1990-91 to 2014-15. In order to assess the relation between these two variables, unit root test has been conducted to check the stationarity, Johansen cointegration test has been conducted to check long run association and a VAR model is build based on the ADF and cointegration test for assessing the causal relationship. Moreover, growth rates of different infrastructural parameters, rank of infrastructural development, expenditure on education and district domestic income has been calculated which shows the inefficiency of public expenditure on education sector. The result shows that expenditure on education sector can give fruitful result to the economy by boosting the economic growth. And to make the economy more dynamic and more competitive government must invest in infrastructure related to education as it creates the quality of education and this investment will alternatively help in promoting economic growth in long-term. The major findings of study include the following:

## **7.2 Major Findings**

### **7.2.1 Educational Infrastructure and Trend of Educational Expenditure In Odisha**

- Use of new technologies and scientific knowledge in the delivery of education services and promotion of scientific and technological interventions is likely to have significant impact not only on the quality of education services but also on its accessibility to the rural poor, in particular the disadvantaged sections. Access to quality basic education is imperative not only to reduce social and regional disparities, but also to achieve balanced growth and development. States, which have given high priority to investment in education, have shown greater economic progress in recent years.

- This study investigates the infrastructure development related to education in Odisha over a time period of 2007-08 to 2015-16 and found that; different infrastructure facilities like; drinking water facility, girls' & boys' toilet, and boundary wall facility are showing significant performance i.e. a major number of schools are well equipped with these facilities. The attainment of children in school is very much related to quality of the schools (Jhuma Halder, 2016) While the state is lagging behind on the ground of other facilities like; playground, electricity and computer facility. Moreover, while comparing the rank of Odisha with other states of India the study found that except drinking water facility and number of govt & private schools, in all other parameters Odisha's rank is declining. And these are some important parameters of to be looked over by the government which can resulted as significant social and economic development in the state.
- The study also examined the trend of educational expenditure as well as economic growth of three different division comprises of ten district each namely; North, Central and South over a period 2002-03 to 2015-16. State with higher per capita income found to spend more income on education (Chakrabarti and Jogelkar, 2006) where as the study found that the government is raising the fund on education for backward districts (most of them are coming under south division) but the result from this raised fund is not significant as many part of these districts still do not have primary or necessary facilities related education and are genuinely deprived from other facilities as well. So, only expending more will not rise the education level and economy growth, unless and until there is no proper allocation of fund and management committee to look after the fund and reported progress.

### **7.2.2 Causal Relationship Between Education Expenditure and Economic Growth**

- The unit root test confirms that both variables GSDP and EDUEXP are non-stationary at level as well as at first difference but, found to be stationary at second difference. Which allowed the study to run further tests and model like; Johansen Cointegration test, Granger Causality test & Vector Error Correction Model.
- The Johansen cointegration test confirms that economic growth and expenditure on education have long run association as they are cointegrated, indicating the existence of long-run association between GSDP and EDUEXP.
- The causality between Educational expenditure and economic growth is a bidirectional one (Yousif Khalifa Al- Yousi, 2008). The Granger Causality test in a VAR framework confirms that both variables are causing each other and the relation is bi-directional i.e. causality can run from economic growth to educational expenditure and vice versa.
- Running of Vector Error Correction Model (VECM) confirms that there is no short run causality running from educational expenditure to GSDP rather there exist long term causality. Czynski and Zeira (2003) in their study found GDP positively affects educational expenditure and the result also shows the short-term causality is running from GSDP to educational expenditure.

### **7.3 Policy Implications**

- Allocation of fund for educational development should be maximised at rural or backward areas, especially for south and north division of Odisha. so that the gap of availing quality of education in developed and under developed districts of Odisha can be minimized.
- The demand for education is strongly influenced by the economic variables such as income, property etc. Hence, availing the higher education by the low-income groups

has become difficult nowadays. In order to achieve equity in higher education, the higher education may be subsidised so as to enable the lower income groups to avail higher education at least to some extent.

- Kothari Committee Stipulates that states shall spend at least 6% of their SDP on Education, which have to be followed strictly. Moreover, it would be more appropriate if, for different levels of education (primary, secondary etc), per-student expenditure is fixed differently for each state with respect to their state income. Because of the major drawback that states with low GSDP (like Bihar and Orissa) may considered as more spending states without spending much amount actually.
- While determining the target groups of educational facilities and assistance, income of the household may be considered as the rational criteria rather than social classification. If income is considered as a criterion, we can establish equity in education at least to some extent.
- In order to keep pace with the Global knowledge explosion and technological advancement the share of education expenditure in GDP and the share of expenditure on Research and Development in GDP should be increased to the Global averages in the various levels of education.
- The poorer section of the society left to receive education at government institutions where infrastructure is poor in most of the cases. It results in less competitive skill among the students coming out government institutions. Hence, it is the need of the hour to strengthen the infrastructure in government institutions. It will help the poorer section of the society to receive better education.
- Finally, it can be suggested that concerted effort of proper management of funds and quality assurance in education should be given utmost priority in order to increase human capital, productivity and to make Odisha growth enhancing.

#### **7.4 Limitation of the study**

All most all studies are faced with various limitations and the study is no exception to the phenomenon. And the study would have been more efficient in the absence of these limitations.

Following are the limitations of the study:

- i) For the analysis of causal relation between educational expenditure and economic growth, data on absolute values of educational expenditure as a whole for Odisha is collected instead of collecting data for different level of education like; primary, secondary and higher education and analysing those with economic growth because of unavailability of state level data.
- ii) Due to unavailability of data on secondary and higher education, only elementary education has been taken for analysing trend and assessing infrastructure. If the data would available for secondary and higher education then the result will be more effective.