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LABOUR PROCESSES AND THE DYNAMICS OF GLOBAL VALUE CHAIN:
A Developing Country Perspective

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CONTENTS

Abstract *1*

1. Introduction 1
2. Critique of the Chain Metaphor 3
3. Dynamics of Inclusion and Exclusion 7
4. Fluid Labour and Footloose Industry 10
5. Labour Surplus and Flexible Accumulation 13
6. Conclusion 16

References 18

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*[**Abstract**: The production process across the world has undergone changes primarily relating to a reorganization of the division of labour across the globe. Global value chain (GVC)/ Global production network (GPN) provides us a strong framework to analyze the creation and distribution of rents within and beyond national boundaries. It shows how the goal of profit making unites various regions, modes of production and various economic activities within and beyond industry and simply rejects the static notions of classification of industries based on factor intensities. This paper with specific reference to India argues that limited view of verticality of production fails to appreciate the fact that choices of locations, the amount of rent created, the shift of value chains and the changes in relative importance of various nodes are not endogenous to the chain itself but are mutually determined by a complex network of actors, institutions and power relations, a large part of which lie outside the chain. In a sense, the sources of rents for a typical participant in a developing country rest on a process of procurement and employment that gradually reduces the possibility of retaining the existing rents and also that of extending the chain further down.]*

1. Introduction

The production process across the world has undergone significant changes. The change primarily relates to a reorganization of the division of labour across the globe. Undoubtedly this has been facilitated by emergence of new communication technologies that caused 'death of distance' and provided opportunities towards more dispersed but functionally integrated global production structures. Technologies affect the equations between the relative prices of moving people *vis-à-vis* the cost of sharing information. If the latter becomes relatively cheaper there would be a tendency towards a more dispersed distribution of production. The history of industrial geography focuses on specific patterns

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of industrial concentration in subsequent phases. At the initial phases industries were largely concentrated around sources of raw materials especially coal mines. In the next phase industries were centered on regions producing minerals and means of production and later on in and around urban space primarily looking for market of durable consumer goods those cities normally offers. In all these phases the production process was not distributed across the globe, specialization was based on the production of final goods. Only since 1940s we come across a new pattern of division of labour in which the production process is broken into constituent tasks and distributed across the globe depending on relative endowments of specific countries and regions (Hudson, 1988). This change had impacted largely upon the trade structure and the participation of developing countries in global manufacturing. Comparing the two phases of globalization, one referring to the late nineteenth and early twentieth century and the other more recent in the late twentieth century, one can see that the trade-GDP ratio remained roughly similar in the two phases but the major difference occurred in the composition of trade (Nayyar, 2006). The share of trade in tasks and intermediate goods, cross border intra-firm transfer had been much higher in the later phase which is indicative of the fact of a greater dispersion of production. Intra-firm trade of multinational companies accounts for one-third of international trade. This change of course has larger implications to developing countries. It increased the possibility of participation in the global production network which is not limited to producing labour or resource intensive goods but also taking part in a labour intensive task that might be a constituent of a highly technology intensive final product. In this backdrop emerges a vast literature of diverse tradition that focuses on the 'network-led development' that approaches the problematic of development through the chain metaphor. The global value chain (GVC) or global production network (GPN) are variants of a similar framework that traces the production process from the conceptualization stage to the final sale and beyond. This is surely a paradigmatic shift in industrial organization analyses primarily because it looks into the dynamics of power and profit beyond the boundaries of manufacturing and brings into agriculture or services in the backward or forward linkages as significant constituents of the value chain.

The opening up of economies were supposed to give rise to increasing opportunities to developing countries in getting included into global networks and sometimes up-gradation along the chain is viewed as a way of moving up in the hierarchy of development. This paper primarily argues that search for endogenous means of upgrading within the verticality of the value chain is a serious limitation of global value chain framework that fails to capture the fissures and disconnects of value chain in developing countries. The point of departure of course is focusing more on the labour process viewed as a horizontal process constituting the node within the value chain embedded in the history and society of respective places. In the following section we make a critical review of the value chain

framework and try to comprehend the mutual constitutivity of profit and power across the value chain not just determined by contestations in shares of value added but more grounded in the creation and appropriation of surplus value. This provides a perspective to see the 'organisational fix' and the 'spatial fix' as different outcomes of the same process. The following section brings out a case where increased competition in a specific setting of labour process typical to developing countries give rise to horizontal fragmentation rather than vertical integration through production chains. In the next section we draw attention to a peculiar mix of 'fluid labour' and 'footloose industry' where the 'spatial fix' becomes the dominant response of capital in the face of global competition. It shows the limited embeddedness of global value chains that either gives rise to changing spaces of production or enclaves of high valued production amidst artisanal cluster. The final section questions the notion of 'flexible specialization' as an explanation to horizontal expansion in the context of India and argues that lack of capabilities to cater to quality requirements demanded in global production networks as well as the minimum scale to attain normal profit could not emerge automatically as a result of competition but requires a coordination beyond the profit and power equations of global production chains.

