1. LITERATURE REVIEW

A number of studies both empirically and theoretically have been made realizing a strong relationship between a country's infrastructure and economic development. Canning (1998) in his country-wise study estimates large growth impacts of physical infrastructure through building up an annual database of physical infrastructure stocks for a cross section of 152 countries for 1990-95.

Alexander and Estache (1999) and Reinikka and Svensson (1999) emphasizes the impacts of reforms and regulatory environment introduced in infrastructure industries which includes the role of private participation in infrastructure contributing towards sustainable economic growth and realizes the importance of poor quality or unreliable infrastructure or insufficient infrastructure that can cause the firms for opting for "complementary capital" for providing infrastructure services respectively.

According to a recent study made by Musisi (2006) investment in infrastructure will bring benefits to the economy in terms of productivity where there are bottlenecks caused by an underdeveloped infrastructure.

The Foreign Direct Investments are considered to be an important source of non-debt inflows and an extension of and substitute of international trade. In addition to this has got the potential to serve as a vehicle for technology inflows and as a means of building inter-firm linkages in a world in which MNCs are primarily operating on the basis of network of global interconnections.

Jing Zhang (2008) in his work."Foreign Direct Investment. Governance, and the Environment in China: Regional Dimensions" includes four empirical studies related to FDI. Governance, economic growth and the environment. The results of the thesis are first, an intra-country
pollution haven effect does exist in China. Second FDI is attracted to regions that have made more effort on fighting against corruption and that have more efficient government. Third government variables do not have a significant impact on environmental regulation.

Swapna S. Sinha (2007) in his thesis. "Comparative Analysis of FDI in China and India: can Laggards Learn from Leaders?" focuses on what lessons emerging markets that are laggards in attracting FDI such as India, can learn from leader countries in attracting FDI such as China in global economy. The study compares FDI inflows in China and India. It is found that India has grown due to its human capital size of market rate of growth of the market and political stability.

Yew SiewYoug (2007) in his study."Economic Integration. Foreign Direct Investment and Growth in ASEAN five members" examines the effects of economic integration on FDI flows and the effects of FDI flows on economic growth in ASEAN countries. The study found that market size economic integration human capital infrastructure and existing FDI stock are the important determinants of FDI for ASEAN countries. The study also found that FDI economic integration and human capital are robustly significant to economic growth manufacturing sector growth and high technology sector growth for ASEAN countries. The FDI flow into ASEAN countries was found to be inversely proportional to the per capita income of the five countries.

SasidharanSubhash and RamanathanA. (2007), study on "Foreign Direct Investment and Spillovers: Evidence from Indian Manufacturing". It is an attempt to empirically examine the spillover effects from the entry of foreign firms using a firm level data of Indian manufacturing industries. Firm level data of Indian manufacturing industries are used for the period 1994-2002. They consider both horizontal and vertical spillover effects of FDI. Consistent with the results of the previous studies the study finds no evidence of horizontal spillover effects.
Garrick Blalock (2006) in his work. "Technology adoption from Foreign Direct Investment and Exploring: Evidence from Indonesian Manufacturing" contains three essays on technology adoption from foreign direct investment and exploring. The first essay investigates how technology that accompanies FDI diffuses in the host economy and finds that multinationals wish to limit technology leakage to domestic rivals they benefits from deliberate technology transfer to suppliers that may lower input prices or raise input quality. The second essay examines how firm attributes affect innovation by investing the adoption of technology through with FDI. The findings suggest that the more competent firms have already adopted technologies with high returns and low costs whereas less competent firms have room to catch up and can still benefit from the adoption of 'low hanging fruit technology' the third essay asks whether firms acquire technology though exporting and find strong evidence that firms benefits from a onetime jump in productivity upon entering export markets.

D. N. Ghosh (2005) in his paper FDI and Reform Significance and Relevance of Chinese Experience finds that if India shed its inhibitions about FDI and follow in the footsteps of China, than India would be in a position to realize its full potential China's FDI saga has been a textbook reply of what institutional economics would call "adaptive efficiency" on the part of its political regime. The country made courageous but careful choices in difficult circumstances signaling radical departure from the belief system it has been accustomed to for decades.

