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### Socio-economic study of the peoples established in three steel plants in India

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#### Abstract

In preponderance of the cases the ongoing development model propelled by the market forces often goes against the interest of the very section of people that sacrifice their hearth and home for economic development of the nation. In order to throw light on the inadequacy of the state's resettlement and rehabilitation policy measures for the people affected by the modern development projects and their social and ecological consequences on the livelihood of the ecosystem people, the paper attempts to make a critical analysis of the present state of living of the families displaced during 1950s and 1960s by three public sector steel plants in India. The findings are based on primary data collected by the author through fieldwork in the three steel cities and their peripheries during 2007-08.

**Keywords:** 1.Development, 2.Steel Plant, 3.Socio-Economic, 4.Industrialization.

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#### Introduction

The mainstream development model putting emphasis on GNP (Gross National Product) led growth and materialistic enrichment has in fact heightened socio-economic inequalities across space and people (Bhaduri 2008; Meher 2001a). There is very little trickle down effects of economic growth. Rise in GNP mostly favours the affluent sections population and technically skilled manpower engaged in organised sector manufacturing and service sector economy. It does not percolate downwards to benefit the poorer category unorganised sector workers, who constitute more than 90 per cent of the workforce in Indian economy. This is evident from the fact that nearly one-third of the country's population languish under poverty and subliminal state of living despite high growth of GDP

(Gross Domestic Product). The growth rate has been around seven to eight per cent in recent years during 2003-04 to 2006-07 (Government of India 2008:4). The present development model does not help building the capacity of the marginalised and downtrodden people by developing the quality of human capital in them. It also does not take necessary precautionary measures to prevent impoverishment risk among the development victims in case of the displacement-induced development projects that are being promoted in different parts of the country in the name of development. The peasants, the landless poor, the rural artisans and servicing castes and the aboriginal tribal populations intertwined with the agricultural economy and forest now feel deprived of their traditional sustainable form of livelihood Long years back, D. H. Meadows et al (1972) produced an ecological classic, *Limits to Growth*, alarming finite resource supplies and growing world population cannot sustain a development model that consumes more and more ecological resources for the sake of high growth and luxurious living. In spite of many ecological and environmental protest movements all over the globe the materialistic desires of modern and the so-called civilised man have never been ending (see Blaser et al. 2004; Taylor 1995). This model of development caters to the unending desires of privileged minority mostly in the name of development for all. The excluded indigenous minority populations all over the globe are now put into impoverishment and livelihood risk. The mainstream development model that aims at homogenisation of human civilisations and cultures in fact marginalises and pauperises the indigenous tribals, peasants and other ecosystem people. The model leaves them in semi-limbo condition and ultimately makes them ecological refugees in the slums and squatter localities of the city.

#### **Data base and methodology**

The fieldwork in the tribal belts of Chhattisgarh, Jharkhand and Orissa covering three public sector steel plants of India respectively Bhilai, Bokaro and Rourkela was taken up by the researcher in different phases during 2007-08. The fieldwork covered a period of six months during different phases from January to August 2007 and during December 2007 and May 2008. By using interactive method and a suitably designed questionnaire schedule canvassed to the oustee households of the three steel plants, the researcher collected all necessary information from the field. The study covered 200 oustee families of each steel plant by following stratified and simple random sampling method. The oustee households were classified into two categories: i) households that could get regular jobs in the steel plant, and ii) households, which could not get any regular formal jobs in the steel plant and were left with economic compensation to survive on their own. From each category 100 households were studied at random, thereby covering 300 oustee households having been provided with formal regular type jobs in the public sector steel plants and another 300 households without any formal and regular jobs. Thus, 600 displaced households residing at present in the resettlement colonies and villages surrounding the three steel towns were intensively studied.