2. Critique of the Chain Metaphor

The splitting of the production process across the globe necessitated a research agenda because the international networks that evolved could not be captured simply by binary notions of market and hierarchy. The coordination of the emerging division of labour became important and required further attention beyond input-output cross border linkages. There had been in the process a new dynamics between 'space of places' and 'space of flows' and the flows of capital, labour, knowledge and power redefined the space mutually constituted by the changing places and flows (Castells, 2000). In the 1960s and 70s chain metaphor was largely used by analysts following the trajectory of mineral exports. French economists in the 1970s developed an empirical research agenda to trace the flows of commodities and identify the agents and activities within the filiere (Raikes et al). However the world system theorists later on gave a broader perspective to analyses of global value chain. Hopkins and Wallerstein (1982) conceived the research as part of a broader world systems studies. The dependency theory which was at the core of world system analyses looked into the capitalist system as a structure that reproduces hierarchy and inequality through unequal exchange. This was of course the entry point of Gereffi and Korzeniewicz (1994) who viewed global value chain not just a heuristic device to analyze global capitalism but considered it as a distinct phase of capitalist industrialization. In other words, it went beyond the static categories of core-periphery attached to dependency argument and tried to comprehend the dynamics of the emerging industrial organization.

Indeed such shifts gave rise to a serious turn in value chain studies that was relying more on the empirical details of relative inequality and less on the political economy categories.

Gereffi (1994) identified three major dimensions of value chain analyses and these are the following: physical input-output flows; territoriality and governance structure. Governance and up gradation are the two most fundamental concepts of value chain analyses. Governance is about the relative positioning of power across the chain and up gradation is about how participants can increase their respective shares by moving up in the value ladder. There are of course various strands of literature that focuses on different aspects of the value chain. One aspect is looking into the dynamics of profit and power through the chains between MNCs and developing countries. Others focus on supply chain management. The new institutionalists analyze the bilateral transactions between firms and social network theory identifies the horizontal relations and social aspects in which the chain is embedded. However the principal theoretical mould of value chain as conceived by Gereffi (2001) and Kaplinsky (2000) is that chains are repositories of economic rents that emerge out of returns from scarce assets. The rents arise from differential productivity of factors because of varying degrees of entrepreneurship and barriers to entry that creates relative scarcity. This scheme of analyses is close to the Schumpeterian notion of rents that emerge through purposive actions creating new scarcities. Hence the dynamics of the value chain and the relative position of actors that defines the equation of power and profit within the chain are results of the creation and destruction of economic rents in various nodes. Scarce assets can be tangible as machines or intangible as brands and some of intermediate type like the marketing skills. Sources of rents could be technological, organisational, trade rents, relational and so on. The economic rents emerge at different degrees in different nodes of the value chain and that defines the power relations within the value chain. Because of increased competition the barriers to entry once created get eroded beyond a point and new scarcities need to be generated either by technological or organisational innovation or through changing the rules of governance. Hence rents are dynamic and changes according to deliberate actions of the participants. The governance structures on the other hand unite the structure of accumulating and depleting rents. Furthermore it is argued that performance of value chains depends more on systemic efficiency than point efficiency. In other words the governance of the system makes a significant difference even if the contributions of individual actors remain same. Two broad categories of value chains are being identified according to their governance structure and they are buyer driven or producer driven value chains. The former is more visible in relatively labour intensive production process such as garments, leather goods or toy making. On the other hand the latter is typical for technology oriented high-valued chains. These broad typologies however do not capture the various types of value chain emerging in the present context and as a result more and more variants demand new typologies for

analyses. The increase in the number of typologies decreases somehow the analytical strength of the value chain or network perspective giving rise to numerous patterns of relationships rich in empirical details but those do not contribute much to comprehend the essence of such changes.

