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Artha Beekshan, Volume 25, No.1- 4 , June 2016- March 2017

Publication of ***Artha Beekshan***, the quarterly referred journal of Bangiya Arthaniti Parishad, that is, the Bengal Economic Association, is one of the most important academic activities of the Association. The present volume, **Volume 25, No.1- 4** of the Journal, is published as a combined issue containing four selected papers contributed by scholars. We are thankful to the authors and members who have helped in one way or other in the preparation of this volume.

I would like to extend my whole-hearted thanks to the Editorial team, the Publisher, and all who have helped in the publication process, and especially the office bearers of Bangiya Athaniti Parishad for their kind endeavours to make this issue of **Artha Beekshan** viable and **Kolkata Mudran** for bringing out the present issue.

Editor in Chief

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INDIA-BANGLADESH TRADE- COMPOSITION, TRENDS AND DIVERSIFICATION: AN EMPIRICAL STUDY

DEBJANI MITRA*

SUDIPTA SARKAR**

Abstract

South Asia has become one of the most energetic economic regions of the world with its rising share in global output. India accounts for more than fourth-fifths of the region's total GDP. Its sustained high economic growth has increased the potential for intra-regional trade. India's links with Bangladesh are cultural, civilization, economic and social. Both the countries shared history and common heritage, linguistic and cultural ties, passion for music, literature and the arts. With Bangladesh, India shares not only a common history of struggle for freedom and liberation but also multi-dimensional relations at several levels of interactions.

The two neighbours India and Bangladesh have striking trade profiles. While Bangladesh's global exports are dominated by labor-intensive manufactured commodities, its export to India is dominated by primary commodities. The shares of manufactured goods in Bangladesh's export outlay were about 92 and 91 percent in 2001 and 2011 respectively in comparison with the corresponding shares in total exports destined to India as 51 and 45 percent respectively. The composition of bilateral trade between these two countries (both exports and imports) has been changing over time which is marked by (i) inclusion of new products and extinction of some of the traditional ones, and (ii) change in the relative significance of different goods

In this backdrop, this paper examines the trade prospects between India and Bangladesh with special emphasis on composition, trends and diversification of trade along with a growing bilateral trade.

Key Words : Intra-Regional Trade, Diversification, Intensity and Openness, Revealed Symmetric Comparative Advantage (RSCA)

JEL Classification Codes: F14,O57, R 15.

INTRODUCTION

Bangladesh and India are part of the Indian subcontinent. The relationship between these two countries is deep rooted in respect of historical and cultural links. In particular, Bangladesh and

* Assistant Professor, Department of Economics, Bijoy Krishna Girls' College, Howrah, WB

** Economist-cum-Credit Planner, Department of Planning, Statistics and Programme Monitoring. Govt. of West Bengal

the Indian states of West Bengal and Tripura share the Bengali language. They are the largest trading partners in South Asia. Two-way trade is estimated to be over USD 7 billion. Bangladesh is also the fifth largest remittance sender to India. Now-a-days the special interest of both the economies is trade relationship. The reasons behind this are as follows. Firstly, due to arising of perennial, large bilateral trade deficit with India, Bangladesh concerns about large volumes of informal imports from India across the land border for avoiding Bangladesh import duties Secondly, India's trading relationship is much less significant for it than it is for Bangladesh. To improve the trade relationship different agreements have considered. Finally, for closer economic integration within the South Asia region both countries have long shared common objectives. On the basis of their common objectives a new agreement SAFTA was signed in January 2006. In SAFTA, a number of motivated new objectives have been enunciated which brought about destruction of old preferential tariffs agreed in the various rounds of SAPTA. These include the eventual elimination of tariffs and non-tariff barriers on trade between the members.

In this backdrop our current paper concentrates on the pattern, growth and diversification of foreign trade of India and Bangladesh in special reference to bilateral-trade between the countries. This paper has seven sections. Sectoral composition and time trend of GDP of both the economies is discussed in Section I. Section II concentrates on trade policies of both the countries in special reference to bilateral trade. The composition and time trend of foreign trade is enlightened in Section III. Section IV highlights the commodity diversification of foreign trade of both the economies. Section V concentrates on the trade intensity and openness of trade in both the economies. India-Bangladesh bilateral trade amount, trade indices for measuring bilateral trade and pattern of exports of selected commodities of India to Bangladesh are examined in Section VI. Finally, section VII includes some concluding remarks.

I. SECTORAL COMPOSITION AND TIME TRENDS OF GDP IN BANGLADESH AND INDIA

GDP of any country can be taken as an indicator of economic growth. Since the important component of GDP is international trade thus it is important to know about the pattern and growth of GDP in any economy for knowing the export and import pattern. In this section we will examine the sectoral composition of GDP of both the economies and their respective time trends by taking the timer series data.

A) BANGLADESH

In case of Bangladesh GDP has come from three sectors Primary Sector (PS), Secondary Sector (SS) and Tertiary Sector (TS). Primary sector consists of agriculture & forestry, fishing, mining and quarrying. Manufacturing, Electricity, Gas and water supply and construction are the components of secondary sector. Tertiary sector consists of wholesale & retail trade, hotels restaurants, transport, storage & communication, financial intermediations, real estate, renting, health, education, public administration & defence, community, social and personal services etc. The contribution of these sectors to GDP has changed during the period under study. The share

of PS in GDP has decreased from 30.13% in 1990-91 to 26.10% in 2000-01 to 21.28% in 2010-11 and to 20.05 in 2012-13. Compared to this the share of SS has increased from 30.09% in 1990/91 to 33.84% in 2000/01 to 36.12% in 2010-11 to 37.38% in 2012-13. Similar trend has followed in TS. The respective figures for TS are: 39.78%, 40.06%, 42.60% and 42.57%.

Now we consider the trend growth rates of GDP in aggregative level and dis-aggregative level. In this study we take the time period of 1990/91 to 2012/132. We divide this total time period into two sub-periods: period I: 1990/91 to 2000/01 and period II 2000/01 to 2012/13. We have estimated the growth rates of GDP, in both aggregative and dis-aggregative levels during these sub-periods. The growth rates are statistically significant in all the cases. During 1990/91-2012/13 the Bangladesh economy has grown at a rate of 5.57% and all the three sectors (primary, secondary and service) have also grown at the rates 3.73%, 6.46% and 5.96% respectively (Table 1). In the period I (1990/91 to 2000/01) GDP grew at the rate of 4.89% whereas in this period primary, secondary service sector grew at the rates of 3.37%, 6.20% and 4.91% respectively. Comparing to this period GDP grew at the rate of 6.16% during the period 2000/01 to 2012/13 along with 6.72% growth rate of service sector. But in this decade performance of primary sector is too poor. Primary sector only grew at the rate of 4.05%. Thus we observe that the growth rate of service sector has increased at the cost of the growth rate of primary sector.

B) INDIA

GDP generates from three sectors: Primary Sector (PS), Secondary Sector (SS) and Tertiary Sector (TS). The Primary sector includes agriculture, forestry & fishing, while manufacturing, construction; mining and quarrying, electricity, gas and water supply are taken into consideration in secondary sector and tertiary sector or service sector includes trade, hotels and restaurants. railways, other transport & storage, communication (Post, Telecom), banking, insurance, dwellings, real estate, business services, public administration; defense, personal services, community services, other services. The contributions of these sectors in GDP have been changing during the plan periods. The share of PS has continuously decreased from 29.62% in 1990/91 to 22.31% in 2000/01 and to 13.69% in 2012/13. On the other hand, the share of SS has followed the fluctuating trend during the period under study. The share of secondary sector has increased from 20.63% in 1990/91 to 20.69% in 2000/01 and then decreased to 18.93% in 2012/13. Compared to this the share of TS has increased during this period under study. The shares are respectively: 49.76% in 1990-91, 57% in 2000-01, and 67.38% in 2012/13. Thus we observe that the tertiary sector has played a dominant role in the Indian economy at the cost of the PS during different plan periods in post reform period.

Now we consider the trend growth rates of GDP in aggregative level and dis-aggregative level. In this study we take the time period of 1990/91 to 2012/13. We divide this total time period into two sub-periods: period I: 1990/91 to 2000/01 and period II 2000/01 to 2012/13. We have estimated the growth rates of GDP, in both aggregative and dis-aggregative levels during these

sub-periods. The growth rates are statistically significant in all the cases. During 1990/91-2012/13 the Indian economy has grown at a rate of 6.86% and all the three sectors (primary, secondary and service) have also grown at the rates 2.92%, 6.62% and 8.40% respectively (Table 2). In the period I (1990/91 to 2000/01) GDP grew at the rate of 6.13% whereas in this period primary, secondary service sector grew at the rates of 3.18%, 6.48% and 7.47% respectively. Comparing to this period GDP grew at the rate of 7.88% during the period 2000/01 to 2012/13 along with 9.36% growth rate of service sector. But in this decade performance of primary sector is too poor. Primary sector only grew at the rate of 3.23%. Thus we observe that the growth rate of service sector has increased at the cost of the growth rate of primary sector.

II. TRADE POLICIES

A) Bangladesh's Trade Policies and Implications for Indo-Bangladesh Trade

Enhancement of Indo- Bangladesh trade is an opportunity obtained from gradual changes of Bangladesh's trade policies has three distinct phases. Heavy controls on export and import, and pervasive price control was taken in the first phase (1972-75). The second phase (1976-1990) was marked by a shift towards market-based economy. This was done by beginning of de-nationalization, modest downward adjustment of tariffs, partial elimination of quantitative restriction etc. The third phase (1990-to date) approached trade liberalization in a more concerted manner.

Impact the liberalized regime has on Indo-Bangladesh bilateral trade is predominantly unidirectional and favouring to Indian exports to Bangladesh. It may also have impacted the informal trade between these two countries. This trade policy includes substantial reduction and rationalization of tariffs, elimination of trade-related quantitative restriction, unification of exchange rates and shift to a managed floating exchange rate regime. The enhanced outward policy orientation is also reflected in country's overall trade outcome, which is not matched by Indo-Bangladesh bilateral trade statistics.

B) India's SAPTA preferences for Bangladesh

From January 1, 2006 SAFTA (South Asia Free Trade Agreement) was introduced and it supersedes SAPTA (SAARC Preferential Trading Agreement) in respect of tariff concessions. At present India has given preferences to Bangladesh on approximately 2925 tariff lines, about 58% of the total number of its approximately 5000 6-digit HS (Harmonized Code) lines. In the third SAPTA negotiating round two thirds of these preferences were introduced and came into force during India's 2000/01 fiscal year.

Since Nepal and Bhutan have had long duty free access to the Indian market under their bilateral treaties, and the Maldives trade is negligibly small (at least from India's perspective) thus in practice Bangladesh is the only relevant beneficiary of India's LDC SAPTA preferences. In order to qualify for India's SAPTA preferences, products imported from Bangladesh would have to satisfy the SAPTA origin rule. The rule is that, the value of non-SAPTA imported inputs included in the exported product should not exceed 70% of the fob (Free on board) price.

Between 1996/97 and 1999/2000 there were relatively few products with preferences. Imports from Bangladesh without preferences would have had to compete in India with domestic producers after paying tariffs which ranged from just over 40% to almost 60% during these years. Products with preferences would have still been subject to tariffs which varied between 20 and 30 percent during the period. For three of these years (1997/98, 1998/99, and 1999/2000) Bangladesh exporters of consumer goods were exempt from India's import licensing system and in this respect had a major advantage over exporters from non-SAARC countries, but it seems that the Indian tariffs (whether or not reduced by preferences) were too high for them to take advantage of this opportunity

After 2000/01 there was a big increase in the number of products with tariff preferences for Bangladesh. Since 2000/01 both MFN (Most Favoured Nation) tariffs and the corresponding lower preferential tariffs for Bangladesh have steadily declined. From the viewpoint of Indian traders, this would have made importing from both Bangladesh and the rest of the world more attractive, relative to buying from local suppliers, with a substantial margin of preference for imports from Bangladesh. However, up to 2003/04 only Indian imports from the rest of the world have been growing, not Indian imports from Bangladesh, and this pattern was continuing in the first three quarters of 2004/05, when the MFN tariff for this representative industrial product was 20%, and the preferential tariff for Bangladesh only 10%.

III. SECTORAL COMPOSITION AND TIME TRENDS OF FOREIGN TRADE IN BANGLADESH AND INDIA

BANGLADESH

Bangladesh has traded different commodities during 1993/94-2012/13. These commodities can be categorized into three sub-sectors: primary exports, secondary exports and tertiary or service sector exports. Over time due to change in trade policy the composition of trade basket has changed. In this section we will analyze the pattern and growth of foreign trade (total exports and total imports) by taking percentage distribution of exports and imports during 1993/94-2012/13.

Estimates:

a) Exports

During the period under study liberalization policy was introduces in Bangladesh and it brings about change in export basket. The share of primary exports has decreased from 14.74% in 1993/94 to 7.89% in 2000/01 and to 2.70% in 2012/13. Compared to this the share of secondary exports has decreased from 76.01% in 1993/94 to 71.25% in 2000/01 and then increased to 73.63% in 2012/13. So the secondary sector exports has been experiencing fluctuating trend takes the prime position in Bangladesh exports. Similarly tertiary sector has also increased during the period under study. The respective figures are: 9.26%, 21.77% and 23.67%. Now we consider the growth rates of exports

(Table 3) during the period. The total exports has grown at the rate of 16.47% during the period under study along with the growth rates of 7.87%, 16.38% and 20.92% of primary, secondary and tertiary exports respectively. In period I(1990/91-2000/01) total exports has grown at the rate of 16.76% whereas the growth rates of primary, secondary and tertiary exports are 7.11%, 15.36% and 32.21% respectively. The growth rates have increased in all three sectors exports and total exports during period II (2000/01-2012/13) as compared to period I.

b) Imports

Like exports the composition of imports basket of Bangladesh has also changed during the period under study. The share of secondary imports has taken the prime role and it has taken near about more than 52% of total imports during the period under study. Being a developing country Bangladesh has imported different goods of secondary sectors as compared to primary sector. Bangladesh imports have been grown at the rate of 15.21% during the total period along with the growth rates of 16.26% of primary imports, 16.94% of secondary imports and 12.34% of tertiary imports respectively. The growth rates are higher in period II as compared to period I (Table 3).