#### **Discussion**

In the post reform years of economic liberalisation and globalisation in India, the nation on the whole is polarised into two opposite factions. The modern omnivores people attracted to city living and luxurious materialistic culture having full command over the national economy, champion the promotion of mega development projects including mineral-based industries and rapid exploitation of mineral and forest resources (Gadgil and Guha 1995). They are welcoming MNCs and ICHs to the natural resource and mineral rich regions resided by the ecosystem people, i.e. the tribals and other downtrodden populations. According to them promotion of mineral-based industries in the mineral rich tribal areas would not only help in accelerating country's economic growth and infrastructural

development of backward regions, but also it would help in reducing development disparity gap between space and people in the long run. However, the peasants and other ecosystem people subsisting on ecological resources of the region such as land, forest and water are opposing tooth and nail to such development measures propelled by the market economy with implicit support of the state. They allege that location of all such industries in the mineral rich tribal region is not only causing massive displacement of tribals and peasants from their hearth and home, but also many others are indirectly getting deprived of their sustainable means of subsistence due to acute pressure exerted by these industries on the mineral and other natural resources of the region like land, water and forest. While some tribal regions are transformed into patches of modern and cosmopolitan type industrial enclaves harbouring a few affluent outsiders, the majority of the locals and native population continue to suffer. The aboriginal populations in the absence of education and modern technical skill and loss of primary source of living such as, land, water and forest, are pushed into informal and unorganised category wageworkers in all such development enclaves. The majority among them languish in poverty and social insecurity.

In many cases the living condition of such victims of the development projects are found to be worse than their past living conditions. Many suffer from agonies and estrangement of their kith and kin, breakdown of social capital linkages and support to encounter the problem of transient as well as hardcore poverty in their place of resettlement (Baboo 1992; Mahapatra 1999; Mathew 1989; Ota 1999; Pandey 1998a&b; Reddy 1992&1994; Sahu 2000). Especially, the mining and mineral-based industries in the tribal regions are observed to be causing great risks and destitution of the tribals and other ecosystem people in the forms of loss of their hearth and home, access to common property resources, forests, land and water, with little hope of sustainable living. They are becoming the victims of impoverishment, homelessness, social disarticulation, loss of sustainable living and unsecured environmental surroundings due to incomplete resettlement and rehabilitation (R&R) measures (see e.g., Blaser et al 2004; Cernea 2000&1996; Cernea and Guggenheim 1993; CSE 1985; Fernandes 1994; Mathur and Marsden 1998; Meher 2004, 2003 & 2001b; Oommen 2006&2004; Taylor 1995; and others).

This model of development is characterised in the present paper as the livelihood insecurity and deprivation of ecosystem peoples. There have been little sincere efforts to bring holistic transformations of the project-affected peoples and make them true beneficiary of the development project. The development planners assume that displacement related trauma and dislocation from home and traditional family-based occupations are short term sufferings of the oustees. The cash compensation and project-based jobs coupled with many invisible benefits finally mitigate the problems of oustee population in their new resettlement areas. However, in reality the piecemeal and ad hoc approach to solve the problem of the development-displaced ecosystem peoples through cash compensation and project-based jobs, for sometime work as palliatives and in the long run that creates livelihood insecurity for them. In the light of this, the present paper critically analyses the present socio-economic condition of people, those who were displaced years ago (around 40/50 years back) by three public sector steel plants located in mineral rich tribal regions of India.

It may be mentioned that after Independence the Government of India in the early years of planning set up three large and integrated public sector steel plants at Bhilai, Bokaro and Rourkela in the mineral rich Chhotanagpur region. These steel plants were expected to strengthen India's infrastructural base for industrial development and to reduce regional development disparities between advance and backward states of the country. However, the immediate effects of location of large iron and steel industries in the three backward states of Chhotanagpur region namely Chhattisgarh, Jharkhand and Orissa in central and eastern India were massive displacement of human population, mostly the tribals and other ecosystem people from their hearth and home and also from their base of traditional sustainable living. The industries and the grafted steel townships in these three states by virtue of their massive resource exhausting nature of extraction and consumption put great strain and stress on the natural

resources of the immediate periphery and hinterland, such as mineral resources, land, water and forest that provided sustainable subsistence to the ecosystem people of the region for generations together. Apart from the effects on the livelihood of the direct oustees, these industries and the newly grown urban centres indirectly affected the livelihood of many more ecosystem people in multiple ways.