The value chain analyses undoubtedly provides a robust framework compared to any of the firm level or industry level analyses and throws light on the entire flows of inputs and outputs and resulting distributions of gains but its entire focus on the verticality of the relationship gives a partial view of the complex totality. The principal critique of value chain analyses is that there is an implicit assumption in this analyses that values are created within the chain and valorized by various actors or capital depending upon the configuration of the power matrix1. The chain literature tries to explain the changes in relative distribution of gains endogenously created and assumes that governance and up gradations are the two modes of increasing the value within the chain. The value chain literature of course provides a rich description of how rents are created in the chain by possessing strategic assets created by various actors but in this process it entirely misses the labour process that ultimately gives rise to values. In other words the value chain analyses by limiting its focus on the verticality of relations fails to capture the horizontal and diagonal relations that constitute the nodes of the entire chain. The social embeddedness of value chains, the social cultural and historical processes that influences the architecture of the relations hardly get captured in value chain analyses. The relationship between profit and power across the globe in the realm of production would not be fully unearthed if the dimensions are limited to inequalities arising from monopolizing rents instead of looking into how surplus is created within the process and the way it determines power differentials. Starosta (2010) and I˜nigo Carrera (1998) provides an extensive Marxian critique of value chain analyses arguing that value chain literature assumes the power matrix as given and hardly throws light on why possession of strategic assets and deriving rent thereof is limited to few players while increased competition wipes out the little gains which the small players could make. In other words value chain analyses provides little clue to the question of 'immiserizing growth' characterized by increased economic activity and falling economic returns raised by Kaplinsky (2000) within the value chain tradition. Global capitalism in a definite line of production defines a socially normal mode of production and scale of operation that ensures 'normal profit'. Any level of operation below this level would not forthrightly become unviable but would survive also by producing surplus which would largely be valorized by the big actors who could monopolize the released surplus. In other words the value is created by the social labour

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[1] For a detailed analyses see also Bair (2005), Bair and Peters (2006), Henderson et al(2002) and Newman (2012)

that is living labour within and outside the chain and that gets appropriated through the process of the formation of the general rate of profit. Therefore the chain actually captures a slice of the whole process of creation, appropriation and distribution of surplus and the power relations manifest the relative appropriation of gains attributed to different capital involved. The other important critique of the value chain analyses is the relative neglect to the financialization of the global economy. The realm of production is increasingly intimidated by financial interests that largely influence the flow of international capital. On the other hand the choice of location within a country and the terms of inclusion within the value chain are to a great extent determined by the requirements of the finance capital.

The labour process which is generally ignored in the value chain analyses is the entry point in this paper which aims to revisit the dynamics of value chains through the labour process in a developing country scenario. The distribution of social labour takes place through the law of value and the value relations are internal to capitalism which can express concrete labours into abstract comparable values through the act of exchange. But there is also a vast space of informal enterprises with small capital, low technology and cheap labour that also constitutes the various nodes of global value chains. The terms of trade of these segments with the larger capital is completely accidental and arbitrary and are not determined by value relations. In other words global value chains informally take advantage of this non-capital segment mainly characterized by survival strategy but the formal/legal standards used by governance structures in the context of global production network creates new forms of entry barriers that prevent insertion into the value chain. The other aspect of course is the 'spatial fix' to the problem of capitalist accumulation2. The value chain analyses focuses on the 'organizational fix' and do not pay much attention to how new spaces are created as a response to increasing competition. In other words peculiarity of the labour market and the related processes in developing countries determine the options for specific nature of valorizing labour and created surplus, either by creating new spaces of production or by reorganizing the production process within existing production spaces.

In the following sections we discuss a labour process that characterizes a case of self-exploitative fragmentation, that is instead of vertical integration that aims to draw released surplus from small firms we find a clear disconnect between big and small enterprises in the leather cluster. The big firms engage in global chains while they do not extend the chain to draw in small producers. The small producers in a peculiar scenario of exchange relations and labour market hardly tend to grow big, rather fragment into tiny self-owned firms. And if one wants to find an explanation to this disconnect as well as fragmentation, looking into the asymmetric distribution of value added within the chain would hardly

[2] See Harvey (1986, 2001) for further discussions.

provide any insight rather the labour process emerges to be the key element in explaining such trends.