INDIA

India has traded different commodities during different plan periods. These commodities can be categorized into three sub-sectors: primary exports, secondary exports and tertiary or service sector exports. Over time due to change in trade policy the composition of Indian export basket has changed. On the other hand India has imported many commodities from rest of the world. The major importable commodities are divided into primary and secondary and tertiary. In this section we will analyze the pattern and growth of foreign trade (total exports and total imports) by taking percentage distribution of exports during 1990/91-2012/13.

Estimates:

c) Exports

Due to introduction of globalisation and liberalisation Indian exports basket has changed after reform was introduced in the economy of India. The share of primary exports has decreased from 23.83% in 1990/91 to 15.99% in 2000/01 and to 15.37% in 2012/13. Compared to this the share of secondary exports has increased from 74.50% in 1990/91 to 81.25% in 2000/01 and to then decreased to 81.17% in 2012/13. So the secondary sector exports has been experiencing fluctuating trend takes the prime position in Indian exports. Similarly service sector has also increased during the period under study. The respective figures are: 1.67%, 2.76% and 3.46%. Now we consider the growth rates of exports (Table 4) during the period. The total exports has grown at the rate of 18.30% during the period under study along with the growth rates of 15.38%, 18.68% and 28.12% of primary, secondary and tertiary exports respectively. In period I(1990/91-

2000/01) total exports has grown at the rate of 18.63% whereas the growth rates of primary, secondary and tertiary exports are 15.56%, 19.30% and 23.97% respectively. The growth rates have increased in all three sectors exports and total exports during period II (2000/01-2012/13) as compared to period I.

d) Imports

Like exports the composition of imports basket of India has also changed during the period under study. The share of secondary imports has taken the prime role and it has taken near about more than 91% of total imports during the period under study. Being a developing country India has imported different goods of secondary sectors as compared to primary sector. Indian imports have been grown at the rate of 20.28% during the total period along with the growth rates of 20.39% of primary imports and 20.45% of secondary imports respectively. The growth rates are higher in period II as compared to period I (Table 4).

IV. COMMODITY DIVERSIFICATION OF TRADE

To account for compositional changes brought about in the composite exports and imports in both the countries Pal (1996) has computed the index of commodity diversification (DI) based on Theil (1967) Entropy measure : DI= E/log n,

$$E = \text{“ } x_i \log (1/x_i)$$

where $x_{i:}$ share of i- th commodity (exports or imports) in the total

n : number of commodities.

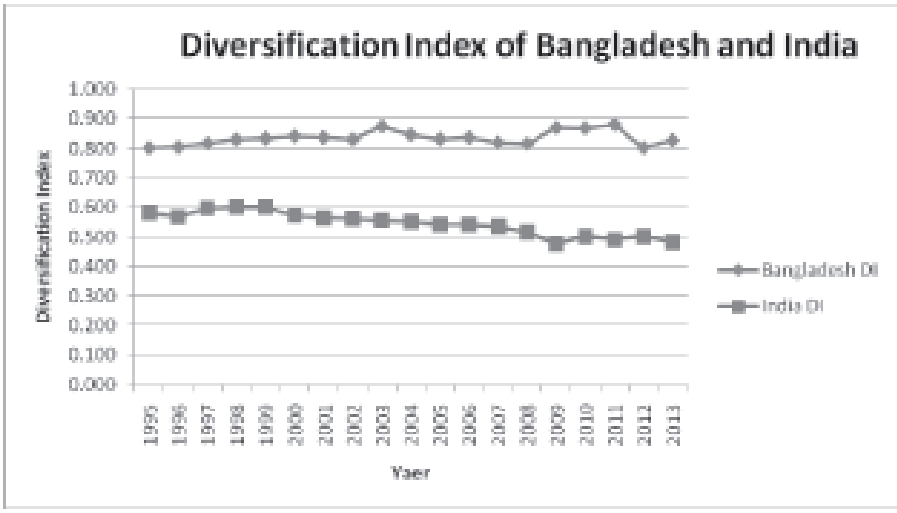
When E=0, DI=0. In this case the trade (exports / imports) distribution is completely inegalitarian and the whole trade is completely shared by only one commodity.

For E = log n, DI= 1.The trade pattern is completely diversified among the commodities. Commodities are shared equally in trade. It thus follows that 0d” DId”1 . DI varies from zero when the trade becomes completely concentrated (only one commodity appropriates the total trade), to unity when the trade becomes completely diversified (all the commodities share trade equally). So higher (lower) the value of DI, higher (lower) the degree of diversification.

Estimates:

Our estimates (Table 5) reveal that the number of commodity traded in both the country change with change in time. In the year 1995 Bangladesh has traded 110 commodities whereas India has traded 241 commodities. The number of commodity traded in both the countries has increased in both the countries. In Bangladesh it has increased from 132 in 2000, 159 in 2005, 211 in 2010 and 216 in 2013. The corresponding figures for India are 241, 246, 252, 255 and 252 .

Commodity diversification in Bangladesh has increased from 0.802 in 1995 to 0.841 in 2000 to 0.832 in 2005 to 0.868 in 2010 and to 0.827 in 2013. Compared to this, the commodity diversification index in India has followed a decreasing trend in India. DI in India has decreased from 0.581 in 1995 to 0.572 in 2000 to 0.542 in 2005 to 0.502 in 2010 and to 0.483 in 2013. This can be shown by using following diagram.



V. TRADE INTENSITY AND OPENNESS

Intensity of trade (exports or imports) of a country is the ratio between the trade value and the GDP while openness is the ratio of exports plus imports and GDP. So, we have two types of intensity: export intensity (E_I) and import intensity (M_I).

(i) Export Intensity: E_I= E/GDP: E_I=0; for E=0, E_I=1 for E=GDP: 0d" E_Id" 1.

(ii) Import Intensity: M_I= M/GDP: 0d" M_Id" 1.

Trade intensity and openness of trade are thus two indicators of a country, which reflect country's growth and development with respect to other countries. As GDP of the country increases over time then country's development particularly on trade (exports and imports) has been reflected automatically.

Openness of trade write as : $O_{T=}$(E +M)/GDP= E/GDP + M/GDP= E_I+ M_I:Summation of export intensity and import intensity.

Clearly, O_T=0 for E_I=0, and M_I=0——————————(1)

< 1 : either E_I=0 and M_I<1——————————(2)

Or, E_I<1 and M_I=0 ——————————(3)

Or, E_I<1 and M_I<1 such that E_I+M_I<1————(4)

>1 : E_I<1, M_I<1 such that E_I + M_I >1 ————(5)

Now we explain the above cases one after another.

(1) In this case there is no trade at all. This means the country is closed economy.

(2) In this case export intensity is zero but import intensity positive. That means there are no exports. The country only imports. That is the country adopts import-oriented trade policy.

(3) In this case import intensity is zero but export intensity positive. That means there are no imports. The country only exports. That is the country adopts export-oriented trade policy.

(4) Both export and import intensities are positive and summation of export intensity and import intensity is less than unity. That means domestic demand is there.

(5) Both export and import intensities are positive and summation of export intensity and import intensity is greater than unity.

Openness of trade is the sum of export and import intensity. The degree of openness of trade depends on the degrees of export and import intensities. Higher degree of openness implies either (a) higher (lower) degree of exports intensity and lower (higher) the degree of imports intensity, or (b) higher the degrees of export and import intensities. So, variation in openness of trade is caused by variation in export intensity, import intensity or both. If the degree of export intensity is greater (smaller) than that of import intensity then the openness of trade is due to export (import)-oriented.

Estimates

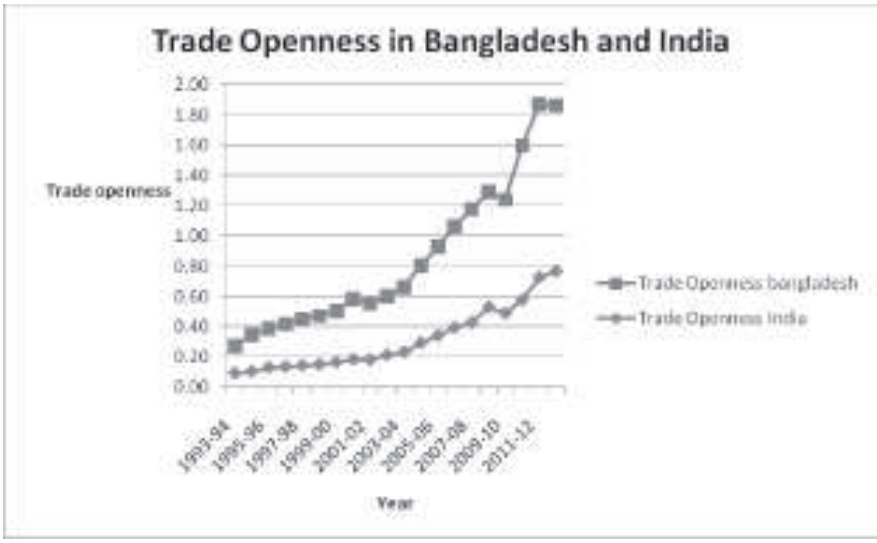
a) Bangladesh

Our estimates (Table 6) reveal that the export intensity has increased from 0.07 in 1993/94 to 0.16 in 2000/01 and to 0.45 in 2012/13. Respective figures for import intensities are 0.11, 0.24 and 0.64. During the period import intensity exceeds the export intensity. The values of openness of trade are also increasing during the period under study . Thus we can conclude openness of trade is due to import oriented and this is the common feature of developing economy.

b) India

In case of India also the values of import intensity is higher than that of export intensity. Both export and import intensities have increased during 1993/94 to 2012/13. The value of trade openness has also increased during this time period.

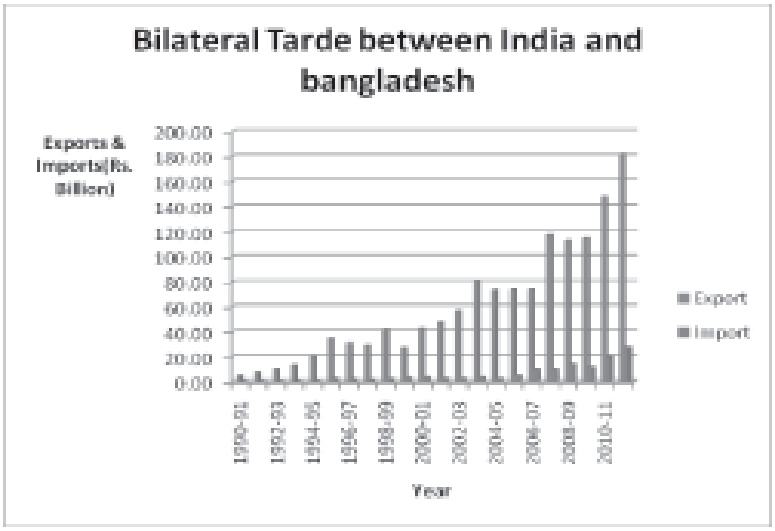
The values of openness of trade in Bangladesh are higher than that of India economy and this can be shown by using following diagram:



VI. INDIA-BANGLADESH BILATERAL TRADE

Trend in Bilateral Trade

The percentage share of exports of India to Bangladesh is very small in respect of total exports of India. In 1990/91 the export amount of India to Bangladesh was only Rs. 5.47 billion which is only 1.68% of total Indian exports. It has increased to Rs 42.72 billion in 2000/01 and to Rs. 182.30 billion in 2011/12. But the percentage share of exports to Bangladesh in total exports has been fluctuating from 1.68% in 1990/91 to 2.10% in 2000/01 and to 1.24% in 2011/12. The amount of import of India from Bangladesh is also very small. It was only Rs. 0.31billion in 1990/91(0.07% of total import). It has increased to Rs. 3.67(0.16% of total import) billion in 2000/01 and to Rs.27.96 (0.12% of total import) billion in 2011/12. This trend can be shown by using following bar diagram



Our estimates (Table 7) reveal that the Indian exports to Bangladesh have grown at the rate of 22.47% in comparison to 20.29% growth of total trade during 1990/91-2001/12. The growth rate of import of India from Bangladesh is 22.47% in comparison to 20.29% total import growth. If we divide the total period into two sub-period : period I (1190/91-2000/01) and period II(2000/01-2011/12) then our estimates(Table 7) show the growth rates are higher in period I than in period II. Thus we can conclude that Bangladesh trade falls in low base high growth cell of Indian trade.

Major Export and Import items of Bangladesh to India

Major Export Items of BANGLADESH TO India in 2012-13 (In million US $):

Frozen Food (13.79); Agri-Products (109.49); Chemical Products (15.423); Leather (6.218); Raw Jute (78.392); Jute Goods (123.02); Knitwear (14.344); Woven Garments (60.869); Others (142.414).