Sharma EAS (2005) in his paper "Need for Caution in Retail FDI" examines the constraints faced by traditional retailers in the supply chain and give an emphasis on establishment of a package of safety nets as Thailand has done India should also draw lessons from restrictions placed on the expansion of organized retailing in terms of sourcing capital requirement, zoning
etc. in other Asian countries. The article comments on the retail FDI report that as commissioned by the Department of Consumer Affairs and suggests the need for a more comprehensive study. Sharma Rajesh Kumar (2006) in his article "FDI in Higher Education Official Vision Needs Corrections" examines the issues and financial compulsions presented in the consultation paper prepared by the Commerce Ministry which is marked by Shoddy arguments perverse logic and forced conclusions. This article raises four issues which need critical attention the objective of higher education its contextual relevance the prevailing financial situation and the viability of alternatives to FDI.

Nayak D. N. (2004) in his paper "Canadian Foreign Direct Investment in India Some Observations" analyse the patterns and trends of Canadian FDI in India. He finds out that India does not figure very much in the investment plans of Canadian firms. The reasons for the same is the indifferent attitude of Canadians towards India and lack of information of investment opportunities in India are the important contributing factor for such an unhealthy trends in economic relation between India and Canada. He suggested some measures such as publishing of regular documents like newsletter that would highlight opportunities in India and a detailed focus on India's area of strength so that Canadian firms could come forward and discuss their areas of expertise would got long way in enhancing Canadian FDI in India

Naga Raj R (2003) in his article "Foreign Direct Investment in India in the 1990s: Trends and Issues" discusses the trends in FDI in India in the 1990s and compare them with China. The study raises some issues on the analytical discussion and comparative experience the study concludes by suggesting a realistic foreign investment policy.

Nirupam Bajpai and Jeffrey D. Sachs (2006) in their paper "Foreign Direct Investment in India: Issues and Problems", attempted to identify the issues and problems associated with India's
current FDI regimes and more importantly the other associated factors responsible for India's unattractiveness as an investment location. Despite India offering a large domestic market rule of law, low labour costs, and a well working democracy, her performance in attracting FDI flows have been far from satisfaction.

Kulwinder Singh (2005) in his study "Foreign Direct Investment in India A Critical analysis of FDI from 1991-2005" explores the uneven beginnings of FDI in India and examines the developments (economic and political) relating to the trends in two sectors: industry and infrastructure. The study concludes that the impact of the reforms in India on the policy environment for FDI presents a mixed picture. The industrial reforms have gone far, though they need to be supplemented by more infrastructure reforms, which are a critical missing link.

Basu P. Nayak and N. C. VaniArchana (2007) in their paper "Foreign Direct Investment in India: Emerging Horizon" intends to study the qualitative shift in the FDI inflows in India in depth in the last fourteen odd years as the bold new policy on economic front makes the country progress in both quantity and the way country attracted FDI. It reveals that the country is not only cost effective but also hot destination for R & D activities. The study also finds out that R & D as a significant determining factor for FDI inflows for most of the industries in India.

The Six important factors that were identified in World Economic Forum 1997 for judging a foreign direct investment location were-

1. Current Market Size
2. Expected Market Size
3. Competitiveness
4. Ability to repatriate capital and remit profits
5. Productivity and work habits of the workers
6. Quality of infrastructure

From above we can link up the need of a proper infrastructure for identifying a FDI location. The definition of infrastructure for attracting FDI is related to physical, social, institutional and governance aspect.

As against this backdrop what we find in India till the onset of globalization i.e. till early nineties that the flow or availability of FDI in India was very meager. In the year 1991 739 crores ($325 million) were the approvals against which actual FDI inflows were 351 crores ($155 million). Similarly in 1992 against approvals of $1781 million actual inflows were only $233 million.