3. Dynamics of Inclusion and Exclusion

Global value chains are important sites reflecting the dynamics of capitalist accumulation. Capitalist growth is typically uneven and determined by a continuous dynamics of inclusion and exclusion. In developing countries global value chains are embedded in industrial clusters comprising of a combination of various size categories of firms. Some of them are directly linked to global value chains and play a nodal role in organizing production according to global demand while some others who are generally large in numbers are strictly limited to domestic demand. In leather clusters at Kolkata and Agra in India we come across a typical disconnect between firms producing for exports and those producing for the domestic market (Roy, 2009a). The point however is, there is no great technological gap between exporting and non-exporting firms although their scale of operations are largely different. In other words the scale gap of these two categories of firms could not be explained by technology gaps. Large firms are mostly exporters and smaller firms are generally restricted to producing for domestic market.

One important claim of liberalization narrative is integration to global markets provides firms opportunities to escape the demand constraint which they might be facing in the domestic market and allows them to grow big and upgrade by getting linked to a detailed structure of stable division of labour. The participation of firms, in other words, their inclusion in the global production network and vertical movement upwards along the value chain is expected in the context of market reforms. But this is not necessarily the case. The same production network that provides opportunities to few exporters to participate in global production process might be embedded in a cluster which on the other could be characterized by spawning of self-exploitative producers as a response to increased competition. In a way value chains fail to integrate large number of suppliers in developing countries and increased exposure to global market and related rise in competition creates a dual process of growth for the few and fragmentation for a large number of firms. This is manifested apparently by a rise in the number of small firms within the cluster and such spawning of firms is a process that is close to poverty sharing without much addition to values. There is no doubt of course that global producers take recourse to such small enterprises as a mode of flexibilizing the production process; it is the periphery that somehow is linked to the global networks, it contributes indirectly to the value addition process but never gets a place in the discourse on seamless functioning of value chains.

In many developing countries we come across an arrangement where there are few big producers or traders linked to a vast number of small producers who supply final products or intermediate inputs to the big players. These big players who might be manufacturers or traders happen to be part of global production network and act as a node surrounded by a cluster of suppliers. The rents generated in such nodes which primarily capture the comparative advantage of the specific places are largely contributed by the horizontal relationships between the big players and the network of small enterprises. Sometimes we find a numerical expansion of this network that is the number of small enterprises in the cluster increases. The interesting feature of course is that such an expansion does not necessarily imply a growth of the cluster in terms of value addition but rather the larger proportion of these firms that crop up are caught in a survival strategy of self-exploitative fragmentation. The process of engagement of small firms with the big players often takes place in a manner that discourages higher value added activity and pushes the cluster to a trajectory characterized by low productivity, low quality and declining returns. In other words the exchange relation between big producers and small suppliers gradually reduces the possibility of inserting the smaller producers of the cluster into the value chain.

The exclusionary nature of such exchange relationships can be characterized by contested exchange where the trader or the big producers have the control over the suppliers' future stream of returns but the suppliers do not have a similar control over the big players. The small producers in this case are not facing a market where they can take prices or market demand as given and hence ignore the competitors. In fact increasing revenue in this case largely depends on the extent to which the small producers are agreeable to share their profits with their buyers. In other words the small producer can get entry into the market only through the big buyers and this gives the trader a power of endogenous enforcement during the course of transaction. The trader promises renewal of contract if satisfied and terminate it if otherwise. To the small producer, increasing the revenue is subject to paying a greater premium of profit to the trader, be it directly or indirectly. The trader transfers the burden of fluctuations in raw material prices to the small producers, compels the small firms to supply at lower rates during off-season, retains a part of the productive capital of small producers through delayed or partial payments, and even increases margin through supplying one producer's specific design to others. However, these are all 'hidden' stories in an incomplete contract between a trader and a small producer and there is no relevant third party to monitor or redress. Bowles and Gintis (1990) identified this kind of contested exchange as endogenous claim enforcement, which gives rise to a well-defined set of power relations among voluntarily participating agents even in the absence of collusion or other obstacles to perfect competition.