It is found from official record that Bhilai Steel Plant (BSP) all together acquired 12,086.6 hectares (henceforth Ha) land for the plant, township and mines affecting 94 villages. All total 5,703 families were displaced from the villages and mines area (Srinivasan 1984:40). Similarly, Rourkela Steel Plant (RSP) in Orissa caused direct displacement of 4,094 families in 64 tribal villages including 31 villages of Mandira dam oustees, which was built to supply water for the steel plant and its township. Among the oustees, more than 60 per cent were tribals. The plant acquired 12,675 Ha lands that included prime agricultural land of the acquired tribal villages<sup>2</sup>. In the case of Bokaro plant till March 31, 1988, all total 13,251.85 Ha land from 56 villages of the region was acquired by the Bokaro Steel Limited (BSL) for its plant, township, air strip, railways and Garga dam reservoir that supplies water to the plant and the township. This plant caused displacement of 6,019 families from 56 villages. Among the displaced families 554 (9.20%) were SCs and 1,103 (18.33%) were STs (Srinivasan 1988:15). The three public sector steel plants together caused direct displacement of 15,816 families and converted 38,013.45 Ha land providing sustainable living to the ecosystem people into non-agricultural, urban-industrial use.

These industries that caused large scale displacement of tribals and other depressed category of people in the past are government sector industries and those were expected to play broader societal roles than the private sector industries. These three large steel units are in their full stage of operation since 1960s and 1970s. When people were asked to vacate their hearth and home for these public sector steel plants, they were promised jobs in the project, at least one for each of the displaced family and cash compensation for the house, land and other immovable properties (though at very nominal rates), besides their rehabilitation in the resettlement colonies. However, it is found that many in the present generation are dissatisfied with R&R measures of these public sector steel plants and the descendants of the oustees still found running from pillar to post to get justice. In many cases their resentments and dissatisfactions are shown against the state in the form of protests and militancy demanding more cash compensation, return of unused surplus land of the project to oustee families and jobs for living and livelihood of the next generation. Hence, in order to throw light on the present state of living of project-affected population after 40/50 years of their resettlement and rehabilitation and social deficiencies of the ongoing development model the study covers India's three old public sector steel plants. Needless to say, these industries were set up in the early phase of Independence to generate massive employment and socio-economic transformations of the backward tribal regions.

### **The socio-economic condition of the peoples**

This is evidenced from the analysis of the field data collected through household survey. It is found from the field data that 42.17 per cent of the oustee families in the three steel cities are of tribal or scheduled tribe (ST) origin; 17 per cent are scheduled castes (SCs) or the ex-untouchable castes; 29.50 per cent are from the lower castes background or OBCs (other backward classes); less than 1 per cent (0.67 per cent) are from the minority category; and the rest 10.67 per cent is of higher castes origin. Classification of the oustees according to religious affiliation of the households reveals that 90 per cent are Hindus; 9.33 per cent are Christians having tribal origin and only 0.67 per cent is Muslims. More than 60 per cent of the oustee families in the Rourkela sample are tribals and in Bhilai and Bokaro they respectively constitute almost one-third of the sample total. In Bhilai while one-third of the sample oustee families are of SC origin, they are only 11 per cent in Bokaro and 6.00 per cent in Rourkela. Around two-fifths

(38.00%) of the oustee families in Bokaro are OBC category, whereas in the other two cities the OBC oustees constitute roughly one-fourth of the sample total. The age profile of the population in the sample oustee families shows that around 27 per cent are children below 14 years age and 9 per cent are adolescent children between 14-18 years. The elderly people (60 years and above) are around 5 per cent and the rest comprising almost 60 per cent are in economically productive age group of 18 to 60 years.

However, when the educational level of persons in the oustee households of the three steel plants is analysed from the field data, it indeed gives a depressing state of human capital development. This indicates socio-economic vulnerability and susceptibility to poverty and livelihood insecurity of the oustees. It has been found that almost two-fifths of the people excluding 0-6 age group population are illiterate in true sense. More so, among the literates almost two-fifths are just namesake literates with less than 10 years of formal school education. That means only around 20 per cent of the people in sample oustee families have reasonable level of education with more than 10 years of schooling. Among them 5 per cent are general graduates and post graduates and hardly 1 per cent of them are technical and professional degree/diploma holders and another 0.40 per cent are vocationally qualified people (see Table 1).