Major Import Items in 2011-12 (In million US $):

Cotton (all types), cotton yarn / thread and cotton fabrics (1437.4); Vehicles other than railway

or tramway rolling- stock and parts and accessories thereof (395.7); Cereals (372.7); Nuclear reactor, boilers, machinery and mechanical appliances, parts thereof (266.8); Residues and waste from the food industries, prepared animal fodder (249.7); Iron and steel (135.1); Organic chemicals (124.0); Mineral fuels, mineral oils and products of their distillation, bituminous substances, mineral waxes (122.5); Edible vegetables and certain roots and tubers (116.3); Tanning or dyeing extracts, tannins and their derivatives, dyes, pigments and other colouring matter, paints and varnishes, putty and other mastics, inks (103.8); Plastics and articles thereof (100.5); Electrical machinery and equipment and parts thereof, sound recorders and reproducers, television image and sound recorders and reproducers and parts and accessories of such articles (91.6); Coffee, tea, mate and spices (79.0); Rubber and articles thereof (76.2); Salt, sulphur, earths and stone, plastering materials, lime and cement (73.5); Man-made staple fibres (65.3); Knitted or crocheted fabrics (63.1); Aluminium and articles thereof (59.5); Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruits; industrial or medicinal plants; straw and fodder (50.8); Inorganic chemicals, organic or inorganic compounds of precious metal, of rare-earth metals, of radioactive elements or of isotopes (45.8); Man-made filaments; strip and the link of man-made textile materials (37.4); Essential oils; perfumery, cosmetic or toilet preparation (22.4); Paper and paper board, articles of paper pulp, of paper or of paper board (22.0); Edible fruit and nuts, peel of citrus fruit or melons (20.5); Pharmaceutical products (14.1); Zink and articles thereof (5.4); Dairy produce, birds' eggs natural honey, edible products of animal origin, not elsewhere specified or included (3.4); Others (590.8)

Source: Import Payment, Bangladesh Bank and Export Statistics, Export Promotion Bureau & Bangladesh Bank. Prepared by: DCCI Research Cell

TRADE INDICES

Revealed symmetric comparative advantage index (RSCA)

This index is defined as the share of each commodity group (k) in an economy's total export divided by the share of each commodity group in another economy's total exports

$RCA=(Xiw^k/Xiw)/(Xjw^k/Xjw)$

Where X denotes exports, , k denotes the commodity group or sector classification of exports, i and j denote export countries, and w refers to the world. Value of RCA greater than one (and unbounded) infers specialization, while values less than one (and bounded by zero) infer non-specialization. Since the index is not comparable on both sides of unity, the RCA is modified using the following equation as:

RSCA=(RCA-1)/(RCA+1)

Estimates:

The values of RSCA are positive in case of service exports implying comparative advantage in trade in service sector. Compared to this, exports of primary and secondary sector have comparative disadvantages in trade.

Bilateral trade intensity index (TII)

This index measure whether the value of trade between two countries is larger (or smaller) than expected, based upon their importance to world trade. Trade intensity is measured as the exporting country's share of the world exports of a particular commodity to a partner country, divided by the exporting country's share of the total world exports.

Bilateral trade intensity is determined by comparing bilateral exports between Bangladesh and India to the exports of each country to the rest of the world. Bilateral export is deemed 'intense' if they trade with each other relatively more than they do with the rest of the world. The degree of "intense" bilateral trade relationship between India and Bangladesh is low(Table 9).

EXPORTS OF SELECTED COMMODITIES TO BANGLADESH FROM INDIA

Spices: The share of exports of spices has decreased from 8.34% in 1990/91 to 4.38% in 2000/01 and then marginally increased to 4.73% in 2007/08. So the export of spices to Bangladesh has been following a decreasing trend during the period under study.

Rice: The share of exports of rice has increased sharply from 0.00% in 1990/91 to 10.15% in 2000/01 and then to 22.52% in 2007/08. So the export of rice to Bangladesh has been following an increasing trend during the period under study.

Engineering goods: The share of exports of Engineering Goods has decreased from 3.96% in 1990/91 to 2.97% in 2000/01 and to 0.92% in 2007/08. So the export of Engineering Goods to Bangladesh has been following a decreasing trend during the period under study.

VII. CONCLUDING REMARKS

South Asia has become one of the most emerging economic regions of the world with its rising share in global output. India accounts for more than fourth-fifths of the region's total GDP. Its sustained high economic growth has increased the potential for intra-regional trade. India's links with Bangladesh are cultural, civilization, economic and social. Both the countries shared history and common heritage, linguistic and cultural ties, passion for music, literature and the arts. With Bangladesh, India shares not only a common history of struggle for freedom and liberation but also multi-dimensional relations at several levels of interactions.

In respect of sectoral composition of GDP, both the economies show a rising trend in tertiary sector. Similarly, in both the countries share of secondary sector trade take the prime position during the period under study. Both the economies are taken the policy of commodity diversification. Import intensity in both the economies exceed export intensity during the period under study implying import-orientation of foreign trade.

Trade between Bangladesh and India cannot be explained by the trade complementarities between these two economies. An evaluation by using few trade indices, shows that these two economies are more of competing nature. The lack of trade complementarities of these two economies is attributable to their similar economic and production structure, with both countries having a large service sector (with about 53 and 50 percent of GDP in India and Bangladesh respectively), followed by the industry sector (with about 29 percent of GDP in both countries). In many cases, both Bangladesh and India have comparative advantage in same commodities in regard to the world export markets. Despite both countries being a story of service-led growth, service trade is conspicuously absent in their bilateral economic relationship.

REFERENCES

1) Basher Md Abul , "Indo-Bangla Trade: Composition, Trends and Way Forward" April 2013, Commonwealth Secretariat.

2) Das, R.K : Diversification and instability in Indian exports. *The Indian Economic Journal*, Vol :31 No-2 (1988).

3) Goyal, Arun (2004). "Study on Financing of India-Bangladesh Trade". *Academy of Business Studies, Delhi. India-Bangladesh trade study, project report.*

4) Mehta, Rajesh (2004). "*An Overview and Analysis of India-Bangladesh Trade*". RIS. India-Bangladesh trade study, project report.

5) Pal, P.K., Pal D. P.(1996) : "Structure of India's Foreign Trade : Commodity Composition and Diversification (1971-87), in K. R. Gupta(ed) : *Issues in Indian Economy*, Atlantic Pub. And Distributors, New Delhi.

6) Theil , H (1967) : *Economics of Information* , North Holland Pub company, Amsterdom

7) www.bangladeshbank.org

8) www.rbi.org

9) www.worldbank.org.bd/bds, " India-Bangladesh Bilateral Trade and Potential Free Trade Agreement" Bangladesh Development Series, Paper No: 13, The World Bank Office, Dhaka, December, 2006.

10) www.unctad.org

Table 1: Annual Compound Growth Rates of GDP and its Components during 1990/91-2012/13(Bangladesh)

Period	PS	SS	TS	TOTAL
Total	3.73	6.46	5.96	5.57
Period I	3.37	6.20	4.91	4.89
Period II	4.05	6.87	6.72	6.16

Source: Data is collected from Bangladesh Bank Data set and Calculation is done by Scholars

Table 2: Annual Compound Growth Rates of GDP and its Components during 1990/91-2012/13(India)

Period	PS	SS	TS	TOTAL
Total	2.92	6.62	8.40	6.86
Period I	3.18	6.48	7.47	6.13
Period II	3.23	7.52	9.36	7.88

Source: Data is collected from RBI Data set and Calculation is done by Scholars

Table 3: Time Trends of Trade in Bangladesh during 1993/94-2012/13

Time	Primary Sector		Secondary Sector		Tertiary Sector		Total	
	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports
Total	7.87	16.26	16.38	16.94	20.92	12.35	16.47	15.21
Period I	7.11	14.81	15.36	14.07	32.21	15.73	16.76	14.87
Period II	9.06	19.94	18.16	18.72	18.35	13.61	17.71	17.17

Source: Same as Table 1

Table 4: Time Trends of Trade in India during 1990/91-2012/13

Time	Primary Sector		Secondary Sector		Tertiary Sector		Total	
	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports
Total	15.38	20.39	18.68	20.45	28.12	17.73	18.30	20.28
Period I	15.56	31.21	19.30	18.97	23.97	22.71	18.63	19.55
Period II	18.84	19.80	19.97	24.84	28.71	18.29	20.14	24.30

Source: Same as Table 2

Table 5: Commodity-wise Trade Diversification in Bangladesh and India

	Bangladesh		India	
YEAR	Commodities	DI	Commodities	DI
1995	110	0.802	241	0.581
1996	115	0.805	245	0.568
2000	132	0.841	246	0.572
2001	132	0.837	246	0.563
2002	134	0.830	246	0.562
2003	137	0.874	249	0.556
2004	156	0.846	252	0.551
2005	159	0.832	252	0.542
2006	167	0.836	253	0.541
2007	183	0.819	256	0.535
2010	211	0.868	255	0.502
2011	212	0.880	256	0.491
2012	215	0.802	255	0.503
2013	216	0.827	252	0.483

Source:UNCTAD

Table 6: Trade Intensity and Trade Openness in Bangladesh and India

Period	Bangladesh			India		
	Export Intensity	Import Intensity	Trade Openness	Export Intensity	Import Intensity	Trade Openness
1993-94	0.07	0.11	0.18	0.046	0.048	0.094
1994-95	0.09	0.15	0.24	0.051	0.056	0.107
1999-00	0.13	0.21	0.34	0.071	0.096	0.167
2000-01	0.16	0.24	0.40	0.087	0.099	0.185
2001-02	0.14	0.23	0.37	0.085	0.099	0.184
2002-03	0.15	0.24	0.39	0.099	0.116	0.215
2003-04	0.17	0.26	0.43	0.106	0.129	0.235
2009-10	0.29	0.46	0.75	0.188	0.303	0.490
2010-11	0.39	0.63	1.02	0.234	0.345	0.578
2011-12	0.46	0.69	1.14	0.281	0.449	0.730
2012-13(P)	0.45	0.64	1.09	0.292	0.477	0.770

Source: Same as Tables 1 & 2

Table 7: Time Trends of Bilateral Trade Between India and Bangladesh during 1990/91 to 2011/12

	Bangladesh		Total	
	Export	Import	Export	Import
Total	15.34	22.47	18.20	20.29
Period I	21.49	38.05	18.63	19.32
Period II	12.69	23.95	20.17	24.45

Source: Same as Table 2

Table 8: Revealed symmetric comparative advantage index (RSCA) of Exports

Year	Primary Exports	Secondary exports	Others
1993-94	-0.19978	-0.00445	0.768863
1994-95	-0.20732	-0.01678	0.807725
1995-96	-0.29549	-0.00741	0.844689
1996-97	-0.31202	-0.01031	0.865063
1997-98	-0.34476	-0.02775	0.865244
1998-99	-0.39113	-0.04033	0.878458
1999-00	-0.3214	-0.06519	0.862133
2000-01	-0.3392	-0.06845	0.770287
2001-02	-0.40163	-0.06392	0.780777
2002-03	-0.40272	-0.06953	0.816036
2003-04	-0.37928	-0.06504	0.757998
2004-05	-0.43667	-0.05526	0.771981
2005-06	-0.43736	-0.06396	0.799672
2006-07	-0.44527	-0.06012	0.795455
2007-08	-0.48725	-0.05412	0.797364
2008-09	-0.53149	-0.04616	0.672655
2009-10	-0.53551	-0.04793	0.646328
2010-11	-0.51505	-0.04064	0.505182
2011-12	-0.60535	-0.03313	0.573128
2012-13	-0.70116	-0.04871	0.744932

Source: Data is taken from UNCTAD and calculation is done by Scholars

Table 9: Bilateral Export Intensity of India to Bangladesh

Year	Bilateral export Intensity
1995-96	4.44
1996-97	3.39
1997-98	2.79
1998-99	3.58
1999-00	1.90
2000-01	2.24
2001-02	2.26
2002-03	2.04
2003-04	2.41
2004-05	1.54
2005-06	1.09
2006-07	0.81
2007-08	1.04
2008-09	0.71
2009-10	0.65
2010-11	0.57
2011-12	0.51

Source: Same as Table 8

EFFECT OF FINANCIAL GLOBALIZATION ON THE POOR IN INDIA

HRISHITA GHOSH*

UPASANADATTA*

Abstract

In case of India the importance of financial globalization was internationally recognized since 1991 when India embraced liberalization and privatization through economic reforms.

There has been an ongoing debate about the effect of financial globalization on Indian poverty level. During the late 1970s, Gini coefficient was considerably high. The mild liberalization introduced in late 1980s at the time of Rajiv era helped to bring down the inequality. But during the liberalization era the situation has utterly changed.

The purpose of this paper is to look into the reasons for the disparity in income among the Indians through some basic statistical tools and prescribe few possible remedies. Here we analyze some aspects of financial globalization and to show whether it has improved the livelihoods status of the common people of India.

Keywords : Financial Globalisation,Poverty, Indian Economy

JEL Classification codes : O11,O15, I31, I32

Introduction

Over the past two decades, India has been on a path of spectacular economic growth, with the GDP growing annually, on an average, by over 7% for quite a few years now. The unprecedented economic success is popularly attributed, largely, to the integration of India into the global economy. However, the effects of this integration, particularly on economic growth and employment, have not been as favourable. In this paper, we analyze these effects on the economic growth and employment through an analysis of empirical facts.

Globalization is a process that refers both to the compression of the world and intensification of the consciousness of the world as a whole. It is like the emergence of a networked world, thanks to the rise of the world wide web and the advances in ICT.According to World Bank, financial globalization is defined as global linkages through cross-border financial flows, which has become increasingly relevant for emerging markets as they integrate financially with rest of the world.

Globalization signifies an open door economic policy for integrating domestic market with the world market. It means allowing foreign multinationals to enter the Indian market as well as Indian companies to go global.