In the context of such asymmetric relations of power, the exchange between big buyers and small producers is something similar to oligopsony. There are few purchasers for the intermediate goods or final products produced by the vast number of small producers but these few traders on the other hand face a competitive scenario while selling goods in the final market. This situation finally leads to a sub-optimal outcome both in terms of output and prices and more the competition increases the suppliers can only remain buoyant by reducing the cost of production. The costs of production could only be reduced by pushing down returns to labour but it reaches a limit since most of the workers receive a wage close to their reservation wage. In that case, to the owner the only option left to reduce cost is to increasingly deny the vertical mobility of workers. As a result the skilled worker gets increasingly dissatisfied with the wage they receive that hardly reflects their attainments of skill. In that context if the capital intensity of such production is low, which it used to be in most of the small enterprises, the skilled worker would start a new small enterprise depending on the knowledge they have gained about production and market over the years. In other words a new supplier is added to the market by the process of self-exploitative fragmentation.3 The process of self-exploitative fragmentation occurs in both ways: (a) the owner gradually replaces hired labour by himself or/and by unpaid family labour, (b) the skilled worker starts an own account enterprise and becomes 'free' to exploit herself while earning higher than her/is past income as hired labour. In such scenario the worker works extended hours to earn more but at the same time s/he would be inclined to produce goods with low value added that is supposed to have a demand in larger quantities but with low margins at the same time. The worker who would be capable of producing goods of higher value added would not be inclined to do so because that involves engaging with contracts with traders and that would entail a transfer of working capital from the small firm to the big traders or producers. Therefore the process of self-exploitative fragmentation also destroys in a way the process of skill acquisition.

The final outcome of such an asymmetric exchange relationship gives rise to a very peculiar composition of firms around the global production networks. The big players with some formal subcontracting relationships are engaged in exports while a vast mass of small producers are typically confined to the lower end of the domestic market. The big players who are linked to the global value chain resort to the small producers only when there is a pressure in the delivery schedule or in jobs that are outsourced to home based units but hardly visible in the descriptions of global value chains. In this context one would appreciate the fact that social auditing of labour standards by independent agencies undoubtedly helps in pursuing certain labour standards within the chain but they could hardly look beyond the formal constituents of the chain and recognize the home based

[3] For a formal model of the analysis see Roy (2006).

workers where flouting labour laws is not only the rule but the prime source of competitive costs in labour intensive sectors such as garments and foot wear. The exporters recognize suppliers who are capable of maintaining stipulated levels of quality and also to maintain control over the whole production process the exporter is more and more inclined to vertical integration. Thus we are left with industrial clusters with few large producers surrounded by a sea of tiny enterprises who are unrecognized contributors to the global production networks, they are neither included in the chain nor are they completely separated from the networks of production. In other words there is a continuous dynamics of inclusion and exclusion centered around the value chain and the surplus produced or the value added is not strictly confined to the formal links of global value chains. The precise point is that the focus on the distribution of values along the chain hardly captures the constitution of value added beyond the chain and which is to a large extent located within the horizontal relations in which the value chain is embedded.

The leather footwear cluster in Kolkata (West Bengal) or Agra (Uttar Pradesh) or the surgical instruments producing cluster at Baruipur (West Bengal) manifests this dynamics of inclusion and exclusion, but such trends are typical to many of the clusters located in developing countries having links to global value chains. The analyses of such dynamics could not be captured by looking into the verticality of relations but we need to go beyond and see the labour processes that contribute to both integration and fragmentation at the same time. In the next section we see how the labour process entails a 'spatial fix' involving geographical relocation of global value chains and the answer to such movements lie more in the labour process rather than the changes in the distribution of value added along the value chain. Hence we would be focusing on the shift of value chains from one place to another caused by changing sources of rents created by economic and non-economic factors.

4. Fluid Labour and Footloose Industry

Global production network shifts from one place to another depending upon how actors in the chain find suitable places to retain or create rents. The rents created at a definite point in the value chain is not necessarily an outcome driven by technological innovations but could be produced by access to cheap resources such as labour that is usually in abundance in developing countries. Labour intensive productions such as garments, leather and footwear, toys and so on derive competitive advantages through cheap labour and because of that developing countries are hosts to large parts of these value chains. The shift of nodal points within the value chains in garments and foot wear are widely reported both in the context of global locations as well as within nations. The reason behind such shifts could not be identified within the chain itself but depends on how rents created by a certain

location in a definite point of time eventually withers away and the search for new locations become important. Movements entail conflicts between mobility and fixity of capital. Industries move from one place to another and in order to shift locations they need to create new fixed capital centering which the flow of capital would take place. It is a continuous process of negotiating between time and distance and new spaces are created using accumulated surplus capital and labour to displace the crisis that arises in existing locations.

