CHAPTER - 4.

ROLE OF CHILD LABOUR IN ECONOMIC DEVELOPMENT OF FORMAL SECTOR

In the earlier chapter I have discussed about the significant role of child labour in the different manufacturing process in different industries of Lock, Bangle, Carpet and Brass in Uttar Pradesh. As discussed in prior chapter’s child labour is involved to a significant extent in these four industries and the industries are in turn making noteworthy contribution towards the economic development of the country. Before understanding how children are contributing in the economic development first let us discuss Economic development and Economic Growth quickly and for those economic and non-economic factors.

4.1. ECONOMIC AND NON-ECONOMIC FACTORS

Economic process is a complex process. It is influenced by both economic and non-economic factors. Among the economic factors which determine the development process in any country includes, the most prominent one to be available capital stock and the rate of its accumulation, capital-output ratio in various sectors, agricultural surplus, conditions in foreign trade and economic system. In addition, some non-economic factors such as size and quality of human resources, political freedom, social organization, technical know-how and general education, absence of
corruption and above all, will to develop on the part of the people play an important role in determining the pace and direction of development.  

4.2. ECONOMIC GROWTH AND ECONOMIC DEVELOPMENT

The essence of economic development consists in the growth of output or real national income per head of the population. Economic growth means the transformation of an economy from the state of under development to a state of development, from an agrarian to a highly industrialized society, from a low saver to high saver and from a predominantly rural to predominantly urbanized society. This transformation is mainly reflected in a sustained and steady rise in national income and per capita income.

A rise in national and per capita income is implicit in economic growth. This improvement in income helps and in turn is facilitated by larger savings, increased capital formation and technological development. Rise in the per capita availability of capital resources, improvement in the skill, efficiency and earning power of labour, better organization of production, development of means of transport and communications, growth of financial institutions, urbanization, rise in standards of health and education and expectation of life, greater leisure and increased recreation facilities and widening of the mental horizon of the people, all these characterize economic growth.  

Development without growth is inconceivable; the term economic growth refers to increase over time in a country’s real output of goods and services – or more appropriately product per capita. Output is generally

measured by gross or net national product, though other measures could also be employed. The term economic development, in contrast is more comprehensive. It implies progressive changes in the socio-economic structure of a country. Viewed in this way, economic development involves a steady decline in agriculture’s share in GNP and a corresponding increase in the share of industries, trade, banking, construction and services. This transformation in economic structure is invariably accompanied by a shift in the occupational structure of the labour force and an improvement in its skill and productivity.

The process of economic development is a highly complex phenomenon and is influenced by numerous and varied factors, such as political, social and cultural factors, from stand point of economic analysis, the most important factors determining the rate of economic development are: availability of natural resources, the rate of capital formation, capital output ratio, technological progress, dynamic entrepreneurship, rate of growth of population, social overheads like educational and health and non-economic factors. But our main focus for defining economic development will be on capital formation, the need for and process of capital formation and how it works for the economy.

4.3. CAPITAL FORMATION AND ECONOMIC DEVELOPMENT

Recognizing capital formation from the point of view of economics is the core of economic development. It indeed plays a decisive role in determining the level and growth of national income, hence economic

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development. Capital formation enables the adoption of more productive methods of production; it makes the economy more diversified and broad based; it exerts an interesting and cumulative effect on the whole economy; it facilitates economic progress, these and several other ways of capital formation promotes economic growth. The process of physical capital accumulation is a function of three variables: (i) an increase in the volume of real domestic savings so that the resources that would have been used for consumption are released for investment. (ii) the creation of adequate banking and financial institutions to mobilize the savings of the community (iii) the emergence of an entrepreneurial class which can utilize the community’s saving into channels of productive investment or the assumption of the entrepreneurial function by the state in the critical state.

The credit of capital formation goes to the entrepreneur. He is the one who organize and bring together the various agents of production and undertaking to remunerate for the work done. Entrepreneur by adopting new technology and improved methods of production makes a contribution to economic growth. His main objective is to aim at enlarging his profit and he does so by ensuring that the value of the final product exceeds the sum of the remuneration of the factors of production, i.e., the value of the means of production. Obviously, the greater the surplus, the greater is the entrepreneurial activity and greater the entrepreneurial activity the faster is the rate at which economy grows. Entrepreneur through innovation, i.e., by bringing new product, searching new market, new sources of raw material and

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6 Ruddar Datt, K.P.M.Sundaram, 2004(50th Revised Edition); Indian Economy; S.Chand & Company, New Delhi, p.327
by adopting an optimum economic combination of the factors of production maximizes his profit. It is relevant to mention here that factors of production include land, labour and capital. Now my point of specifying the factors of production is that entrepreneur uses capital, land and labour for production process but in between this he uses child labour also to minimize his cost of production and to maximize his profit. At this point of time a question arises how children are utilized for the production purposes and how they help in enhancing entrepreneurs profit is a question of concern which will be explained later in this chapter.