As compared to this, when we work out the educational level of population in the urban area of Durg district in Chhattisgarh comprising Bhilai city from 2001 population census data, it is found that the illiterates constitute 28.95 per cent. People with more than 10 years of schooling comprising matriculate and higher secondary pass are 18.39 per cent, technical diploma holders 1.34 per cent, and graduates including technical degree holders are 8.73 per cent. In the urban area of Bokaro district including Bokaro steel city the education level of population by all age groups according to 2001 population census is as follows: illiterate-32.28 per cent; people with more than 10 years of schooling comprising matriculate and higher secondary pass are 21.50 per cent, technical diploma holders 0.34 per cent, and graduates and above including technical degree holders- 8.73 per cent. Similarly, in the urban area of Sundargarh district comprising Rourkela steel city the educational level of population in all age groups during 2001 population census is as follows: illiterate-27.74 per cent, matriculates and higher secondary pass with more than 10 years of schooling-22.76 per cent, technical diploma holders-1.69 per cent, and graduates and above including technical degree holders-9.26 per cent (Census of India 2001). This picture of education reflecting quality of human capital in the urban areas of the three districts including the three steel cities in 2001 (where the three steel plants are located) is obviously better than the education level of sample oustee families as shown in Table 1 for the reference year 2007.

It is because of the low level of education very few among the earners of oustee families at present found employed in the formal and organised sector economic activities. Only one-third of the oustee households have their principal earners working in the steel plant. Out of the 300 persons from the sample oustee households provided with jobs in these three steel plants, only 105 work there at present and the rest 195 are retired from their service. The present generation earners of the retired steel worker households do not have any specific type of occupation. They manage by doing casual wage work or petty business taken up by their offspring. In some cases, the retirees live on interest earned from retirement benefits amount deposited in the banks/Post Offices. Among the other 300 sample households who did not get any jobs in the steel plants, the majority earn their bread by doing wage work. Only around one-fifth of them at present earn their livelihood from agriculture-based occupations. The latter category households are mostly found in Bhilai. But in Bokaro and Rourkela the non-beneficiary oustees of steel plant jobs, mostly do wage work. Some among them do small business and other self-employed type informal sector services like rickshaw pullers, trolley and cart pullers, etc. As the earnings from the principal occupation in the case of majority of the households are inadequate for subsistence, many take up subsidiary occupations like dairy and animal husbandry, agricultural and non-agricultural wage work and collect minor forest produces (MFP) from the

forest. However, collection of MFPs is done mostly by the oustee households of Rourkela, as quite many of them were resettled in the reclamation camps in the midst forest far away from Rourkela.

It is because of unsecured and informal nature of employment the present generations of oustee families of the three steel cities presently live a very miserable life. The majorities have become landless. The younger generation offspring lack necessary technical and vocational education to earn their living by pursuing modern non-agricultural category occupations and services. They have become ecological refugees in the grafted steel cities set up in their own homelands. Due to lack of skill and technical knowledge the progenies of steel plant employees, who were earlier given employment in the steel plant as project oustees also now earn their living by doing casual wage work in other small scale industries and businesses establishments of the three steel cities. Many work as construction sector workers, some as masons and the majority as unskilled and semiskilled labourers. As a result, the majority do not have the minimum living standard of a present steel plant worker family placed in lowest grade.

According to National Sample Survey (NSS) data 2004-05, a household with less than Rs.356.30 monthly per capita expenditure (henceforth MPCE) in rural area and Rs.538.60 MPCE in urban area is considered to be poor living below the poverty line. On that basis, it is estimated that according to mixed recall period the poverty ratio in India during 2004-05 was 21.8 per cent- precisely 21.8 per cent for rural areas and 21.7 per cent for urban areas (Government of India 2008). However, according to S. Mahendra Dev and C. Ravi (2008) the consumption basket of the poor based on which the poverty line is derived from is taken from NSS data of 1973-74. The composition of the consumption basket in 1973 hardly includes any expenditure on health and education as it was assumed that the basic needs of education and health would be met by the state. As a result, poverty line determined on the basis of the consumption basket of 1973-74 hardly includes expenditure incurred on health and education by a poor category household in India. So, they have worked out the new poverty line by including per capita expenditure incurred on health and education at present. The adjusted poverty line including health and education in the MPCE according to their estimates is Rs.391.60 in rural area and Rs.622.70 in urban area of India. By using this new revised poverty line, when we work out the poverty level income of our sample oustee households; this comes to Rs.3,238.04 or say Rs.3,240 per month for an average family comprising 5.20 persons. That means household with an annual income of less than Rs.38,880 in the urban area of India or 972 US Dollars is a below poverty line category family.