The garments industries in Gurgaon and NOIDA in the National Capital Region are mostly relocated or reorganized plants of those located within Delhi[4]. The new region evolved mainly as a response to high profitability in garments industry during the mid-eighties and also industrial estates were developed as part of government policies. Garments produced in NCR are sold to brands such as Stopper, Pantaloons, Rituwear, Lifestyle, Shapes, H&M, TNG, GAP, Diesel, Adidas and so on. Firms are competing with those producers located in low wage countries such as Bangladesh, Combodia, Vietnam, Sri Lanka, Pakistan and Indonesia. There are two notable features of these garments factories in NCR and these are the following. First, we come across a horizontal expansion where single owner owns 3 to 8 similar sized firms located in the same area as separate legal entities. Because of legal restrictions the expansion of firms got manifested in horizontal expansion through multiple firms with separate legal ownerships rather than vertical integration reflected through expansion in size in employment. Second, in this region garment units were primarily relocated from Delhi to Gurgaon and NOIDA because of civic regulations but later on there has been a growing trend to set up industries in Manesar, Sonepat, Panipat, Jaipur, Bhiwandi and even to Bangladesh. These shifts are mainly driven by the purpose of reducing labour cost and the costs related to infrastructure. Labour assumes a significant proportion in the production costs of garments. But the other important aspect of the liberalized regime is increased mobility of labour. Rise in the mobility of labour in a way evens out the differentials of labour costs between regions especially within close vicinity such as NOIDA, Gurgaon or Delhi. The tendency of the equalizing of differential rate of exploitation that operates in a global scale also manifests itself within regions and the absolute advantages of cheap labour of certain regions gets weakened because of increased migration. Moreover owners play not only on the differences in labour costs between regions but also within regions relying more and more on migrant workers. Firms at Gurgaon and NOIDA prefer to employ migrant labour because they are relatively docile and vulnerable and also do not have a clout in the local power structure. The migrants are often less concerned about their working conditions and more interested in their absolute amount of income and hence are often amenable to higher degrees of exploitation. The

[4] See Roy (2009)b for further discussion.

other advantage of employing migrants is that families of migrants usually stay back at their native places and that in a way reduces the reservation wage at which the workers agree to work. Besides issues related to labour the price of land is increasing much faster pushing up the rents for factory spaces in places such as Gurgaon and NOIDA that possibly tends to eat up the little margin attained in periods of downturn. The other issue of course is concessions and reliefs offered to capital by various state governments in order to attract new industries. In response to those policies garment units are relocated to spaces where cost of infrastructure turns out to be low giving rise to net benefits in business. On the other hand in the case of garment production commissioning of a new unit takes relatively less time often even less than a month to shift from one place to another given the fact that factory sites are easily available on rent. As a result of which a different kind of dynamics evolve basically to reduce the cost of production and in a way garment units emerge as 'footloose' industries.

The shifting of spaces of garment production becomes a real hindrance to long term inter-linkages between firms. The peculiar combination of fluid labour and footloose industry gives rise to a growth strategy that resorts heavily on competition based on cutting costs. And the more important point of course is that such cost advantages are hardly sustainable in nature and remains restricted to markets of goods with relatively low value addition. The temporary relation between capital, labour and space deters any virtuous circle that generates competition based on higher quality and higher wages. The creation of new space or insertion of new nodal points in the global value chain is a response to changing relative price of factors that occurred because of increased mobility of both capital and labour. On the other hand when such mobility tends to reduce the accumulation of surplus within the existing arrangement, new spaces are created as a response to such crises. The insertion in this case could not be explained by the vertical relations within the value chain rather it is because of the changes in the horizontal relationships that define the relation between capital and labour at a definite locale at a definite point of time. This of course is part of a larger dynamics that defines the conflict between 'space' and 'place' within capitalist development. Intra-regional policies within the boundaries of nation states were meant to strike a balance between the need of space demanded by capital to valorize its surpluses and on the other hand rights to livelihood and places in which people live. The national industrial policies could manage to assert certain levels of control on flows of capital as well as upon flows of labour. The spaces where waged work were supposed to be more concentrated and places that supplied the flow of labour were balanced by intra-national policies. With the decline of such policies in the liberalized regime the recasting of space and relocating industries is largely dependent on the whims of capital and the profit imperative. Therefore the rent that keeps an actor buoyant in the global value chain either arises because of easy access to disposable labour or because of a diminution of public