**Sector wise availability of FDI in India**:

A large portion of the FDI flows into skill intensive and high value-added services industries, particularly financial services and information technology. Service sector, computer software and hardware industry together account for about 35.49 percent of the total FDI into India April 2000 to December 2007. India in fact, dominates the global service industry in terms of attracting FDI with its unbeatable mix of low costs, deep technical and knowledge skills, mature vendors and supportive government policies. India topped at the Kearneys 2007 Global Services Location Index, people and skills availability and business environment.

Country-wise, Mauritius has been the leading nation for FDI inflows into India, followed by USA, UK, Singapore, Netherlands and Japan during April 2000 to December 2007. It is to be noted that Mauritius pre-eminence has been due to its stature as a tax haven and most volume of FDI inflows through Mauritius has been from the USA.
What a good infrastructure can bear and what a deficient infrastructure can cost?

Past researches both empirically and theoretically have established the significance of infrastructure for economic development. The definition of infrastructure is not encapsulated within limited horizons; it includes physical, social, institutional, governance, legal aspects of economy and their impacts can be felt on an economy as a whole. Therefore, the need of infrastructure just cannot be taken for granted. In today's scenario the noted fact is that additional infrastructure capacity may not address productivity if existing infrastructure is not effectively utilized. Efficient infrastructure use and management has the possibility of greatly affecting economic productivity. This may contribute in bringing domestic and global competitiveness.

As far as flow of FDI in Bihar is concerned the picture appears to be very dismal.

Between 1994 and 2004, Bihar attracted foreign direct investment of just Rs. 740 crore as compared to Gujarat (Rs. 13,745 crore) and Andhra Pradesh (Rs. 19000 crore). Assocham has expressed its hope that the new governments in Bihar will a policy that will be industry friendly and will develop investment environment in the state.

The government should focus on connectivity and infrastructure to let the businessman evacuate his goods or raw material. Exports from Bihar are virtually non-existent. Investment in EOUs (Export Oriented Units) between 1993 and 2003 stood at only Rs. 17 crore. EOUs in AP and Karnataka, on the contrary, attracted Rs. 42,440 crore and Rs. 58,397 crore, respectively, during the period. As Bihar tries to rebuild itself, opportunities exist in almost every sector. Security no longer a threat today, the new government in Bihar is creating an atmosphere conducive for investment. Bihar received just Rs. 2.74 crore of foreign direct investment between January 2000
and November 2005. However, with the current state government's one point agenda of making Bihar the best investment destination in India; its citizens are experiencing a steady turnaround.

- In 2005 a software development center was opened by an NRI, in Katihar, which provides technical support to public and private firms in California.
- Katihar boasts of the R.S. College of Computer Science and Engineering established in July 2006, again an NRI investment.
- A Rs. 584 crore loan from Japan Bank of International Co-operation (JBIC) for development of Patna approved in October 2006.
- The Singapore and Japanese governments are keen on reviving the Nalanda University.
- Japan has agreed to offer a grant to the tune of Rs. 5,600 crore for infrastructure development of the Buddhist circuit in Bihar.
- JBIC has also extended financial assistance in developing basic facilities like drinking water, electricity and sewerage system at Nalanda, Vaishali, Rajgir, Kesaria, Areraj and Mangalgarh.

The proposed research will attempt to examine the causal factors behind the dissatisfactory flow of FDI in Bihar in general and availability of FDI for Infrastructure sector in particular. However in order to present the study in a broader backdrop we would also be attempting to analyze the flow of FDI in India and its distribution in the various states of the country.

In this study an attempt is made to realize the importance of infrastructure and MNCs as a contributor or agent of economic development via forming a viscous cycle. This cycle will be formed on the basis of stylized facts extracted from past researches for interlinking infrastructural development with economic development, foreign direct investment with
infrastructural development and infrastructure development as an agent of global and domestic competitiveness among MNCs, thus contributing to economic growth of economic development to economic growth. This study will be based on analysis of FDI in infrastructure sector in Bihar during globalization. It has been observed that infrastructural development is highly required in Bihar particularlary the FDI when Bihar lacks capital and development mindset. Prior to this study, no work has been done related to this study to boost the FDI in infrastructure sector in Bihar.