* Post Graduate Students of Economics,Jadavpur University.

I.The Analytical Framework

We begin our analysis by outlining an analytical framework which is generally applied to explain the empirical effects of integration into the global economy in light of the predictions of mainstream economic theory. The rationale for this framework derives from the need to identify some important dimensions of economic growth and employment that need to be taken into account in the analysis. The salient features of this analytical framework is as follows:-

1. Globalization creates stimulus for structural change in the formal sector of the economy and defines the role of foreign capital.
2. The employment effects of foreign capital and trade growth are largely confined to the formal sector, given that most tradable goods and services are produced in this sector.
3. Free trade adversely affects employment conditions of unskilled labour in industrialized countries but benefits unskilled labour in developing countries. The opposite is true for skilled labour.
4. The overall effects on employment depend on labour market regulations and institutions. If wages are difficult to change, total employment falls.

II. India After Globalisation (In Comparison With China)

In order to understand the effects of globalization on the Indian economy, we study the economic impacts on India post globalization in comparison with another similar fast growing economy, i.e. China. During the past three decades, post globalization, India like China have attained extraordinary levels of economic growth. Over the past two to three decades, China and India have attained spectacular prominence due to their rapid and sustained economic progress. The Chinese economy has been thriving at almost double-digit growth rates since 1980. Although the Indian economy did not grow as fast as China's, it has nevertheless been among the ten fastest growing economies in the world over each of the two decades, 1980-1990 and 1990-2000. The unprecedented economic success is popularly attributed, largely, to the integration of these countries into the global economy.

During 2005-07 India's GDP grew at an average rate of 9.6% while that of China grew at 11.7%.It is widely believed that the spectacular economic performance of China and India is a result of their market-oriented reforms that were geared towards integration into the global economy. While financial globalization has indeed resulted in extraordinary economic growths, the social impact, the sectoral impact and the impact on employment deserves a closer look.

Table 1 :Sectoral Composition of GDP of India and China (% of GDP)

	China				India			
	1980	1990	1997	2005	1980	1990	1997	2005
Agriculture	36.1	26.8	17.1	11.4	38.1	33	24.5	19.6
Manufacturing	25.4	25.3	31.1	34.1	17.7	16.7	17.7	15.1
Other Industries	8.2	8.6	13.8	14.3	3.2	NA	5	4.3
Services	30.3	39.3	38	40.2	41	41	50.6	61.1

Sources: 1) China: Calculated by Ghose, 2009, from World Bank's World Development Indicators databse; 2) India: Reserve Bank of India 2008, Panagriya 2008.

When the reforms began, China was already substantially industrialized.China's manufacturing sector has grown steadily since 1980 along with other industries.By contrast, industry's share in India's GDP was just 20.9 per cent in 1980 and has not registered significant growth.India's growth is led by the services sector.

Exports Of China And India By Sector

Table 2: Export Structure of China and India by Sector (% of total exports)

	Agriculture	Manufactures	Merchandise	Services
China				
1984	18.9	43	47.3	9.7
1990	14.7	65.4	26	8.6
1997	7.5	75.2	12.9	11.8
2005	3.4	83.7	7.4	8.9
India				
1984	16.8	31	30.2	21.9
1990	13.2	51.8	18.4	16.6
1997	9.2	49.9	15.3	25.7
2005	6.3	42.2	17.8	33.7

Note: Merchandise includes primary commodities and non-manufactured goods.

Source: Ghose, 2009

Internationally, the economic growth of these two countries has taken the advanced countries by surprise.China poses formidable competition in the manufacturing sector and India in the services sector.The present patterns of growth seem to be favorable for long-term development, but serious concerns exist about the employment effects.

Table 3: Distribution of labour Force in China and India by Sector (% of labour force)

	Agricultue	Industry	Services
China			
1980	69	18	13
1990	60	21	19
2000	50	23	27
India			
1983	86.6	14.7	16.7
1987-88	64.9	17.1	18
1992-93	64	19.9	20.1
1990-2000	60.4	17.5	22.1

Source: Nagaraj,2005.

The bulk of the labour force was in agriculture in both China and India in the early 1980s, more so in India.Since 1980, labour force has steadily decreased in agriculture, but substantial part of it has been absorbed by industry in China and to a lesser extent in India.Overall, the share of industry and services in labour force has increased in both countries.

Impact On Employment

The effects of inter-sector transfer of labour on employment are associated with the corresponding output growth of these sectors. Its implications appear to be far more serious for India than China.Dasgupta and Singh (2005) argue that India defies the Kaldorian pattern of growth, as its economic growth is led by services. This is in sharp contrast to historical evidence which suggests that the engine of growth in a country with per capita income level of India has to be manufacturing, rather than services.This phenomenon is one of "jobless growth" in the organized manufacturing as well as the services sector when the Indian labour force is increasing at 2 per cent per annum.

India requires more jobs to be created. Otherwise, most of the excess labour in agriculture will either remain in agriculture or will have to be absorbed by the low-productivity informal sector. It is argued that, because the growth of India's services sector is predominantly led by information technology (IT), it has limited value as far as employment is concerned. The IT sector employs less than one million people in a total labour force of 450 million.IT cannot absorb much additional labour due to it's unique nature which requires only educated and skilled people who constitute a minor proportion of the total labour force. Only five per cent of India's relevant age group receives college education.Other services such as hoteling, transport, real estate, restaurants and community services should be developed to absorb the unskilled labour.

III.Impact On Indian Society

Income Disparities After Globalization

India's poverty ratio stands at a disgraceful rate of 28%. The net Gini coefficient has increased for India from 0.45 in 1990 to 0.51 in 2013. A recent study by Oxfam shows that the richest 1% of the population owns 58% of the total wealth. India is on the way of becoming a plutonomy, a society sharply stratified by the super wealthy at one end and abject poor at the other, as reported in the leading national daily, The Times Of India. We witness a glittering India and a littering India. Glittering India belongs to the super earners and the super consumers who enjoy lavish life style, patronize mega-malls and 5 star hotels. On the other hand, the littering India belongs to pavement dwellers, rag-pickers, scavengers and sweepers, rickshaw-pullers, and under-nourished millions. There is a complete disconnect between the 300 million high-flying Indians and the remaining 750 million of their countrymen, many of whom seldom get a square meals a day.

Rise Of A New Middle Class

The middle class consists of the company executives, IT specialists, finance and management consultants, media professionals and the neo-rich including the bullock capitalists from the country side. The new middle class (person spending anywhere between $2 and $10 per capita per day) has doubled in size to 600 million people between 2004 and 2012 (a study by economists of Mumbai University). The rise of the new middle class is one of the most visible consequences of globalization in India.

Fig 1: Disposable Income of Households in India.

[* File contains invalid data | In-line.JPG *]

Source: Euromonitor International from national statistics/UN

As we see in the above Figure 1, since 1990, households with high disposable income have risen twenty-fold.

Marginalization Of Peasants

Globalization has brought market forces to bear on agriculture in a big way, resulting in corporatization of agriculture, crop diversification, genetically modified crops etc.These coupled with WTO induced pressure to reduce farm subsidies have accelerated a trend of de-peasantization of small and marginal farmers.This has also resulted in immiseration of the agricultural labor driving them away to cities .

IV.Conclusion

Financial globalization has led to an extraordinary rate of economic development for India in the last two decades.The growth is led by the services sector and the share of the services sector in exports is increasing rapidly.

This has led to a rise of the unemployment problem and decline of employment in the formal sector, especially for the unskilled labour.This has given rise to a deepening of the wide spread disparity between the rich and the poor.While the growth of the services sector has given rise to the birth of the new-middle class which enjoys the benefits of the economic development, the poor has remained poor and the fruits of the economic development has remained beyond their reach.

This has also led to a marginalization of the peasantry and de-peasantization of the small and marginal farmers.The need for India is to have a steady process of creation of jobs that leads to the growth of regular wage employment which exceeds the rate of the labour force growth.

References

- Acharya, Shankar (2004), 'India's Growth Prospects Revisited', *Economic and Political Weekly*, Issue 9 October 2004, 4537-42.
- Ahluwalia, Montek S. (2002), 'Economic Reforms in India since 1991: Has Gradualism Worked?', *Journal of Economic Perspectives*, Vol. 16, No. 3, 67-88.
- Dasgupta, Sukti and Ajit Singh (2005), 'Will Services be the New Engine of Economic Growth in India?', *Centre for Business Research, Working Paper No. 310, Wired at www.cbr.cam.ac.uk/pdf/WP310.pdf.*
- Ghose, Ajit K. (2004), The Employment Challenge in India, *Economic and Political Weekly*, Vol. 39, No. 48, 5106-5116.
- Ghose, Ajit K (2008), 'The Growth Miracle, Institutional Reforms and Employment in China', *Economic and Political Weekly*, Issue May 31, 2008, 47-56.
- Ghose, Ajit K. (2009), 'Discussion on sources of employment data for China'.(Personal communication 15 May, 2009)

- IMF (2016), "Sharing of growth dividend: Analysis of income inequality in Asia", *IMF Working Paper*, March 2016
- The Hindu, "Richest 1% own 58% of total wealth in India: *Oxfam*", 16 January 2017.

THE ECONOMICS OF MINING AND TRIBAL RIGHTS

S. XAVIER SJ[1] **MELVIL PEREIRA SJ**[**]

The need for the mining industry is indisputable, given the technological and scientific advancement and needs of society today. Mining seems to have propelled GDP growth, accelerated job opportunities and improved FDIs in the country but the effect of untrammeled mining activity on the life of the tribals who have been displaced from their ancient lands has been swept under the carpet. However their cries have not remained unheard and many economists, environmentalists, social scientists and activists now raise the question: "Has the economic growth and prosperity been economically equitable, socially inclusive, environmentally sustainable and politically just?'

The tribals, feel that they are left out and their resources - jal, jungle, and jameen - are taken away unjustly, without their free, prior and informed consent (FPIC) Not only that; their entire culture, traditions and way of life is being destroyed. The tribals and others organized themselves into collective people's movements to oppose being displaced from their traditional surroundings. Though suppressed, frightened and disoriented they have declared, 'jan deinge, jameen nahi deinge', resulting in a lack of trust and faith in the State and a complete breakdown of relationship. Tensions, confrontations, conflicts and violence became the norm.

This presentation on a People's movement in Pachwara, Jharkhand, has a unique story to tell. The Rajmahal Pahad Bachao Andolan (RPBA) that resisted for almost 8 long years since 1998, the entry of the State and (PANEM Coal mines Ltd.) into nine tribal villages, finally negotiated with the company in 2006, paving the way for an alternative model of mining that claims to benefit both the state and the tribals. This in-depth study of the history of the region and the current situation will examine whether the mutual agreement (MoU); has enhanced the economic, educational, social and cultural wellbeing and rights of the people; and whether it is a viable alternative model for the future?

Key words: Mining, Tribal Rights, People's Movement, Environment

JEL CLASSIFICATION CODES: H32,Q32,K32,J83.

Introduction

Mineral resources now constitute the backbone of India's economy and the mining industry is a major contributor to its growth (GOI, 2011). India is a mineral-rich nation, with more than 20,000 mineral deposits. The country produces about 90 minerals, which include 4 fuel, 10 metallic, 50 non-metallic, 3 atomic, and 23 minor minerals. It is the world's largest producer of

[1]*S. Xavier SJ* is a Research Scholar, Department of Social Work, St. Xavier's College, 30 Park Street, Kolkata ,

** *Melvil Pereira SJ* is the director of North Eastern Social Research Centre, Guwahati, Assam.

mica, second largest producer of chromite, barytes and talc, third largest producer of Iron ore and coal, and the fifth largest producer of bauxite (CSE, 2012; Invest India, 2013). According to the Ministry of Mines [MoM], mining and quarrying sector accounts for 2.6 % of GDP in the first two quarters of 2012-2013 (Ministry of Mines, 2014)as opposed to 2.06 % in 2011-12 (GOI, 2013). In 1993, India opened its mining sector to Foreign Direct Investment [FDI]; made 'automatic approval' for up to 50% FDI in 1997; and further gave the sector an100% automatic route in February 2006. This helped FDI to grow by leaps and bounds (Chaudhry, 2011). According to RBI data, (as cited in Chaudhry, 2011) FDI in mining sector in 2005-06 was US$ 6 million, which rose to US$ 42 million in 2006-07 and US$ 461 million in 2007-08. India's metal and mining industry was estimated to be US$ 106.4 billion in 2010 (Human Rights Watch, 2012). This is a phenomenal growth for the country's economy, which is being achieved not by technological or industrial development but by merely excavating and selling of valuable assetswithout considering long-term need, which may arise. According to government sources 'if India fully (sic) opens up its potential of the mining sector, it could add around US$ 210 to 250 billion to the GDP and create 13 to 15 million jobs through direct and indirect contribution by 2025' (GOI, 2011).

This is a phenomenal growth from an economic angle but tantamount to selling off the family jewels. Also from a socio-cultural and human rights angle, not all have benefited from such a trajectory of development and there is a lot of misrepresentation about who the real beneficiaries are.. Out of the 50 top mineral producing districts of India, 60% fall under the 150 most backward districts (CSE, 2008). Jharkhand, Odisha, Chattisgarh and Andhra Pradesh, thus ironically the most mineral rich states, have the maximum number of backward districts, where the majority of tribals live. These States themselves receive only 6% to 13% of total revenue from mining. Keonjhar in Orissa produces 21% of India's iron ore but has 60% of its population below the poverty line. Koraput produces around 40% of India's Bauxite but is ranked 27th out of the 30 districts of Orissa on the Human Development Index [HDI] and 79% of its population is below the poverty line (CSE, 2008). Jharkhand, which contributes 40% of the coal production in India and has 3.7 billion tonnes of iron ore reserves,(Srivastava, 2009) sadly also has 39.1% of its people living below the poverty line (UNDP, 2011). These statistics unravel a growth story that most unfortunately is not inclusive. This dichotomy in India is evocatively articulated bythe Sixth Citizens' Report on environmenttitled *Rich Lands, Poor People*(CSE, 2008), a fast growing economy in the world benefitting a favoured few while 47.4% of its tribals who are the actual owners of the land,livebelow the poverty line.