concerns that reduces the costs of both relocation and operation of industries. This is nothing but the 'spatial fix' to the problem of capitalist accumulation and that cannot be captured by the notion of 'organizational fix' that global production network literature often focuses upon. The shifting of spaces and the insertion of new areas to global value chains is driven by a continuous move towards generating profits. In short the production locations are re-casted not because of a redistribution of values created within the value chain but because of a redistribution of social labour and capital that contributes in the creation of values within and beyond the realm of a specific value chain. The creation and destruction of space is linked to the inclusion and exclusion dynamics of capitalism at large and gives rise to an uneven growth process that devalues existing spaces and infuses new values to emerging areas. In the next section I draw attention to the unsustainable nature of the flexible labour process that is often adhered to by developing countries such as India in order to remain buoyant in the global production network.

5. Labour Surplus and Flexible Accumulation

The participation of developing countries in global production networks is often attributed to a post-Fordist turn in the production organization defined by greater flexibility in the use of both machines and labour. The change is predicated as a response to rise in customized demand in place of standardized goods and in the supply-side availability of flexible machines that allow reducing average costs at a much lower scale of operation. In other words this narrative declares the decline of Fordism which was primarily characterized as a mass production structure that depended upon hierarchy of organization and fixed motion machines. The decline of Fordist mass production and larger scale of operation once again brings horizontal relations at the core of industrial organization literature and 'flexibility' in its various dimensions is considered to be the key element in characterizing the required change. The notion of flexibility has various implications in the current changes in the labour or production process. One aspect is numerical flexibility which refers to basically the right to hire and fire and adjust the workforce according to fluctuations in demand; the second aspect is wage flexibility which allows owners to employ workers at varying terms and conditions and offer wages which are amenable to changes in specific contracts and thirdly functional flexibility that entails a process of multi-skilling where workers are increasingly drawn into performing various inter-related functions instead of repetitive work. The flexibility requirement is undoubtedly related to the changes in production structure and changes in demand patterns but more important at least for developing countries is that flexibilization essentially characterizes a change that allows capital greater access to global disposable labour in a regime of integrating markets. The bargaining strength of the worker declines as a result and capital has the option of outsourcing and cheapening further the labour cost

in the name of flexibility. In other words the flexibility discourse although has important implications on the use of labour in the context of technological change but it is largely referred to dilute the existing rights and claims of workers that make the workers more amenable to the whims of capital.

The larger question of course is how this flexible specialisation explains the increased participation of developing countries in the global value chain. It is as if the value chains found places in the world that are endowed with required inputs and flexible organization structure and therefore includes them in the global production network. The insertion is primarily attributed to a significant change that took place in the global industrial structure since 1940s and that is slicing the production structure in modules and redefining the division of labour according to relative advantages of certain spaces across the globe. Apart from labour intensive goods such a change allowed developing countries in participating into a labour intensive module may be of a highly technology intensive final product. The share of developing countries in global manufacturing value added increased as a result but the comparative advantage in many of the cases still remain to be the low cost labour. And the economic rent which producers of developing countries derive at various nodes of global production network primarily originates from the accessibility to a vast pool of cheap labour reserve.

Most of the industrial clusters in India that are linked to global production networks are also the clusters that manifest a peculiar combination of higher levels of technology and archaic forms of labour processes. Workers do not receive wages according to productivity and wages even in the exporting sector is not always attractive to those who survive on household enterprises. This is precisely the reason why formal modes of employment and work relations in larger enterprises are not always able to replace the existing fragmented structures of production rather they engage in an asymmetric relation of interdependence where large factories outsource work whenever required and on the other workers in the smaller enterprises often rely on factory jobs during off season. The 'low road' phenomenon often quoted in the context of developing countries is defined by a competition that relies more on cutting costs especially that accounts for labour. And there can be two strategies: one catering to a mass market with large scale of operation and employing workers at a lower wage; the other where production structures are relatively small and flexible but essentially compete on the basis of cheap labour derived from flexibility of avoiding labour laws. Both these strategies of creating economic rent become unsustainable beyond a point. In the first case as labour market tightens wages tend to increase and that reduces the cherished comparative advantage. In the second case which could take advantage of flexible production organization would not be able to do so because higher qualities and skills demand higher wages and if denied gives rise to

fragmentation that ultimately reduces the skill pool upon which quality driven trajectories could rely upon.