Applying this estimate when we look at the income particulars of our surveyed oustee households shown in Table 2, almost three-fifth (60 per cent) of them presently live below the poverty line. As against this, it is found that according to revised poverty estimates of Mahendra Dev and C. Ravi (2008:8) the revised poverty ratio in Urban India is at present 34.45 per cent. This clearly reflects the precarious living of the oustee families at present and the impoverishment they might have suffered from during all these years since 1950s and 1960s. When we disaggregate the poorer category oustee households across the three steel plants, the poverty ratio for Bhilai is found to be 56 per cent, for Bokaro it is 63 per cent and for Rourkela it is 59.50 per cent. More so, when we look at the households placed in different income range in Table 4, it is found that 28 per cent or say around half of the poor households among the oustees shall be categorised as ultra poor households with almost half of the official poverty line income.

It has been revealed from the survey that 54.83 per cent of the oustee households in the sample have reported their inability to meet basic subsistence needs at present. Such category of households is found more among the oustees of Rourkela. Moreover, almost one-tenth among the oustee families report that they face starvation problem or no cooking of food during some part of the year, especially during the rainy season of July and August. The poorer households also send their children to work instead of sending them to school. Almost one-third of the oustee families have child labour, who are sent to work to earn something for the family and also to acquire work experience and skill for their future survival.

Out of 600 oustee households covered in the study, only 105 (17.50 per cent) of them have steel plant jobs at present. Of the 300 steel plant worker households included in the sample survey, 195 have retired from their service. After the latter's retirement, very few among their offspring could get organised sector jobs or steel plant jobs in the later years. At present, only less than one-third (29.50 per cent) of the sample oustee households live in an improved socio-economic environment. The main cause of deteriorating living of majority of the oustee households is lack of regular employment (68.17 per cent). According to them lack of agricultural land and loss of traditional occupations are the main reasons for their worsening economic condition.

The poverty and miserable living condition of majority of the households is reflected in their dwelling condition of the houses in the resettlement colonies vis-à-vis the comfortable living of the lower grade plant workers in the steel townships of these three cities. Very few of the oustee households possess modern gadgets and high value consumer durable goods unlike the affluent blue collar worker households of the steel plants. On the other hand, some among the poorest of the poor category households have reported fall in their assets position in the post displacement period. It is revealed from the field data that more than 50 per cent of the oustee families at present live in Kutcha (mud-built) houses and almost equivalent per cent of houses do not have separate kitchen. The rest other half, of course, live in pucca or cemented structure houses and floors, but only one-third of them having toilet facility in their house. Only half of the number of houses is having electricity connection. Some of the resettlement colonies of Rourkela oustees located in forest area do not have any access to electricity. One third of the oustees at present live in good houses with adequate living space, whereas almost one-third of the oustees have reported better condition of their displaced houses as compared to their present ones. Interestingly, although majority among them presently live in urban area, more than 80 per cent of the households use traditional cooking fuel like wood, brushwood, dry leaves and charcoal.

The health status of these people is observed to be very poor due to poverty and unsanitary living in the urban environment. It is reported that almost 20 per cent of the households are affected by illness of family members almost four times in a year and the access of the oustee families to the public health care services is reportedly very poor. More than half of the children are left un-immunised and only 36.67 per cent have received complete immunisation. The pre and post natal health checkups of expectant and nursing mothers are also reported to be very poor. Hardly 10 per cent of them get complete health check-up facilities and almost half of them remain completely left out. Malaria is reported to be most recurring disease and almost one-third of the oustee families have reported malaria in their house during last five years. Apart from that more than one-fifth of the households suffer from the problem of rheumatic diseases. Other serious category of diseases observed among these oustee households are tuberculosis, skin disease, gastric, blood pressure, diabetes, diarrhoea and dysentery. Because of the disease burden majority of the oustee families spend a minimum of Rs.100 on medicine every month and some having chronic diseases spend up to Rs.1,000 per month. It is found that majority of deceased people die at a very younger age below the age of 60 years. Only one-tenth of the deaths during last five years were found to be old age death, whereas infant and child below five years shared almost two-fifths of the deaths and another one-fifth of the death had occurred in the age group of 15-45 years.