How the children contribute in the economic development and to what extent is although difficult to define because of lack of data available and their exact contribution made could not be ascertained but surely children are contributing in economic development by working at lower wages and enhancing the entrepreneur's capital, which is one of the ways leading to economic development. Now the question is what economic development is and how it works for the country. Economists have given their own perspective about the theories of economic development. Economic development is of extreme significance to all types of economies whether developing or developed as it is related with the growth of the individual to the growth of the country. Conventionally literature argued that economic development is necessary for developing countries because this can solve the problems of poverty, unemployment, low production and productivity and also in raising standard of living masses. The economic stratum people are the main affected ones facing such problems because of their low per capita

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income. Some Economists were of the view that increase in real national income is also an indicator of economic development besides some of them believed in economic welfare criteria which means to maintain the consumption and living standard of the people. All the indicators of economic development are related with income. According to the new definition given by the economists, economic development is the process by which poverty, backwardness, inequality, unemployment, etc. is reduced. The basic requirement of removing these problems from the economy is fulfilled through capital. Capital is defined “as that part of wealth which is used or is intended to be used for further production of wealth.” The term capital is generally used for capital goods. According to Colin Clark, “capital goods are reproducible wealth used for the purpose of production.” A United Nations Study defines capital “as those goods resulting from economic activity which are used for the future production of other goods.” Capital is considered as life blood of all economic activities and also the foundation of any business, without it not even a needle can be produced. An entrepreneur’s who works at micro level in the economy for their self interest; assemble his capital along with other factors of production in such a way so that he can maximize his production to make more and more profit, irrespective of the proportion of his resources he is using. The same policy is adopted by the rest of the entrepreneur’s in the economy of efficiently and effectively utilizing their resources so as to maximize their profit, but when a number of entrepreneurs entered the market with the intension of profit maximization they combined effort at macro level

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8 Economic Activity resulting in production of goods and services and adds value to the national product is considered as an economic activity.

and automatically lead to economic development. For economic development, economic growth is necessary and for economic growth capital formation is necessary. “Capital formation (accumulation) is regarded as one of the important and principal factors in economic development.” It also influences the economic welfare of a country. It helps in meeting all the requirements of an increasing population in a developing economy. Entrepreneur is the key player of any business enterprise; who takes all the necessary investing decisions to get the most out of his factors of production to enhance his profit. Profit made by the entrepreneur takes the form of capital formation and this profit is further invested for other expansion/progress purposes. The profit made by the entrepreneur is by employing child labour instead of adult labour by negotiating the wages, between the two types of labour. This profit which he makes through wage differentiation is the amount which takes the form of capital formation for him and consequently the saved money. This saved money can be effectively utilized for further growth in the industry (assumed) and hence take the form of economic development. Let us elucidate the process of capital accumulation on the basis of Karl Marx theory of surplus value.

4.4. **KARL MARX THEORY**

There have been several theories given by the eminent economists for economic development but we will discuss about Karl Marx, ‘theory of surplus value’. His theory says that “labour sells his labour for what it is

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worth in the labour market, viz., for its value. The value of labour – power is the value of means of subsistence necessary for the maintenance of the labour. In fact, labour power produces more than this. The value of commodities necessary for the subsistence of labour is never equal to the value of produce of that labour. "Marx uses his theory of surplus value as the economic basis of the ‘class struggle’" under capitalism and it is on the basis of his theory of surplus value that he builds the superstructure of his analysis of economic development. Class struggle is simply the outcome of accumulation of surplus value in the hands of a few capitalists. Capitalism, according to Marx, is divided into two great lead roles the workers who sell their ‘labour-power’ and the capitalists who own the workers who own ‘means of production.’ Labour power is like any other commodity. The labourer sells his labour for what it is worth in the labour market viz., for its value. And its value, like the value of any other commodity is the amount of labour that it takes to produce labour-power. In other words, the value of labour power is the value of the means of subsistence necessary for the maintenance of the labourer, which is determined by the number hours necessary for its production. According to Marx, the value of the commodities necessary for the subsistence of the labour is never equal to the value of the produce of that labour. If a labourer works for ten-hour a day, but it takes him six hours’ labour to produce goods to cover his subsistence, he will be paid wages equal to six hours labour. The