I. Anti-Mining Movements and Negotiations:

While the State and mining companies want faster and higher economic growth through the expansion of mining with the help of corporate-friendly laws, policies and rules; the poor, particularly the tribals, are mostly left out and their resources - *jal, jungle,* and*jameen* - are taken away unjustly, displacing them without their Free, Prior and Informed Consent (FPIC). Not only that; their entire culture, traditions and way of life is being destroyed. The affected

tribals and others all over the country have begun to organize themselves into collective people's movements, to oppose the State and the companies from entering and displacing them from their own natural habitat, where they have been living for hundreds of years. The affected people though often suppressed brutally, frightened and disoriented have declared, '*jan deinge, jameen nahi deinge*'. The result has been a complete breakdown of relationship leading to a lack of trust and faith in the State. Tensions, confrontations, conflicts and violence between the people and the State became the norm.

Actually, many of the 'anti-mining movements' as they are often called, have not really been anti-mining. They do not question the necessity of mining or the need for growth in the economy and providing better job opportunities. What they question is the lop-sided paradigm of development that favours only a fortunate few outsiders while destroying the life, livelihood and cultural heritage of tribal communitiesand causing irreversible damage to the ecology and environment. Basically the movements seek inclusive development for all; affirming the right of all citizens in the country particularly the tribals and seeking protection and preservation of the ecology and environment. The question that movement activists, along with many economists, environmentalists, and social scientists raise is: 'Has the economic growth and prosperity been economically equitable, socially inclusive, environmentally sustainable, culturally respectful and politically just?'

There are three types of approaches in people's movements against mining on the basis of their outcome: a) A complete no to mining; b) From initial no to compromise; and c) From initial no to negotiation. The negotiation approach can be further sub-divided into 3 categories, namely: (i) Negotiation between the company and the State on behalf of the people; (ii) Negotiation between the company and people directly without the State involvement; and (iii) Negotiation between the company, people and state.

'A complete no' approach prevents any mining work in the area, as in the case of the Dongria Kondhs against the Vedanta mining corporation on Niyamgiri hills in Orissa. Such a movement may go through difficult moments of suppression, conflicts, violence, and court cases but finally the movement succeeds by not allowing the company to set up their mining operations.

'From initial no to compromise' approach, a most common phenomenon in people's movements, often starts well by initially saying 'no' to mining. But when faced with difficulties of suppression, conflicts, forced displacement etc., or when the leaders are bought up through favours done to them (divide and rule), the people in the movement get divided and the movement gets dissolved slowly to the benefit of the company. Actually the so-called compromise is nothing but a sell out by the leaders.

'From an initial no to subsequent negotiation' approach starts by initially saying no to mining. But in the process, either because of the 'right' granted by law, as in Austalia through Native Title Act of 1993(O'Faircheallaigh, 2008), or because the people have recognized the possibility of getting better deals with the company or with the government or with both the state

and the company, they enter into negotiation with the company or with the State or with both. The negotiation may also take place between the State and the company with a clear 'localist' policy paradigm(Arellano-Yanguas, 2011) as in Peru for the management of natural resources, inviting the companies to assume more active role in the development of the area and people. It can also happen as an out of court settlement between the company and the people as in the case of the PANEM Coal mines Ltd., and *Rajmahal Pahad Bachao Andolan* (RPBA) a people's movement in Amrapara block,Pakud district in Jharkhand which I shall analyse as a case study in my research.

II. The Case study on Coal Mining and Agreement between PANEM and RPBA

II.1. Background

PANEM Coal Mines Limited was a joint venture company of Punjab State Electricity Board (PSEB) and Eastern Mineral and Trading Agency (EMTA), a coal mining company with its headquarters in Kolkata. In this joint venture the PSEB held 26% of the stake while EMTA had 74% of the stake and became the mine developer and operator of the coal block. In 2001, PANEM acquired 1,151.70 hectares (about 13 sq. kms) of land in Amrapara block, covering 9 tribal villages in Pakud district without the knowledge of the tribal people, even though the land falls within the 5th Schedule of the Indian Constitution and under the law of Panchayat Extension in Scheduled Areas Act (PESA) of 1996 that requires the permission of the Gram Sabha for any developmental activity in the region. The type of land that would be affected by mining in this Pachwaracentral coal block is as follows: Raiyati (agricultural) – 640 ha; Forest – 360 ha; Homestead – 2 ha; Waste land – 15 ha; Nala, River – 34 ha; Road – 28 ha; and Grazing land – 22 ha (PUCL Dumka, 2003).

II.2. Project profile of Pachwara Central coal block(PSA, 2015, p. 8)

Total coal reserves	562 million tonnes
Extractable reserves	289 million tonnes
Time period of mine	44 years
Total area	1278 hectares
Cost of the Project	[1] 385.83 crores
Annual royalty to Jharkhand	[1] 100 crores
Household to be displaced	807
Peak water requirement	600 cubic metre per day

The Paharias, Santals, a few dalits and others who live in these 9 villages (Sindheri, Amjhari, Taljhari, Kathaldih, Bisunpur, Chilgo, Dangapara, Alubera and Pachwara) as well as from the region did not have all these facts and figures. The district administration neither informed nor

consulted them, though by law it was mandatory to get their approval. The people only came to know casually that their land was going to be taken away and that they might be left to fend for themselves without the land. This callous attitude of the administration infuriated them. As the *Parganaith*, the traditional headman, of the Santals for 32 villages in the area, who assumed the leadership of the movement said to the PUCL enquiry team (2003):

> *We have been living here for long. Our forefathers Sido and Kanhu and their followers sacrificed their lives and won for us freedom from oppression and gave us an identity. All of a sudden, like a bolt from the blue, we hear that someone is coming to enter our premises and oust us as if we are encroachers and criminals. Can any one do that? We shall live here and shall die here. No power on earth can make us move out. Or they will have to kill us all?*

Realizing that their life and livelihood was in danger, the villagers began organizing themselves under the banner of '*Rajmahal Pahad Bachao Andolan*' opposed the entire acquisition process and put up a stiff resistance. Like many other people's movements in India, this movement too went through the initial *stage of resistance*to the encroachment. The villagers put up blockades and prevented any outsider from entering. The youth guarded the villages day and night and put up solid resistance, organized regular meetings, morchas, dharnas and programs of mobilization. On the other hand, the company and the administration wanting to enter the village by any means filed numerous false cases against the village leaders hoping to intimidate them and also thinking they would not be able to fight back in court. They also threatened them of many consequences calling the resistance a provocation. However the villagers responded in the court. The second *stage that is the stage of legal battles* began and it went on for almost 5 to 6 years in various courts. The company and the administration then began a divide and rule policy by favouring a few with money and material things such as motorcycles and alcoholic drinks. Meanwhile the administration claimed that the andolan was connected to Maoist and naxal groups etc., and condemned the protesters as being anti national. The movement began to show divisions, although the leadership stood strong and continued to resist the company. Finally in 2006 the case was in the Supreme Court. Both the parties recognized that whatever be the SC judgement it would affect their interests. Encouraged by the courts invitation for a mutual settlement both decided to enter into the third stage, that is, the *stage of negotiation*. The MOU drafted by the RPBA leadership was initially authorised in the tribal customary assembly held on 26th November 2006. Later it was signed by PANEM Coal Mines Ltd. and RPBA on November 30, which was approved by the SC of India on 4th December 2006. The Company besides signing an MOU with the people also signed a Resettlement and Rehabilitation (R&R) package with the Jharkhand State government.

II.3.The Salient features of the MOU

This MOU between a mining company and the affected people took place for the first time in the history of movements in India. The most important and unique feature in this MOU is that

the company admitted that the **tribal people are the absolute owners of the land** and the land acquired was for the limited purpose of excavation of coal. A few other salient features of this MOU, signed by the Director of PANEM and the President of RPBA, the traditional village leader, *Parganaith*, before the witness of the Deputy Chief Minister of Jharkhand and with the approval of the Supreme Court of India are:

a. To return the land to the extent of 50% in cultivable condition after excavation.

b. To excavate one village after another not all together. And after the mining, to re-fill, level and replace with topsoil for cultivation and return the land.To compensate monetarily the landowners as follows: Dhani – I: ¹ 141,960/- per acre (pa); Dhani – II: ¹ 106,470/- pa; Dhani – III: ¹ 70,980/- pa; and Homestead land – ¹ 88,725/- pa.

c. To pay an annual compensation of ¹ 6,000/- pa for crop loss and ¹ 10,000/- pa for agricultural land.

d. To provide a minimum of 210 sq. meters of homestead land and construct houses with a plan more or less akin to the customary houses of the community, with a separate latrine and cowshed on demand.

e. To ensure drinking water, electricity, establish playground, ponds, place of worship, grazing land for cattle, cremation ground, two market places with sanitation facility and provide a mini truck for transport etc.

f. To compensate an amount of ¹ 30,000/- per acre for the land taken for road construction

g. To provide one employment to the family who lose three or more acres of land and one indirect employment to all those who lose two acres of land.

h.To establish training institute and provide stipend to the trainees.

i. To establish 3 Primary Schools and one High School, at the appropriate place suggested by the *Gram Sabha*, and to provide necessary infrastructure - School bus to transport and scholarships to students.

j. To establish a hospital with 50 beds, an ambulance, competent doctors and specialists and provide a mobile clinic with doctor and nurse.

II.4. Research Questions and Methodology

Against the above background of the people's movement that initially resisted, then legally fought and finally entered into a negotiation with the mining company, this paper empirically analyses the information gathered through a weeklong stay in the rehabilitated colony called New Kathaldih Resettlement colony in mid-July 2015 by the researcher, listening to the life stories of the 71 families that live there, both collectively as well as by administering an individual interview

schedule in each of the families in the Colony. Two basic questions that we shall analyse in this paper are:

1. *Have the promises made in the MOU been actually realized?*
2. *Are there evidences to suggest that the implementation of the MOU has improved the Socio-economic, educational, and cultural standards of life of the tribals in thesemining villages?*

III. An analysis of the promises and implementation of MOU:

The New Kathaldih Resettlement Colony, henceforth called Colony, was created soon after the agreement and the people from one of the 9 villages, called Kathaldih were shifted to the colony in 2007. Kathaldih was a typical Santhal village where everyone depended on their agricultural land and forest in this hilly terrain. The District Human Development Report,Pakur (www.pakur.nic.in accessed on 28 August 2013) says, "In the first phase, a total of 110 families from all the five *tolas* of Kathaldih village were (sic) relocated to the 'New Kathaldih Resettlement Colony' – a colony constructed by PANEM Coal Mines Ltd. few kms from Kathaldih village."

A report of the Independent People's Tribunal on the MOU between RPBA and PANEM titled 'Coallateral' (PSA, 2015: 19-21)prepared after enquiry and analysis of testimonies and depositions of the Project Affected People (PAP), shows that the company 'fully adhered' to **only** 6 out of 41 assurances that they had made in the MOU. They include: a) a survey of the list of families affected; b) initial compensation for the land acquired; c) construction of tube-wells and overhead tanks (only construction of overhead tanks, **not necessarily** supply of water); d) establishing a hospital with 50 beds and doctors; e) providing ambulances; and f) providing four tractors. The other 35 promises were not adhered to, although a '**few'** were partially complied with as per the observation of the researcher.

III.1.Life in the Colony: promise or peril?

III.1.1. <u>Houses</u>: The colony is spread over a large area and has 110 separate dwelling units for 110 families, with 2160 sq. ft (i.e. 3 kathas) for each unit with a concrete house and with a built up area of 845 sq.ft. The houses are constructed on agricultural land belonging to people of Kirkire village and the villagers testified that the company chose the site and they were never consulted about it. Although 110 houses have been built, only 85 houses are occupied while the rest remain unoccupied due to waterlogging, inside the housesfor almost 6 months in the year since they are built next to the river Basloi that is just 50 metres away, as acknowledged by the District development report (2013). These colony houses,which have been constructed with very cheap material, are already leaking and falling apart within 8 years. Although the MoU clearly states that '*the plan of the house should be more or less akin to the customary houses of the community*' the houses resemble more like government colonies and not Santhal houses.

> "*After the MOU was signed, we were not even allowed to take our belongings from our old houses. One fine day, the company people came with bulldozers and told us,*

'get out from here. The agreement has been signed already and so the land belongs to us now'. We were told to pick up a house key in the New Kathaldih, which we had never seen before. Whichever house the key that we received opened became our house."