### **Industrialization and development**

The process of industrialisation has been intensified in India since 1950s, soon after her liberation from the long years of British colonial rule. This has become more intensified after 1980s and accelerated in the post reform years of economic liberalisation and globalisation oriented to a private sector market economy. Needless to say, the latter development model has enabled India to emerge as a global economic power in recent years. However, it is with a

hidden ecological cost and livelihood insecurity of the indigenous and marginalised poor. The social and economic disparity between the rich and poor has widened further (Bhaduri 2008). While 10 to 15 per cent of the omnivore affluent Indians now have luxurious living like their counterparts in the developed countries, the bottom 25 to 30 per cent of the ecosystem people have no place in the new development paradigm. On the other hand, in the name of development their resources are grabbed by the omnivore rich and no sincere effort is being made to integrate them in the development mainstream and to make the development self-sustainable for all.

This is evidently clear from our survey of oustee families of three public sector steel plants. In all the three cases the major victims of development are the downtrodden sections of population such as the poor tribals, SCs and OBCs. When these people were asked to surrender their hearth and home to set up India's public sector steel plants to lay the foundation for modern economic development, the state promised them their proper resettlement and rehabilitation nearer to their place of original habitation and assured jobs in the upcoming steel plant, at least one to an adult member of the original oustee family for the improved living of oustee population. However, our present survey of oustee families of the three public sector steel plants reveals that after acquiring their land and displacing them involuntarily from their original abodes in 1950s and 1960s, the state has not bothered to give them proper justice.

In the initial years of construction of the steel plants in Bhilai, Bokaro and Rourkela all the oustee families were encouraged to work in the construction sites as unskilled wage labourers or muster roll workers. But as many among the tribals did not have the culture of doing wage work with fixed working hours, very few among the oustees went to work there on wage basis (Meher 2003). In Bhilai the displaced SC families, mainly the Satnamis were working in the construction site in large numbers. However, in early stage of the commissioning of the plant, there occurred many accidents causing deaths and permanent disability to many of the unskilled workers. This led to a belief many among them that the machineries were used for killing of local Chhattisgarhi people and a big steel plant could not be erected without sacrificing human blood. A rumour was spread among the illiterate people in all the construction sites of the steel plants that the heavy machineries could not be operated without human sacrifice and it was because of that reason many accidents were deliberately caused by the project authority to offer the blood of the wage workers to appease machine God<sup>4</sup>. This in fact discouraged many of the oustee families to work in the steel plant sites as muster roll workers in the early phase of construction and operation of the plants. Many did not report for duties. Instead they preferred to earn their livelihood in the traditional economic sector. So, they built their houses in the resettlement sites and colonies and purchased/reclaimed land for agriculture purpose by utilising the cash compensation money. However, as the cash compensation given by the government at that time was far below the prevailing market price and in many cases it was mostly nominal cash compensation, the money was mostly spent in transit and building of a shelter. Very few could buy land in other places nearer to their place of resettlement by paying the market price. As a result, the majority became landless. Of course, the land owning oustees were partially compensated with government and forest land in some places. But the quality of the land given to them was so poor and degraded that nothing could be grown for subsistence of the oustee family. The land allotted to them in the forest areas as land-based rehabilitation measures could not be reclaimed properly. The land was mostly red laterite type with little moisture retaining capacity of the soil. Over the years due to massive soil erosion, it is converted into rocky and bushy land. In Rourkela region the reclamation camps and resettlement colonies set up for the oustee population in the midst of forest at a distance of more than 50 to 100 km from the steel town to resettle them, virtually resulted into one type of banishment of the oustees. In the 1950s and 1960s, there was hardly any development of transportation and communication system in the backward Chhotanagpur plateau region. The oustees virtually remained cut off from their kith and kin. There was a total break down of social linkages and social capital network that acted as shock absorber for many at the time of crisis and disaster.