12 “Class-struggle is simply the outcome of accumulation of surplus value in the hands of few capitalist”, M.L.Jhinghan, 2002, 35th Revised Ed., The Economics of Development and Planning, Delhi, Viranda Publications, p.96

13 “Capitalism, according to Marx is derived into two great protagonists the workers who sell their ‘labour power’ and the capitalists who own the ‘means of production’. Labour power is like any other commodity. M.L.Jhinghan, 2002, 35th Revised Ed., The Economics of Development and Planning, Delhi, Viranda Publications, p.96
difference worth four hours’ labour goes to the capitalist in the form of net profits, rent and interest. Marx calls this unpaid work “surplus value.” The extra labour that a labourer puts in and for which he receives nothing, Marx calls “surplus labour.\textsuperscript{14}”

\[ \text{SURPLUS LABOUR} \rightarrow \text{SURPLUS VALUE} \rightarrow \text{CAPITAL FORMATION} \]

(the extra labour for which (unpaid work of Labour) labourer receives nothing)

Karl Marx considers surplus value as one of the main and necessary features of capitalism. In his opinion there are three methods of creating surplus value which are:

a) Increasing work hours

b) Raising the productivity of workers through technological change (introducing labour – saving / efficient devices)

c) Reducing the number of hours required to produce labour subsistence.

This surplus value ought to have gone to the workers, which has been collected simply by exploiting the labourers. Larger the extent of surplus value, greater is the exploitation. In other words, the rate of surplus value is the degree of exploitation. Thus exploitation of labour creates surplus value. According to Marx, it is surplus value that leads to capital accumulation. The capitalist’s main motive is to increase the surplus value which goes to increase his profits”.

\textsuperscript{14} R.C. Agarwal, 2002, Economics of Development and Planning, Lakshmi Narayan Agarwal, Agra., 103
4.5. LEWIS THEORY

After Karl Marx theory of Economic Development, Lewis also depicted his theory of economic development with "Unlimited Supplies of Labour". The rapid growth of population in underdeveloped/developing countries results in unlimited supply of labour and how this unlimited supply of labour can be converted into an asset for economic development was explained. Lewis analyzed his theory of economic development in the dual sector economy with special reference to underdeveloped countries. He says "economic development takes place when capital accumulates as a result of the withdrawal of surplus labour from the "subsistence" sector to the "capitalist" sector. The capitalist sector is "that part of the economy which uses reproducible capital and pays capitalists for the use thereof. It employs labour for wages in mines, factories and plantations for earning profits. The subsistence sector is that part of the economy which does not use reproducible capital. In this sector, output per head is lower than in the capitalist sector. Lewis assumptions were following:

a) The rapid growth of population in underdeveloped countries results in unlimited supplies of labour. A major part of the labour is unemployed. Marginal productivity of the unemployed labour is zero.

b) Economic development takes place where capital accumulates as a result of the withdrawal of surplus labour from the subsistence sector to the capitalist sector.

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15 This is the title of an article Published by W.A. Lewis in the Manchester School, May 1954. Reprinted in Aggarwal and Singh, op. cit.,p 400-449. Also "Unlimited Labour" The Manchester School, January 1958
c) Whatever is produced in the capitalist sector is either consumed there or is exported.

d) The production in the capitalist sector takes place according to the principle of maximization of profits.

e) The relationship between the capitalist and the subsistence sector lies in the fact that as former expands; it draws labour from the latter.

According to Lewis, the underdeveloped countries of the world can proceed on the path of economic growth by way of judicious use of their surplus or unlimited supply of labour. The two features of Lewis theory or model are as follows:

**The Dual or Two Sector Economy:**

There is a heavy pressure of rapid growth of population in developing country. In such economies, Lewis believes that an unlimited supply or surplus supply of labour is available at a subsistence wage. According to Lewis, underdeveloped countries have the dual economy and hence can be divided into two sectors:

a) The capitalist sector, and

b) The subsistence sector

The capitalist sector is that part of the economy, which uses reproducible capital and pays capitalist for the use thereof. The use of capital is controlled by capital is controlled by capitalist sector which hires the services of the labourers. It may be either private or public. The average wages are quite high. The people are generally skilled in the capitalist sector. They employ labourers for wages in mines, factories and plantations etc. for earning
profits. The output per head is quite high. On the contrary, the subsistence is that part of the economy which does not use reproducible capital. In this sector, the output per head is quite low as compared to the capitalist sector. The average productivity of labour is low and people are generally backward, illiterate, simple and unskilled.