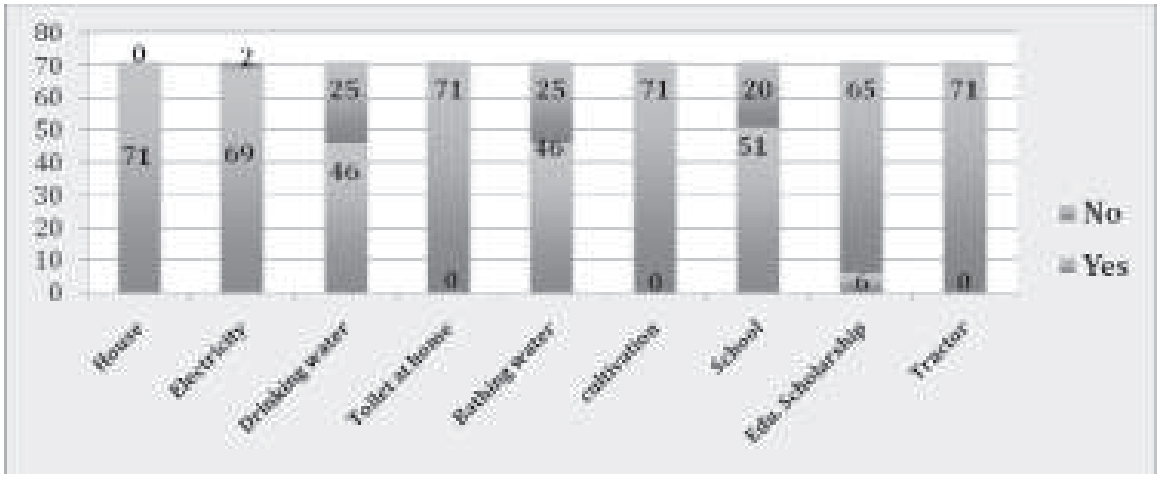
– A woman resident from the Colony

None of the residents in the colony consider these houses as their real homes. They prefer to return to their village as soon as possible. In fact this can be clearly seen in the way they maintain their houses. Usually the Santhals keep their houses neat and tidy. But it is not so in the present houses that they live in. The Santhals are used to living in mud houses and the womenfolk in the family maintain it well with regular plastering and even painting. But they cannot repair the concrete houseson their own, and hence they are forced to depend on other masons to whom they have to make payment which they cannot afford.

III.1.2.

Toilet: The MoU clearly states that '*separate latrine should be there with every house*'. But it was observed that none of the houses havea latrine constructed. To the surprise of everyone in the colony the District Human Development Report of Pakur(2013) mentions that each house has a built-in toilet and further states that the people do not use it as they are not used to it and they consider a toilet inside the house as unhygienic. Since this research scholar and other field investigators lived in one of the houses and had also visited all the houses in the colony, we can **affirmatively** state that there was never a toilet built in any of these colony houses.

Graph: 1: Facilities Provided in the Colony



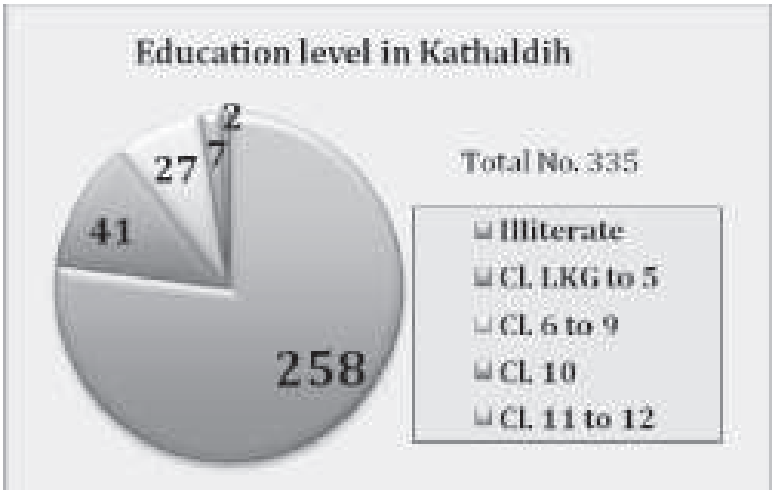
III.1.3.

Electricity: PANEM provided a 100 kv generator which provides electricity to the colony for 12 hours daily. This is something that people appreciate. But the supply is provided **only** between 6.00 pm to 6.00 am. During the day time there is no electricity. Every room in the house is provided with a light but none of the rooms are fitted with fans. A few families have fixed fans on their own as it is impossible for anyone to stay inside the concrete houses without fans, unlike the traditional Santhalhouses, built with mud, which provides warmth during winter and remains cooler in summer.These houses are like hot-boxes where one can hardly remain.

III.1.4.

Water for drinking and bathing etc.: Drinking water is from the wells. As promised in the MOU and R&R package, an overhead tank has been constructed, but there is no water connection given from the water tank to the houses. Tube wells have been dug but most of them are not working. Only the wells are used for drinking water. When 46 people (64.8%) in *Graph-1*, say that they have drinking water facility it is the wells that they are talking about. So, we can say, that as promised the company has constructed the tube-wells and the overhead tank [R&R 6.10], but in practical terms this is a sham as there is no drinking water supply to each home as promised [R&R 6.13].

There are 6 bathing tanks constructed for the villagers,of which 2 are not functioning. These bathing places are the biggest relief for the villagers as it is here they wash their clothes, utensils and take a bath. Cleanliness is something desired and enjoyed by all and at least this is functional.



III.1.5.

School and Educational Scholarship: Out of 335 persons in the village 258 persons (77%) are illiterate and only 9 have reached Class X and above. Though there is a Primary School in the village, there is only one teacher appointed by the State government and not by PANEM. As in

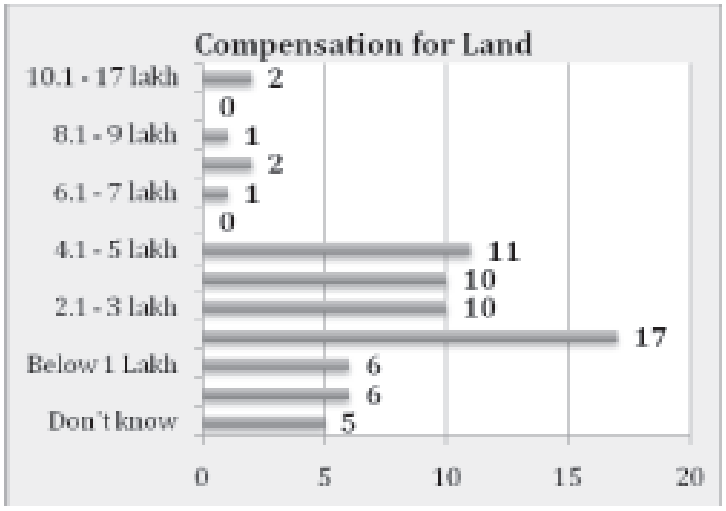
any other government run schools in Jharkhand, hardly any teaching goes on. PANEM had promised 3 Primary Schools by 31st December 2007, but **there are none** in the Colony. The children are forced to go to other villages and hence only very few venture to go out and study.

Thankfully the company, as per the covenant in the MoU, has been giving educational scholarship to six students from New Kathaldih. But ever since the company stopped its work in March 2015, thescholarships too have stopped forcing a few of them to dropout.

III.1.6.

Cultivation, Tractor: Since everyone in the village has lost the agricultural land due to mining, none of them are doing any agricultural work, instead they are employed as daily labourers or seasonal workers in other villages. None of them have received any tractor for cultivation as promised. For Santhals, agriculture being the only known type of work, they are simply lost without it. Without agricultural work and without any job in the company that got closed in March 2015, people are desperate and totally lost.

III.1.7. Compensations for land and annual crop loss:



As per the R&R package [6.1] every family was to be compensated with Rs. 1,41,960 p.a. for Dhani I; Rs. 1,06,470 p.a. for Dhani II; and Rs. 70,980 p.a. for Dhani III type of land acquired. Even though most families stated that they had more than 3 acres of land, yet most of them received **only** between one to two lakhs rupees, which is far below the agreed amount, It is absolutely shocking to hear that 6 families did not receive any compensation, even though they had lost their land and another 6 families received below 1 lakh rupees. Regarding crop compensation, only 24 families (33.8%) said that they received it for a few years after which it was stopped, while most of them said that they did not receive any crop compensation as promised in the MOU. One of the villagers said, "money has been the cause of many fights and divisions not only in the village but also among family members, between brothers and between children

and parents." Another person said, "Our young boys have lost their culture and want motorcycles and other gadgets, and are least interested in agriculture today. The money has come easily and it has disappeared quickly. We cannot eat the money and it cannot feed us. We need our land and we need work. We feel like fish out of water." In paying these cash compensations, there were reports of delays in payment, wrong calculations, corruption and the role of middlemen who had even taken the entire money leaving the ignorant families with nothing.

III.1.8.

Job in the company and Salary: As per the MOU, every family that had lost more than 3 acres of land must receive a job in the Company, or in lieu of the job to receive Rs. 50,000 pa. But 8 families in Kathaldih, though they had lost more than 3 acres of land, neither got any job in the Company nor any compensation in lieu of the job. The majority individuals of the families (76%) who received a job in the company worked as Night/Security guards or as helpers and received a monthly salary of Rs. 6,000 to 7,000. Only 6 of them had jobs as Dumper drivers or as Machine operators receiving a monthly salary of Rs. 10,000 and above. All of those who were working never received an appointment letter and thus remained always as daily labourers depending totally on the mercy of the company and their *dalals*.

III.1.9.

Skill Training: As per the R&R package [6.2] the youth were to receive some training for jobs such as driving, mechanics, vulcanizing, welding, carpentry etc., and the women [6.8i] were to receive training for establishing some small businesses and to run shops and a skill training centre was to be set up in the villages. All 71 respondents said that they never received any skill training nor was any training centre established in the villages.

III.1.10.

Health: The Company had agreed to build a 50-bed hospital, which was built only by 2013 and functioned for a few months with very few medicines and with very few infrastructural facilities. It became only a referral point to send patients to other hospitals rather than treating anyone there. The company has also promised to sprinkle water thrice a day on the road and to cover coal trucks, plants saplings along the road to control pollution and to run mobile clinics in the villages. Sadly the company **never** did any of this. Rather the contaminated water from the mines further polluted the river and the agricultural land making cultivation impossible (PSA, 2015). Coal dust from the mines and from vehicles in transit settle down on agricultural crops and spoil the crop and trees. The people reported that the agricultural production in the other villages as well has significantly reduced. Sicknesses like jaundice, malaria, typhoid and *kalaazar* have increased. The villagers also reported illnesses that were unknown to them in the area are now on the rise.

Probably what an the elderly woman leader (name withheld to prevent her from being heckled and harassed) in the Colony said about their present condition would sum up the reality better:

We agreed to sign the MOU in 2006 because we trusted the company and all that they promised. We thought that we will be better off and our children will have a better future. We are adivasis and we trust people. We don't doubt and we don't tell lies. We kept our words and gave the land, but they did not keep their promise. Instead the company cheated us. They took our land and now we have nothing, except this house. We have no land, no agriculture, no work and we have become beggars and we are forced to remain beggars.

IV. Infrastructural and Economic Development vs Tribal rights and their culture

The people in the colony and other villages acknowledge that with the coming of PANEM, the area received better infrastructure in the form of roads, some water tanks, hospital and schools and the people received some money in hand. These are good and may be necessary. But in the bargain, they have lost everything that they considered as tribal: and worst of all lost their only source of livelihood, the land and forest and along with that they have lost their peace, contentment and community spirit. They bitterly state, "Money has divided us and we have become too greedy and have lost the sense of humanness."

The tribals say that their economy depended on their land and labour and both were with them and they did not have to depend on money too much. Before the advent of the mining companies they had a hard life but they were content with their way of life. As Karl Polanyi an economic anthropologist, describing the market economy wrote way back in 1940s,

> A market economy can exist in a market society… A market economy must comprise all elements of industry, including labour, land and money. But labour and land are no other than the human beings themselves of which every society consists and the natural surroundings in which it exists. To include them in the market mechanism means to subordinate the substance of society itself to the laws of the market." (Shrivastava & Kothari, 2012: 3)

This disturbing insight of Polanyi is very true to the reality of the market friendly economic development of our country and the world. The questions that the tribals would ask if they could freely express themselves would be: can the market oriented economic development replace the tribal economy of subsistence and sustainability? Can our rights over land, water and resources be trampled upon in the name of economic growth and development or at the expense of our lives?

The Universal Declaration of Human Rights (UDHR) of 1948 and the subsequent UN and ILO conventions and Declaration on the Rights of Indigenous Peoples (DRIP) in in 2007 have affirmed the rights of tribals and every nation bound itself with a promise to respect, protect and fulfil the rights of the tribals/indigenous peoples. The preamble of our Indian Constitution clearly commits itself to the idea of equality of all citizens and pledges to the vision of 'equality of status and opportunity' as its fundamental principle. Chapter III on Fundamental rights in articles 15(4)

and 16(4) insist on affirmative action in the form of special provisions for STs as part of their right. The Fifth and Sixth Schedule along with the Panchayat Extension in Scheduled Areas (PESA) Act further calls the State to respect, consult and get the approval of the village *gram sabha* for any developmental action to be undertaken in the tribal areas. The recent Forest Rights Act (FRA) of 2006 further recognizes the rights of tribals over the forest, and land that were denied to them for decades. All these sound very good in paper, and many may even believe that this is being done. Regretfully, the problem is in the implementation of these provisions. In spite of all these protective laws the tribals continue to suffer and face the constant threat of loosing their right over land and resources. As we have seen in the above case study in Pachwara central coal block, even the negotiations with a company, has not helped the tribals to improve their standard of life, because agreements have been made with an utter lack of faith on behalf of the company and local administration. In fact the agreement has only further weakened their bargaining power by getting them to sign away their rights and has made them to live in sub-human conditions. The coal-mines are now closed since April 1, 2015 after the Supreme Court judgement of illegal allotment of coal mines. For the last one-year they are left with nothing to survive on except to run from pillar to post asking for helps. As one of them said, "*we have become refugees in our own land*."