It is revealed from the survey that while 90 per cent of the oustee families were having agricultural land in the pre-displacement period with an average holding size of four acres, now only 70 per cent of them are reported to be having some agricultural land. However, the size of holding among the land owning oustee families is 1.32 acres and only 5 per cent of the land is having irrigation coverage. More so, the quality of the land is very poor, particularly in Rourkela and Bokaro. The yield rate of staple crop paddy is hardly two to four quintals per acre and that too is uncertain because of the recurring drought and elephant menace. The oustee families residing in the forest area of Sundargarh and Debagarh districts of Orissa at a distance of 60 to 100 km away from Rourkela reported at the time of survey that even after more than 50 years of their stay in the resettlement colonies, they could not make the rocky land cultivable despite all efforts and labour. In majority of the cases the oustees are able to make use of around one fourth of the allotted land for cultivation purpose. In many cases even the yield of paddy and other crops at the time of harvest almost looks uncertain. The wild elephants often intrude into the field in troupe at the time of crop ripening and eat away as well as damage the standing paddy in the field. In that situation, for them forest is the only alternative food basket. However, due to extensive mining and commercial exploitation, the forest of the region is dwindling fast with little scope for harvesting adequate MFPs these days. On the other hand, the timber mafia denudes the forest and put the blame on poor tribals, who depend on it for their survival.

Only three per cent of the oustee households at present are able to meet their annual cereal needs from the land cultivated by them. Around 52 per cent of the present oustee families have reported that the yield of food grains from the cultivated land enables them to meet hardly less than three month's food consumption need of the household. In this scenario, the majority of the traditional cultivator households among the oustees are left with no other option except seeking wage employment. The data reveal that around 70 per cent of the so-called land-owning oustee families presently do wage work to subsist their living. Around 10 per cent of them send their young earners to far off places like Mumbai, Goa, Hyderabad, Delhi, Chandigarh, etc to work as seasonal migrant workers. The rest other households subsist their living by collecting MFPs and selling them in the local market to buy cereals.

In the present state of development, life has definitely become harder for the many and very few among them see dream to march hand in hand with the modern omnivores of the prosperous steel cities. As discussed earlier, around 60 to 70 per cent of the oustees those who were given employment in these three steel plants have already retired from their service on attaining the age of superannuation. Very few of their scions in the next generation have been able to get plant job or any other government or organised private sector jobs in the manufacturing or servicing establishments. So, after retirement of the principal earner from the steel plant service, many such oustee households at present live in penury and distress condition. It is seen that many among them have good concrete roof houses, but without any assured source of income at present. Those oustees say that the government should take care for the rehabilitation of their grown up children by providing them jobs in the steel plant or in any other formal organised sector establishments, as they are totally landless today. They argue that had there been land their offspring would have claimed share on the ancestral property and could have at least managed to earn their basic subsistence. But now the little educated offspring have no other option except doing wage work in the unorganised economic sector either as contract labour of the steel plant or in the city's informal sector economy at a wage rate of Rs.50 to 60 or say 1 to 1.5 US Dollar a day with little employment security. All such families are deprived of getting regular employment and social security benefits like paid holidays, provident fund, health insurance, maternity and sick leave, casual and earned leave, etc. unlike a regular plant worker. They sometimes fail to secure two square meals a day for all members of the household. The economic condition of the oustee households who did not have any opportunity of getting jobs in the steel plant is much worse.

## Conclusion

Bereft of ecological resources for sustainable living and evicted from land-based living, the backward ecosystem people of these regions are now struggling hard for their next day bread. Women now in the periphery travel more distances to fetch water and to gather fuel wood. There has been fodder problem for the grazing of cattle and due to fast depletion of forests in all such regions resided by the tribal peoples, the MFPs that provided living and food to them at the time droughts and crop failure in the past are now becoming very scarce. Even the peasants in the periphery now struggle harder to eke out a living from land degraded by water and air pollution and soil erosion.