**Capitalist Surplus:**

For economic growth the unlimited supply of labour is converted into capitalist surplus. The capitalist surplus is the difference between the marginal productivity of labour and the capitalist wage. The capitalist main objective is to maximize their profits. Capitalist for increasing their profit, need more labourers and for that they draws labour from subsistence sector (where wages are low) to capitalist sector on higher wages. Their contribution to output is also higher despite higher wages. In this way surplus is generated in the capitalist sector and Lewis termed this surplus as the 'capitalist surplus'. This surplus is reinvested in the new capital assets by the entrepreneur that leads to capital formation in the economy. Thus capital formation depends on capital surplus which leads to economic development”.

The above theory can be explained with the help of a diagrammatic representation:
WAGES
MARGINAL
PRODUCTIVITY
CURVE

QUANTITY OF LABOUR
In short,

OX - Quantity of Labour;

OY - Marginal Product;

OS - Wage rate in Subsistence Sector;

OW - Wage rate in Capitalist Sector;

OC - Wage rate of child in Capitalist sector

WW - Unlimited Supply of Labour;

OE1 - Labour employed;

A1D1 - Labour (OE1) Marginal Productivity Curve;

OA1 B1 E1 - Total Output;

OWB1 E1 - Wages paid to the Labour;

OCG1 E1 - Wages paid to the child labour;

WA1 B1 - Surplus Output (by employing adult labour);

CA1B1G1 - Surplus Output (by employing child labour);

When Surplus Output (WA1B1) or (CA1B1G1) is reinvested the Marginal Productivity Curve will shift Upwards to A2D2 or to A2F2.

In the above diagram quantity of labour employed is shown on Axis - OX and the marginal productivity has been shown on Axis - OY. OS is the wage rate in the subsistence sector and OW is the wage rate in capitalist sector. The supply of labour is unlimited, as shown by the horizontal supply curve of labour WW in capitalist sector, SS in subsistence sector and in between above of subsistence SS and below the capitalist WW is child labour CC. In the beginning when OE1 labour is employed in the capitalist sector, its marginal productivity curve is A1 D1 and the total output of this sector is OA1
B1 E1. Out of this labourers are paid wages equal to the area OWB1 E1. The remaining area WA1 B1 shows surplus output. This is the capitalist surplus or total profit earned by the capitalist sector. When this surplus is reinvested the curve of marginal productivity shifts upwards to A2 D2. The capitalist surplus and employment are now larger than before being WA2 B2 and OE2 respectively. Further reinvestment raises the marginal productivity curve and the level of employment to A3 D3 and OE3 and so on, till the entire surplus is absorbed in the capitalist sector.

Now assuming that there is child labour in the capitalist sector and gets wages OC, less than OW, i.e. wages of labour in capitalist sector and more than OS, i.e. wages of labour in subsistence sector. In the beginning when OE1 child labour is employed in the capitalist sector, its marginal productivity curve is A1 F1. Total output given by child labour is the same as given by the adults OA1B1E1 but wages given to child labour for producing OA1B1E1 is OC1G1E1 which are less than the wages given to adults for producing the same output. Therefore, the capitalist making profit by employing adult labour is WA1B1 and by employing child labour is CA1B1G1; which is more than the profit made by the adult labour. This is the capitalist surplus or total profit earned by the capitalist. When this surplus is reinvested the curve of marginal productivity shifts upwards to A2 F2. The capitalist surplus and employment are now larger than before being CA2 B2 G2 and OE2 respectively. After this, the supply curve will slope from left to right upwards like an ordinary supply curve, and wages and employment will continue to rise along with development.
Consequently, from the above explanation of the diagram it can be clearly said that by employing child labour capitalist is making surplus output which is much more than the surplus output made by employing the adult labour. Therefore, I can say the capitalist surplus or total profit made takes the form of capital formation which is efficiently and effectively reinvested further helps in the economic development of the country.

To support the above statement let us take few example of the wages given to the child labour and wages given to adult labour considering both are working for 8hours a day and finding the wage difference between the two so as to see the degree of disparity of wages given to them. Also noticing the scale of profit that entrepreneur is making be employing children.

4.6. COMPARISION OF WORKING HOURS AND WAGES OF LABOURERS IN MORADABAD

According to the recently published report in Times of India (dated 01.05.2011) Union Ministry of Labour, minimum rates of wages payable to the employees employed in various segments of work in Moradabad coming under Area –A, in the category of unskilled labour wages are to be given wages Rs. 205 per day. According to the Minimum wages in Uttar Pradesh, in Metal Manufactories adult labourers are provided with the total minimum wages of Rs 173.18 in the category of semi-skilled; Rs. 151.92 in the unskilled category and Rs. 192.23 in the category of skilled labour.