V.Conclusion

Probably the words of President K.R. Narayanan, in his Republic day address to the nation on 25th January 2001 would best sum up the concern. He said,

> Let it not be said by future generations that the Indian Republic has been built on the destruction of the green earth and the innocent tribals who have been living there for centuries. A great Socialist leader has once said that a great man in a hurry to change the world who knocks down a child commits a crime. Let it not be said of India that this great Republic in a hurry to develop itself is devastating the green mother earth and uprooting our tribal populations.

Speaking particularly on the impact of mining on tribals he said,

> The mining that is taking place in the forest areas are threatening the livelihood and the survival of many tribes… While the nation must benefit from the exploitation of these mineral resources, we will have also to take into consideration questions of environmental protection and the rights of tribals.

References

Arellano-Yanguas, J. (2011, April). Aggravating the resource curse: Decentralisation, mining and conflict in Peru. *Journal of Development Studies, 47* (4), pp. 617-638.

Chaudhry, S. (2011). *Foreign Direct Investments (FD) in Mining Sector in India*. Retrieved January 15, 2013, from http://dx.doi.org/10.2139/ssrn.1920217

CSE. (2008). *Rich Lands Poor People: Is Sustainable Mining Possible?* (S. Banerjee, Ed.) New Delhi, India: Centre for Science and Environment (CSE).

CSE. (2012). Mining in India: CSE media briefing. New Delhi: Centre for Science and Environment (CSE)

GOI. (2011, November). *Unlocking the Potential of the Indian Minerals Sector: Strategy paper for the ministry of mines*. Retrieved September 20, 2013, from Ministry of Mines, Government of India (GOI).

GOI. (2013). *Data*. Retrieved Sept 20, 2013, from http://data.gov.in/visualize.php?inst=a6ca4ca77a76fb61a9d676e56d39d210&nid=11045.

Human Rights Watch. (2012). *Out of Control: Mining, Regulatory Failure, and Human Rights in India.* USA: HRW.

Invest India. (2013). *Mining*. Retrieved Sept 2, 2013, from Mining sector: http://www.investmentindia.gov.in/?q=mining-sector

Ministry of Mines. (2014). *Annual Report 2012-13.* Ministry of Mines. New Delhi: GOI.

O'Faircheallaigh, C. (2008). Negotiating cultural heritage? Aboriginal-mining company agreements in Australia. *Development and Change, 39* (1), 25-51.

Pakur Deputy Commissioner. (2013). *District human development report of Pakur district*. (D. h. office, Producer) Retrieved August 28, 2013, from Pakur, Jharkhand, India: http://www.pakur.nic.in

PSA. (2015). *Coallateral: A report of teh Independent people's tribunal on the MoU between Rajmahal Pahad Bachao Andolan & PANEM coal mines.* New Delhi: Programme for Social Action (PSA).

PUCL Dumka. (2003). *Enquiry report of Pachwara Coal mining project* . Enquiry, Dumka.

Shrivastava, A., & Kothari, A. (2012). *Churning the Earth: The making of Global India.* New Delhi: Penguin.

Srivastava, A. (2009, Sept. 27). Jharkhand: Poverty amidst Plenty. *India Today* .

UNDP. (2011). *Jharkhand: Economic and Human Development Indicators*. Retrieved Oct 2, 2013, from http://www.undp.org/content/dam/india/docs/jharkhand_factsheet.pdf.

EDUCATION AND ECONOMIC DEVELOPMENT – CHALLENGES FOR INDIA

BISWAJIT CHATTERJEE*

Abstract

Education enriches people's understanding of themselves and world. It improves the quality of their lives and leads to broad social benefits to individuals and society. Education raises people's productivity and creativity and promotes entrepreneurship and technological advances. In addition it plays a very crucial role in securing economic and social progress and improving income distribution.

But, while education is an integral instrument to foster long run growth of a nation, and has positive externality on production as well as on social behavior, in case of India, the performance and progress of the ever expanding education sector provide important challenges to the policy makers. These challenges pertain to limited access, inadequate and slow skill formation, low educational attainment and poor quality, and weak support to inclusive growth target. The huge amount collected by Government of India as Educational Cess for nearly a decade, has not been invested in efficient and judicious manner to improve access, skill formation, proper knowledge transformation and mitigation of income inequality among a sizeable section of Indian population. Rather than strengthening the physical and human infrastructure in rural schools, the central government is setting up high cost IIMs and IITs in every state which are presumed to generate benefits to high income groups in the long run. It is important to draw up an inclusive policy perspective at this juncture to meet the important challenges faced by India's education sector.

Keywords : Education,Human Capital,Access,Quality of Education , Inclusive Development.

JEL Classification Codes :H52,I 25,I 38, O15.

Introduction

The importance of education as contributing to development of a nation cannot be denied. Education enriches people's understanding of themselves and world. It improves the quality of their lives and leads to broad social benefits to individuals and society. Education raises people's productivity and creativity and promotes entrepreneurship and technological advances. In addition it plays a very crucial role in securing economic and social progress and improving income distribution.

* Former Professor, Department of Economics, Jadavpur University, Kolkata-700032.
Email :chatterjeeb@vsnl.net; Mobile :09830305222.This is an invited lecture delivered at the 17Th Annual Conference of IASSI ,held at Chandigarh in December 2016.

Economic theory suggests that human capital would be an important determinant of growth, and empirical evidence for a broad group of countries confirms this linkage. Countries that start with a higher level of educational attainment grow faster for a given level of initial per capita GDP and for given values of policy-related variables. The channels of effect of education involve the positive effect of human capital on physical investment, the negative effect of human capital on fertility, and an additional positive effect on growth for given values of investment and fertility.

I. EDUCATION AND DEVELOPMENT

According to Dreze and Sen (2013), education contributes to economic development and social progress of nations in a number of ways:

a. The capability to read and write and count exerts profound impact on our quality of life and the freedoms to understand the world, to lead an informed life , to communicate with others and to have thorough knowledge of how life progresses;

b. Educational attainments and cultivated skills enhance our employment and economic opportunities and impart significant effect on an economy's growth and distribution;

c. Absence of literacy muffles the voice of people and makes their lives insecure – in fact effectiveness of exercise of democratic rights of citizens gets augmented when people are endowed with literacy, ability to read and write and so on, which education imparts;

d. Basic education helps tackling health problems in general and public health in particular. In fact, studies have shown that basic education , rather than specific health education, tends to facilitate the implementation of public health programmes, like immunization, sanitation or prevention of epidemics;

e. The public perceptions of the range and reach of human rights are better comprehended and realized with greater educational attainments, greater spread of school education and literacy as the cases of Kerala and Himachal Pradesh in India, amply demonstrate;

f. Education can impact our understanding and use of legal rights. For women in Bangladesh suffering from insecurity, deprivations and even violence , the major stumbling block towards attainments of legal and human rights has been the incidence of illiteracy among them;

g. Even in family decisions, the participation of women members and their empowerment in terms of power and voice are closely related to the incidence of school education among the girl child, which significantly tend to lower the incidence of childbearing and fertility;

h. Education can have important influences on prevention of social stratification and class conflicts that tend to feature in Indian society for long, and this is brought about though changes in various forms of inequalities;

i. Education enhances the quality of life and freedom of the students and it significantly contributes to their skill formation.

Therefore, investment on education should be taken as investment in human capital, and endogenous growth theorists have outlined the contours of theory of economic growth with knowledge expansion with expansion of both physical as well as human capital. Education in every sense is one of the fundamental factors of development-education transforms ignorance into knowledge, and embodied knowledge is skill which enhances productivity and growth. No country can achieve sustainable economic development without substantial investment in human capital. Education enriches people's understanding of themselves and world. It improves the quality of their lives and leads to broad social benefits to individuals and society. Education raises people's productivity and creativity and promotes entrepreneurship and technological advances. In addition, it plays a very crucial role in securing economic and social progress and improving income distribution.

No country has achieved constant economic development without considerable investment in human capital. Previous studies have shown handsome returns to various forms of human capital accumulation: basic education, research, training, learning-by-doing and aptitude building. The distribution of education matters. Unequal education tends to have a negative impact on per capita income in most countries. Moreover, controlling for human capital distribution and the use of appropriate functional form specifications consistent with the asset allocation model make a difference for the effects of average education on per capita income, while failure to do so leads to insignificant and even negative effects of average education. Investment in human capital can have little impact on growth unless people can use education in competitive and open markets. The larger and more competitive these markets are, the greater are the prospects for using education and skills.

Prior to the nineteenth century, systematic investment in human capital was not considered especially important in any country. Expenditures on schooling, on-the-job training, and other similar forms of investment were quite small. This began to change radically during this century with the application of science to the development of new goods and more efficient methods of production, first in Great Britain, and then gradually in other countries. During the twentieth century, education, skills, and the acquisition of knowledge have become crucial determinants of a person's and a nation's productivity. One can even call the twentieth century the "Age of Human Capital" in the sense that the primary determinant of a country's standard of living is how well it succeeds in developing and utilizing the skills and knowledge, and furthering the health and educating the majority of its population.

The past decades have seen extraordinary expansions in access to basic education throughout the Middle East. Many countries are now on the brink of a further increase in access to secondary and higher education and in effecting spectacular improvements in the quality of education offered at all levels. As increasing numbers of students complete their basic education, their demand for

education at higher levels is similarly increasing. Educating girls and women is probably the single most effective investment a developing country can make, no matter whether women work outside the home or are insiders. It creates a multitude of positive externalities, including better family health and nutrition, improved birth spacing, lower infant and child mortality, and enhanced educational attainment of children.

Countries in the Middle East are increasingly integrated in world markets for manufactured goods. Their ability to compete in these markets and in globalizing service markets will depend on the excellence of human capital they bring to the competition. Ensuring that all citizens are educated and numerate, that many possess a wide range of problem solving skills beyond the basic level, and that some have world class professional skills will necessitate new curricula, improved teacher programs, and academic methods that encourage higher order cognitive skills.

Investment in modernization of agriculture is a capital investment, and the capital nature of land is now fully recognized. The capital nature of the sources of labor services is now also receiving its proper recognition. The inadequacy of the traditional view of labor in the field of growth accounting is well known. But the biases went beyond description to affect policy: The misunderstanding of the nature of expenditures on health, education, labor mobility, and information as consumption which reduces saving lead to investments in steel mills rather than in people. Land, by itself, is no longer a limiting or critical factor, but the quality and behavior of people is increasingly recognized as such. Indeed, it appears that indexes of human capital, such as average levels of education, are more strongly correlated with average income levels across countries than measures of physical capital per unit of labor. This finding is not conclusive since the demand for education as a consumer good is income elastic. Education, therefore, is an effect rather than a cause of income. The role of education as a cause, however, is evident from the micro—economic findings that the relation between education of persons and their own future income are strong and largely unaffected by parental income, even though parents' income does affect the amount of education their children receive. Some critics question the inference that education increases productivity from the observation that it increases wages, and still others assert that schools do not affect skills but serve merely as a filter to sort differences in ability which exist independently of schooling. If so the micro—economic relation between education and income would not carry over to the economy as a whole. This argument is contradicted by studies of empirical production functions which have shown that not only differences in wage rates but differences in productivity are related to differences in education and training of the labor force across states, regions, and over time. Indeed, the search for talent by the school and by the student, are activities no less productive than the search for any other scarce natural resource. Human capital is augmented both by learning and by selection. The interaction of the two is efficient: the more able student learns more at the same cost. The view of human capital as a factor of production coordinate with physical capital implies that its contribution to growth is greater the larger the volume of physical capital. This relation is also symmetric: the contribution of physical capital is larger the higher the average level of human capital.

The problem of LDC's was different: They lacked virtually everything necessary for a higher standard of economic productivity, and the injection of only physical capital was found to be both wasteful and disappointing. But, while physical plant and equipment can be acquired or built quite rapidly, the development of a significant and broadly based level of human capital of a nation is a lengthy process which involves profound social and cultural changes. The framework of an aggregate production function makes it clear that the growth of human capital is both a condition and a consequence of economic growth. The growth of human capital raises the marginal product of physical capital which induces further accumulation of physical capital thus raising total output both directly and indirectly. Conversely and symmetrically, the growth of physical capital raises the marginal product of human capital. This produces an increased demand for human capital relative to unskilled labor, if human capital is more complementary with physical capital than is unskilled labor. The resulting increase in the skill wage differential exceeds the increase in (opportunity) costs, so the acquisition of human capital by students and workers becomes more profitable.

Many theoretical models of economic growth have emphasized the role of human capital in the form of educational attainment. Empirical studies of growth for a broad cross section of countries have used proxies for human capital. Recent research by Barro and Lee (1992) through the World Bank has provided better estimates of educational attainment for a large number of countries over the period 1960 to 1985. Through these data it is possible to use a broad sample of experience across countries and over time to assess the interplay between human capital and economic growth. The major findings have been the very slow rate of convergence of the growth process to bridge the gap of human capital between countries. In this context, the conditional convergence does not imply that the poor countries would tend to grow faster per capita than the rich countries.

II. INDIAN SCENARIO – CHALLENGES OF EDUCATION SECTOR

For a country of India's size and variety, variations across groups and between states in any of the indicators of education- for that matter in respect of any indicator of economic development – are only expected observations. Therefore, discussions around the themes of interstate variations in educational facilities and attainments, or across social and economic groups, are important aspects of the relationship between education and economic development, and are well documented (See Dreze and Sen or J.B.S.Tilak, various writings).There are also important insights on the inadequacy of educational facilities across Indian states brought out by the reports of PROBE team or of the Pratichi Trust. The literature on the above are expanding in nature, and need not be repeated .Instead, we like to draw your attention to the important challenges that the Indian education sector poses for the policy makers to devise future strategies and policies to mitigate these challenges.