It is frequently reported in the local medias and national dailies that mining of minerals like iron ore, manganese, coal, bauxite, lime stone, dolomite, etc. in these regions of Chhotanagpur plateau surrounding the five large steel plants from Bhilai in Chhattisgarh to Rourkela in Orissa, Jamshedpur and Bokaro in Jharkhand and Durgapur in West Bengal have been generating devastating environmental and social effects. This region has a fairly higher percentage of tribal population, almost one-third of the total. Together with SC and OBC populations depending for their survival on land and forest they constitute around 70 to 80 per cent. For these people the major problem of modern industrialisation is loss of traditional livelihood and conversion of agricultural land to urban non-agricultural use by forced land acquisition measures. Added to that mining wastes and pollution generating industries like iron and steel plants pollute streams and rivers and the toxic substances are carried by rainwater into the local water bodies, often making the water unfit for agriculture and human use. Air pollution also further adds to the miseries of the poor by generating many deadly lungs related diseases like tuberculosis, asthma, etc and the endemic type malaria that occurs round the year because of acute water and air pollution that favour the growth of parasite carrying mosquitoes. In recent years, this mineral rich region of Chhotanagpur plateau is so much invaded by the affluent omnivores affecting livelihood of the poor indigenous people that whenever any new industry or mine is conceptualised by the state, the indigenous populations of the region spontaneously say 'no' to such projects. Commenting on the state of industrialisation in this region, an eminent social activist and sociologist, Gail Omvedt writes, "More than almost anywhere in the country this industrialisation was visibly a parasitical enclave, grabbing the land of local population, and destroying much of the rest through deforestation and pollution, sucking the life of the native communities to turn their men into unskilled labourers and their women into prostitutes sent all over India" (Omvedt 1993: 127).

The lackadaisical and nonchalant attitude towards environmental protection measures to protect the forest and agricultural economy of the periphery in the mineral-based industrial region by the state and project authority in turn are generating livelihood insecurity of many ecosystem people. This mainstream development model, hence, instead of integrating the marginalised poor with the modern development process posing a threat to their self sustainable subsistence form of livelihood and converting them from ecosystem dependent homo sapiens to ecological refugees. The cash compensation and a factory based job to one adult member of an oustee family for one generation's life time simply does not work for the illiterate tribal and poor peasant families to prevent impoverishment and livelihood insecurity of the next generation in future (See Cernea and Mathur 2008). The status of self-employed peasants and indigenous tribals under this model of development is getting reduced to wage labourers and forcing them to eke out their living in the poverty induced urban informal economic sector by residing in slums and squatters. Hence, there is need for proper development of human capital to enable the agriculture and forest dependent oustee families to switch over to modern non-agricultural sector occupations. At the same time, it is necessary to make the oustees the prime beneficiary of all modern development projects by ensuring a share of the proceeds exclusively for their development.

It may be noted that the ecosystem people of Chotanagpur region in the past were mostly displaced by large public sector projects like iron and steel industries, thermal power plants, dams, irrigation projects and coal mines.

However, due to lack of an effective R&R policy and planning foresight for the development of local human capital, the oustees and the local people in the project areas subsisting on land and forest became the losers and worst victims of development. In case of Bhilai, Bokaro and Rourkela, the public sector units producing iron and steel and at the same time generating massive employment for the lowly skilled people in the past failed to rehabilitate the oustees and improve the living condition of local ecosystem people. These public sector steel plants had many social goals unlike the profit making motive of private corporate sector units. Yet, they failed in proper resettlement and rehabilitation of the displaced ecosystem people. In this scenario, it is least expected from the large MNCs and ICHs operating in a competitive market economy frame at the global level to show concern for the proper resettlement and rehabilitation of displaced and ecosystem people in their area of operation. Without any effective intervention and legislative measures of the state to safeguard the interest of the downtrodden sections of population, a largely populated and socio-culturally heterogeneous country like India may witness doomsday and decimation of the marginalised people in future. The present model of development cannot be sustained in the long run without effecting change in the quality of human capital of the marginalised ecosystem people. In order to enable them to shift voluntarily from subsistence agricultural economy to a developed manufacturing and service sector economy, it is essential to develop health and education of the marginalised people on priority basis.

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