The responses of capital in a situation of labour surplus and especially in a scenario when institutions to protect labour rights are largely weakened could have various implications. In labour intensive sectors such as garments and footwear the availability of cheap labour delays the process of 'creative destruction' and allows firms to remain buoyant even if the regulating capital in that specific industry have adopted higher levels of technology. In technology intensive sectors such as automobiles firms increasingly rely on technologies that deskill the labour process and allow firms to take advantage of the vast pool of unskilled labour. In fact, two-three days training makes an unskilled worker capable of working in an automobile plant. The responses are primarily driven by the notion of considering labour as a cost and not as an investment in human capital. The upgrading of positions of a country within the value chain therefore largely depends upon the kind of labour processes in which the specific nodes are embedded and how capital confronts to specific labour markets. The decline of labour institutions and withdrawal of state as a mediator in the social contract between capital and labour facilitates the 'race to the bottom' and the rents derived from such race characterizes a process of flexible accumulation rather than a trajectory defined by flexible specialization.

The participation of firms in the global production network in developing countries entails a production process that involves a complex network of contracts between various layers of intermediate actors. The upgrading of positions within the chain requires not only an intervention in the labour market but even beyond. The demand and supply of labour only defines the boundaries of contesting terrains between labour and capital and the conflicts need to be mediated by institutions that would foreclose the unending race to the bottom. But that alone would not solve the problem. The layers of intermediaries define the space of contested exchange that ultimately fragments the production process and creates obstacles to extend the chain. The small producers should be relieved from perpetual dependence on traders and from paying enforcement rents and get direct access to buyers. Participation of smaller enterprises in the network of production should be based on proper contracts rather than informal temporary arrangements. The skill and technology required for higher order operations in the value chain involves an investment in human capital and this requires a conscious effort on the part of capital to avoid the easy route of reducing labour costs. And this consciousness could hardly be induced by the spontaneity of market but requires once again a reinstating of an industrial regulation system that rejuvenates the social contract between labour and capital. This could be the first step to initiating up-gradation in the value chain in the context of a developing country.

6. Conclusion

Global value chain undoubtedly provides us a strong framework to analyze the creation and distribution of rents within and beyond national boundaries. The operation of global capital in the realm of production is captured in a more concrete way and shows how the goal of profit making unites various regions, modes of production and destroys the airtight categories of industrial divisions. The conventional categories of industries based on their factor intensities increasingly lose analytical relevance once we view production at a more disaggregated level. The global view of value chain with production being distributed in various parts and in different locations allow us to think production of all goods as an outcome of using labour, capital and skills at varying degrees and countries or economies with relative abundance of each of these factors can participate in producing these goods. In other words, production of a good might undergo phases that are relatively labour intensive, capital intensive or technology intensive and countries locate themselves in the production chain according to their relative endowments. This perspective in a sense allows us to understand the functioning and coordination of integrated production structures led by global corporations. It also provides pointers to various dimensions of conflict across the network both between various nodes and also between labour and capital across the chain. In a way it provides a comprehensive guide to labour and other institutions related to national and regional policies, in finding the appropriate point of intervention depending upon the relative significance and value addition of specific nodes. The chain is indicative of the fact that strategic interventions both to labour and capital would only be meaningful when they take note of the global perspective. The problem however is that with the limited view of verticality of the production one fails to appreciate the fact that choice of locations, the amount of rent created, the shift of value chains, the changes in relative importance of various nodes and the dynamics of rents are not endogenous to the chain itself but are mutually determined by a complex network of actors, institutions and power relations, a large part of which lie outside the chain. Global value chain analysis in that way provides an entry point to look into the interactions that mutually constitute the value chains. In the context of developing countries we see that rents created within the value chain in most cases are in some way or the other related to the process of cheapening the costs of inputs especially labour. The process which allows firms to derive rents is linked to a process of asymmetric power relations with a vast number of suppliers. And the same process of relying on cheapening of inputs generates a downward spiral of fragmentation and erosion of skills. In other words, the sources of rents for a typical participant in a developing country rest on a process of procurement and employment that gradually reduces the possibility of retaining the existing rents and also that of extending the chain further down. The advantages of flexible labour upon which a participant from developing country relies for competitive edge are bound to wither beyond a point. New locations emerge, value-chains shift from one country to other and

developing countries compete with each other in cheapening the costs of production. This of course suggests a coordinated and strategic effort on the part of developing countries to upgrade and participate at a higher order in the value chain but that is less likely to be a spontaneous response of capital when the easy option of exploiting the vast pool of surplus labour exists.

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