The first important problem is *limited access* to education. This is due to several factors, some social-institutional and some economic. The reluctance of parents to send their children to school,

and their preference to send them for work as child labourers are conditioned by the extreme poverty of many parents in India-rural or urban. The idea that such parents can take loan for sending their children to schools for enhancing their future earning capacity, has not mostly materialized in India as there is no insurance cover associated with such schemes. Further, distance from home, inadequate infrastructure in many of the rural schools in the country, including paucity of drinking water and separate toilet facilities for boys and girls, and above all shortage of teachers and their absenteeism from schools are some of the genuine supply side constraints that plague the access to school education in India. There are also cases of caste-based social discrimination which hinders many students from participation in school education, particularly in the private sector. In cases of higher education and learning too, the above factors are having adverse impact on intakes and access, notwithstanding the temporal rise in gross enrollment ratio in almost all the states of India over successive Census periods As a result of such limited access to educational facilities, however inadequate they may be, the basic purpose of expanding the merit good called "education" has not been fulfilled in full. Such a phenomenon has been aptly described by Dreze and Sen(2013) as "privileged excellence and social divisions" whereby there exists "a comparatively tiny group of children from privileged classes enjoying high –often outstanding-educational opportunities, and the bulk of the population being confined to educational arrangements that are, in many different ways poor or deficient"(Dreze and Sen, 2013).The rhetoric of pro-education bias was rooted in our nationalist freedom movement and drawing up of plans for independent India by the National Planning Committee of the Indian National Congress , but in terms of achieving the visions of our freedom fighters India is left behind even after about seventy years of development efforts due to inadequate or limited access to education in our country. The challenge is to broad base the access to education with corresponding expansion of excellence.

The second important issue is skill formation. It is true that education constitutes an important component of the human development index (HDI), it is also an integral instrument in ushering in the *empowerment* of both men and women in any society. But education has also an important function of skill formation in society –*education transforms ignorance into knowledge* and thereby creates flow of skilled manpower that embodies knowledge and can take part in the production process in the productive manner. It is argued that recent surge in India's annual growth rates from the low "Hindu"rate of growth has been propelled by an increase in the share of working-age population in total population, which may be called as demographic dividend. This demographic dividend is defined as the benefits derived from a rise in the ratio of working age (usually 15-59) to dependent or non-working population (usually under 15 and over 60-year olds). When the share of population above 60 years goes over 10% of the total population, the United Nations (UN) defines that society as ageing. While China's demographic dividend was expected to be over by 2015, India's is expected to continue till about 2040 (World Bank 2012).The benefits of demographic dividend come from the fact that as the share of working-age population rises; they get work, earn incomes and save part of that income. As a result, savings as a proportion of GDP rises. Following a standard Harrod-Domar model logic,

investment's share in GDP also rises correspondingly, which propels the growth upsurge.

For India, given the scale of the challenge posed by its rapid economic growth and the rising share of working-age population, one needs to recognize the fact that the general education level of India's labour force in the age group 15-59 has remained extremely low. While the total labour force in 2009-10 was 470 million, the working age population in the age group between 15 and 59 years was 431.2 million of which nearly 126 million or 29% of the labour force, were not even literate, and an additional 102 million, or nearly 24%, of the working population either had below primary or only primary level of education. Thus, well over half of the labour force between 15 and 59 years of age had has extremely low levels of education or none at all. An additional 17.6% had middle level education in 2009-10 and a further 12% had attained secondary level education. In other words, the remainder of only 17% has higher secondary and higher levels of education (including diploma/ certificate, graduates and post-graduation levels of education).This low level of general education corresponds to the continuing high share of those engaged in agriculture and even higher share of the total population that lives in rural areas. Low levels of education in the labour force, especially among those engaged in agriculture make it more difficult for the latter to move into activities in urban areas, except as labourers in the construction industry. The low level of general education also makes it more difficult to provide vocational training to youth who have not even completed elementary education (i. e, until class 8). In other words, the challenges for skill development in the Twelfth Plan are twofold. The first is that existing 228 million in the workforce, or half of the current workforce, that is either illiterate or have only attended primary or less education (who are likely to be functionally illiterate except for the ability to write their names), must be ensured functional literacy and numeracy. Even though such workers have acquired their skills informally, they should be able to now get recognition of their prior learnt skills, for which there is a provision now in the National Skill Qualification Framework (NSQF).The second challenge is to ensure that all children between the ages of six and 14 are completing elementary education by the end of the Twelfth Plan, as required by the Right to Education (RTE) Act, 2009.

Santosh Mehrotra et. al (EPW, March 30, 2013) have tried to prepare an estimate of skilled population of India by 2022 , using the NSS data under alternative growth scenarios. Their estimates based on NSS 66th round survey data, use the following definition of skilled labour as: (1) those between ages 15 and 59 who have received any vocational training; (2) those between ages 15 and 59 who have received post-secondary technical education; and (3) those between ages 15 and 59 who received at least general education up to class 10, i e, up to and including secondary school. The third category is included since the assumption is that the right to education will shortly be extended to class 10, i e, all children between the ages 6 and 16 will complete 10 years of schooling by 2022 (although the current minimum requirement in vocational training is completion of eight years of schooling). This third category is also used since not all jobs in non-agricultural economic activity require more than a general, academic education. Assuming alternative scenarios of migration of agricultural workforce to non-agricultural activities by the end of 13th

Five year period, they found that the skill manpower required will be much less than what have been estimated as 500 million skilled labourers .This means that given the alternative growth scenarios , estimated labour force participation rates , and enrollment of population in schools and the normal retiring segments from the work force, it is not possible to reap the demographic dividend and there exists skill gaps .One underlying presumption of this estimate is that there is no unemployment of skilled labourers , but the patterns of sectoral growth that are emerging , if there is no structural breaks in between, does not seem to support this hypothesis. With structural and sectoral unemployment of skilled workers along overall shortage of skilled manpower, the contribution of the trained manpower to reap the demographic dividend becomes all the more questionable for the Indian economy. In other words, realising the full potential of the demographic dividend in the future will depend critically for India upon both generating non-agricultural employment and upgrading the skill levels of the existing as well as the growing workforce. The demographic dividend is available only till about 2040. If the skill challenge is not met within the next decade, there is a risk that India may be unable to sustain growth in non-agricultural output and non-availability of skilled manpower may result in machines replacing labour on a large scale. This, in turn, will result in declining employment elasticity of output leaving large numbers among the increasingly youthful labour force unemployed.

The third most important issue or challenge of the India's education sector has been in the area of *educational attainment and quality of education.* The abilities of school going children to read, write or calculate correctly or even comprehend about the existing social reality are indices of educational attainment and quality of education imparted. It is important to recognize that poor quality of education is widespread in all layers of education in our country, and more importantly there are sharp dispersions and inequality in such poor or low quality education—in primary, secondary and higher secondary schools, in colleges, in universities and in institutes of higher learning, the virus of poor or low quality education pervades and plagues the development of high quality manpower formation in our country, with the exception of few pockets of excellence containing and producing outstanding and world quality educated manpower. There are many reasons for the existence and prevalence of poor quality education in our country—lack of access due to poor physical and human infrastructure, poverty, and lack of planning regarding the types of education that we wanted to impart and their relationship with the pattern of development envisaged in our vision documents and so on. But the consequences of such widespread prevalence of the coexistence of low quality educational attainments with few high quality trained manpower are quite serious. First, there is quality competition which drives out poor quality educated manpower from the purview of job market and employability based on efficiency and excellence. So it acts as an exclusionary device. Second, when low quality educated people are engaged in teaching the enrolled students at various levels ,and this is conditioned by various socio-economic circumstances or provisions, the effect is invariably to percolate their ignorance or lack of true knowledge into the minds of successive future generations of students. This is not only true in rural primary and secondary schools, but also in some Central Universities, which are well funded and closer to urban set-up Can India reap any demographic dividend with

such handicapped manpower entering into her production process? In the words of Dreze and Sen(2013): "*India's education system is tremendously negligent both in coverage and quality.The steep educational hierarchy that come to be tolerated in India is not only terribly unjust,but also extraordinarily inefficient in generating the basis of a dynamic economy and progressive society. It is in that structural perspective, combining considerations of efficiency and equity, that we can best understand how –and how much—the country loses through its extraordinary concentration on some, while neglecting the vast majority of Indian hampered by economic disadvantage, caste divisions, class barriers, gender inequalities and social gaps related to ethnicity and community."* The challenge is to eradicate the educational deprivation that is plaguing the growth and opulence of India's society and the poverty of knowledge that permeates through successive generations through poor or low quality education that are being imparted in our country over time and space.

The last important challenge of the Indian education sector pertains to the objective of inclusivity of our growth process. It is a fact that India has grown strongly since the economic reforms of the early 1990s, with growth averaging around 7 percent during 1993/94–2009/10. The period of rapid growth and poverty reduction (2004–09) also witnessed a rise in inequality, with the Gini index rising from about 0.27 in rural and 0.35 in urban India in 2004/05 to about 0.28 and 0.37, respectively, in 2009/10. Moreover, rural-urban as well as regional inequality also increased during this period—the ratio of urban to rural per capita consumption and the ratio of real per capita income of the richest state to that of the poorest state both rose. Aware of these widening disparities, the government declared achieving faster and more inclusive growth the stated objective of the Eleventh Five Year Plan (2007/08–2011/12).Inclusive growth continues to be the focal point of the Twelfth Five Year Plan also.

What role can education play in achieving the target of inclusive growth in India? There is no denying the fact that education generates important externality which tend to moderate the in-built inequality in society and groups, and the interactions between the neighborhood environment and income inequality across persons generate both 'positive' *provision* effect and 'negative' *exclusion* effect (Gulati and Ray, 2016), and spread of education tends to promote the first effect stronger than the second, thereby improving the welfare of the poor. Anand et al. (2014) examined the links between Indian state-level socio-economic indicators and inclusive growth and poverty reduction outcomes over the period of 1993/94 to 2009/10. Their results suggest that Government expenditures, particularly social expenditure, are closely linked to inclusive growth and poverty reduction, in the sense that the states that boosted spending on education and those that boosted fundamental educational attainment rates experienced better inclusive growth outcomes. This is because spending on education— which is a component of spending on social needs—not only fosters growth but, through better jobs and higher incomes, advances equity (by helping the poor more). Moreover, when poverty incidence was high—as in 1993/94 when the national poverty headcount rate exceeded 45 percent—higher social spending worked through lifting up the majority of population rather than through redistribution toward relatively

poor households. Higher initial literacy and greater literacy are associated with greater poverty reduction—it is found that greater literacy transmits through growth and the redistribution channels of poverty reduction. While more education is significant only in the redistribution channel regressions, the initial level of education is found to be significant in the growth channel regression. This suggests that the less well-off households are benefiting more from education as compared to better-off households in income distribution.

III.CONCLUDING OBSERVATIONS

Thus while education is an integral instrument to foster long run growth of a nation , and has positive externality on production as well as on social behavior, in case of India, the performance and progress of the ever expanding education sector provide important challenges to the policy makers. These challenges pertain to limited access, inadequate and slow skill formation, low educational attainment and poor quality, and weak support to inclusive growth target. The huge amount collected by Government of India as *Educational Cess* for nearly a decade, has not been invested in efficient and judicious manner to improve access, skill formation, proper knowledge transformation and mitigation of income inequality among a sizeable section of Indian population. Rather than strengthening the physical and human infrastructure in rural schools, the central government is setting up high cost IIMs and IITs in every state which are presumed to generate benefits to high income groups in the long run. But the supply line to higher education centers will be deficient in quality and magnitude over a medium term if the present trend continues and is not reversed though improvements in the quality and access to school education in different states of India. A proper policy perspective needs to drawn up at this juncture to meet the important challenges faced by India's education sector.

Reference

Anand Rahul, Tulin Volodymyr, and Kumar Naresh (2014) , India: Defining and Explaining Inclusive Growth and Poverty Reduction, *IMF Working Paper WP/14/63*,April 2014.

Becker, Gray S. (1964), *Human Capital*, New York, Colombia University Press.

Dreze and Sen (2013: *An Uncertain Glory-India and Its Contradictions*, Allen Lane).

Gandhi Ankitai, Sahoo Bimal.K , **M**ehrotra Santosh(2013),*Estimating India's Skill Gap on a Realistic Basis for 2022, Economic and Political Weekly*,Vol. 48, Issue No. 13, 30 Mar, 2013.

Grossman, Gene M. and Elhanan Helpman, (1989) , Growth and Welfare in a Small Open Economy, *NBER working paper 2970*.

Gulati,Namrata and Ray,Tridip (2016), Inequality,Neighbourhoods and Welfare of the Poor,*Journal of Development Economics, Vol 122,November 2016,Pp 214-228.*

Lucas, Robert. (1998), "On the Mechanics of Economic Development", *Journal of Monetary Economics, July 22(1).*

Mincer, Jacob, (1974), *Schooling, Earnings, and Experience*,New York, Colombia University Press.

Ozturk,Ilhan (2001),The role of education in economic development: a theoretical perspective, *Journal of Rural Development and Administration, Volume XXXIII, No. 1, Winter 2001, pp. 39-47*.

Schultz, T.W. (1961), "Investment in human Capital", *American Economic Review, 51(1).*

Tilak, J.B., (1989), "Education and its Relation to Economic Growth, Poverty, and Income Distribution: Past Evidence and Further Analysis" *World Bank Working Papers 46.*

Wood, A., (1994), "North-South Trade, Employment and Inequality: Changing Fortunes in a Skill-Driven World", *IDS Development Studies Series*, Oxford University Press.

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