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16 An unskilled employee is one who does operation that involves the performance of simple duties, which required the experience of little or no independent judgment or previous experience although familiarity with the occupational environment is necessary. His work may thus require in addition to physical exertion familiarity with variety of articles or goods.

17 A semi-skilled worker is one who does work generally of defined routine nature within the major requirement is not so much of the judgment, skill and but for proper discharge of duties assigned to him or relatively narrow job and where important decisions made by others. His work is thus limited to the performance of routine operations of limited scope.
Assuming, that an adult worker works for eight (8) hours a day on the basis of the Factories Act 1948, Chapter IV, and Working Hours of Adults Sec. 51 and considering the average monthly income of male child workers in Moradabad to be Rs. 184.80\(^{19}\) and the children are working for a period of 8 to 10 hours per day (These numbers are based on a report published by Bimal Kumar, Problems of Working Children, Pg. 119) that out of the 528 male child workers, 288 children, which is 54.54 percent of the survey population, were working for 8 - 10 hours a day. Again taking it from the table\(^ {20}\) (6.6.2 distribution of children on the basis of their duration of work, out of the 606 children taken up in Moradabad 574 i.e. 94.72 % of them were reported to be working from 9:00 am to 6:00 pm that is for 9 hours).

4.6.1. ASSUMPTIONS / CONDITIONS:

- Assuming both are performing unskilled work;
- Assuming both are working for 30 days;
- For comparison it has been assumed that child are also working for 8 hours a day; and adult labour works for 8 hours a day;
- Assuming that child wages does not vary with over a period of time, due to their abundance in the market and no bargaining power;

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\(^{18}\) A skilled employee is one who is capable of working efficiently of exercising considerable independent judgment and of discharging his duties with responsibility. He must process it through and comprehensive knowledge of the trade, craft for industry in which he is employed. Definitions given by Khushi Mehta, last modified on 10 June 2010.

\(^{19}\) Bimal Kumar, 2000, Problems of Working Children, A.P.H. Publishing Corporation, New Delhi, p.123

\(^{20}\) Bimal Kumar, 2000, Problems of Working Children, A.P.H. Publishing Corporation, New Delhi, p.120
- Adult unskilled labourer wages in Moradabad as per Union Ministry of Labour, recently updated to be ` 205 as per the new minimum rates of wage payable to employees;

- Assuming that entrepreneur will use child labour instead of adult labour for increasing his profit for performing the unskilled work, as he has to pay less to the child in comparison to adults. As increased profit will add on to the capital formation and eventually leading to economic development;

Table 4.1: Adult and Child Workers Wages and Working Hours in Moradabad

<table>
<thead>
<tr>
<th>Type of worker</th>
<th>Working hrs/day</th>
<th>Monthly Wage</th>
<th>Wage comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult</td>
<td>8</td>
<td>6,150</td>
<td>233 %</td>
</tr>
<tr>
<td>Child</td>
<td>8</td>
<td>1,848</td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td></td>
<td>4,302</td>
<td></td>
</tr>
</tbody>
</table>

Adult are getting 236 % more than what child labourers are getting; (difference/ initial salary x 100) i.e. (205 – 61.6 =143.4); 143.4/61.6 x 100 = 232.79 %
4.6.2. CONCLUSIONS

1. An adult gets 236% more wages as compared to a child daily wage.

2. The wage comparison in proportion shows that (12:41) a child gets 7 times less wages for performing the same type of work for same working hours than adult.

3. For increasing his profit entrepreneur employ child labour;

   Initially child can perform the unskilled and semi-skilled work and for that adult labour can be substituted; and thus saving those extra wages given to adults, adult labour can be used for performing the skilled work; where child cannot substitute them,
From the above two conditions entrepreneur can get the unskilled and semi-skilled work done by child and where more skill is required he can opt for adult labour. Thus, saving his wages will lead to capital accumulation.

Now taking small example from the data used in the above table, suppose for molding 10 brass vases in a day 10 adult labourers are required and for performing the same work 08 child workers are used for one day (assuming child workers are more efficient, quick and laborious; secondly working for longer hours without complaint) and the entrepreneur choose child labour instead of adult labour to increase his profit. As the cost of adopting 10 adult workers would be ₹2050 and for keeping 08 child workers for completing the same work would cost ₹492.8, then also the price difference between the two types of labourers would be 1557.2, which enhances the entrepreneur’s profit that is further invested for development purposes and eventually to the economic development. At this point it must be mentioned here that this profit which entrepreneur is making is due to adopting child labour. So it can be said that the profit that entrepreneur is creating is through employing child labour who are becoming a part of economic development.